

**IN THE COURT OF APPEAL**

BETWEEN:

GATEWAY BIBLE BAPTIST CHURCH, PEMBINA VALLEY BAPTIST CHURCH, REDEEMING GRACE BIBLE CHURCH, THOMAS REMPEL, GRACE COVENANT CHURCH, SLAVIC BAPTIST CHURCH, CHRISTIAN CHURCH OF MORDEN, BIBLE BAPTIST CHURCH, TOBIAS TISSEN and ROSS MACKAY

(Applicants) Appellants

-and-

HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF MANITOBA, and DR. BRENT ROUSSIN in his capacity as CHIEF PUBLIC HEALTH OFFICER OF MANITOBA, and DR. JAZZ ATWAL in his capacity as ACTING DEPUTY CHIEF OFFICER OF HEALTH MANITOBA

(Respondents) Respondents

---

**APPELLANTS' APPEAL BOOK**

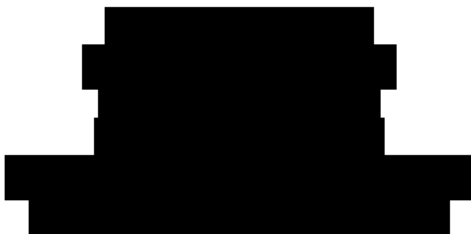
**VOLUME 7 (Pages AB1613 to AB1856)**

---

May 20, 2022

**Supreme Advocacy LLP**

**Eugene Meehan, Q.C.  
Thomas Slade**



**Pejovic Law**

**Allison Kindle Pejovic**



Counsel for the (Applicants), Appellants

**AND TO: Manitoba Justice, Legal Services Branch  
Constitutional Law Section**

[Redacted]

**Michael Conner  
Denis Guénette**

[Redacted]

**Counsel for the Respondents**

**AND TO: The Association for Reformed Political Action (ARPA) Canada**

[Redacted]

**André Schutten**

[Redacted]

**Tabitha Ewert**

[Redacted]

**Counsel for the Intervener  
before the Court of Queen's Bench**

## INDEX

Tabs

### VOLUME 1

<b>1. Pleadings .....</b>	<b>1</b>
a. Amended Amended Notice of Application, dated April 30, 2021.....	1
<b>2. Affidavits of the Applicants/Appellants</b>	
a. Affidavit of Dale Wohlgemuth, affirmed December 14, 2020 .....	19
i. Ex A - Email entitled “Masks and PCR tests”, dated September 21, 2020.....	22
ii. Ex B - Email Response, dated November 5, 2020 .....	24
b. Affidavit of Christopher Lowe, sworn December 30, 2020 .....	27
i. Ex A – Relevant sections of the Public Health Orders, between March 2020 – May 2020 .....	39
ii. Ex B – Public Health Order, dated November 21, 2020 .....	56
iii. Ex C – Public Health Order dated December 22, 2020.....	86
c. Affidavit of Ross Mackay, affirmed January 4, 2021 .....	119
i. Ex A – Public Health Order, dated November 11, 2020 .....	125
ii. Ex B – Ticket, dated November 20, 2020.....	129
iii. Ex C – Public Health Order, dated November 22, 2020.....	131
iv. Ex D – Public Health Order, dated December 22, 2020.....	138
d. Affidavit of Jay Bhattacharya, sworn January 5, 2021 .....	144
i. Ex A – <i>The Great Barrington Declaration</i> .....	154
ii. Ex B – Curriculum vitae of Jay Bhattacharya .....	161
iii. Ex C – Expert Report on the COVID-19 Epidemic Response in Manitoba, Canada, dated January 5, 2021 .....	188

**VOLUME 2**

e. Affidavit of Riley Toews, sworn January 5, 2021 .....	230
i. Ex A – Relevant sections of the Public Health Orders between March 2020 – May 2020 .....	242
ii. Ex B – Public Health Order, dated November 21, 2020 .....	263
iii. Ex C – Public Health Order, dated December 22, 2020 .....	270
iv. Ex D – Emails, government responses, the petition and government response .....	275
f. Affidavit of Tobias Tissen, affirmed January 5, 2021 .....	412
i. Ex A – Relevant sections of the Public Health Orders between March 2020 – May 2020 .....	421
ii. Ex B – Public Health Order, dated November 21, 2020 .....	434
iii. Ex C – Public Health Order, dated December 22, 2020 .....	441
iv. Ex D – Two tickets, dated November 23, 2020 .....	446
v. Ex E – Warning, dated November 29, 2020 .....	452
vi. Ex F – Tickets, dated December 9, 2020 .....	455
g. Affidavit of Roger Thomas, affirmed January 6, 2021 .....	461
i. Ex A – Email entitled “Inquiry” and response, dated December 7, 2020 .....	464
h. Affidavit of Thomas Rempel, affirmed January 7, 2021 .....	467
i. Ex A – Relevant sections of the Public Health Orders between March 2020 – May 2020 .....	476
ii. Ex B – Public Health Order, dated November 21, 2020 .....	494
iii. Ex C – Public Health Order, dated December 22, 2020 .....	500
i. Affidavit of Riley Toews, affirmed March 24, 2021 .....	505
j. Affidavit of Christopher Lowe, sworn March 25, 2021 .....	510
k. Affidavit of Thomas Rempel, affirmed March 26, 2021 .....	514

I. Affidavit of Tobias Tissen, affirmed March 26, 2021 .....	518
--------------------------------------------------------------	-----

**VOLUME 3**

m. Affidavit of Thomas Warren, sworn March 30, 2021 .....	522
i. Ex A – Curriculum vitae of Thomas Warren .....	527
ii. Ex B – Expert Report of Thomas Warren M.D., Responding Expert Report on SARS-Co-V-2 and COVID-19, PCR Tests, and Asymptomatic Transmission, dated March 29, 2021 .....	533
n. Affidavit of Jay Bhattacharya, sworn March 31, 2021 .....	547
i. Ex A – Expert Report of Jay Bhattacharya M.D., Ph.D., Responding Expert Report on the COVID-19 Epidemic Response in Manitoba, dated March 31, 2021 .....	552
o. Affidavit of Joel Kettner, sworn, April 1, 2021 .....	574
i. Ex A – Curriculum vitae .....	587
ii. Ex B – Responding Expert Report on the COVID-19 Pandemic Response in Manitoba, dated April 1, 2021 .....	611
p. Affidavit of Ross MacKay, affirmed April 1, 2021 .....	649
q. Affidavit of David Hersey, sworn April 20, 2021 .....	653
i. Ex A – Letter from the Applicants to the Respondents, dated March 19, 2021 .....	658
ii. Ex B – Letter from the Respondents to the Applicants, dated March 30, 2021 .....	663

**VOLUME 4**

Ex B continued (Item 2 – Insert 5) .....	797
iii. Ex C – Letter from the Applicants to the Respondents, dated April 1, 2021 .....	878
iv. Ex D – Letter from the Respondents to the Applicants, dated April 6, 2021 .....	884

## VOLUME 5

Ex D continued (Spreadsheet of Ct values for positive PCR tests) .....	1058
v. Ex E – Letter from the Respondents to the Applicants, dated April 8, 2021 .....	1220
vi. Ex F – Letter from the Applicants to the Respondents, dated April 13, 2021 .....	1255
vii. Ex G – Letter from the Respondents to the Applicants, dated April 14, 2021 .....	1260

## VOLUME 6

### **3. Affidavits of the Respondent**

a. Affidavit of Jason Kindrachuk, affirmed March 2, 2021 .....	1320
i. Ex A – Curriculum vitae of Jason Kindrachuk .....	1323
ii. Ex B – Report Prepared for Manitoba Justice on SARS-COV-2 and COVID-19, dated February 26, 2021.....	1339
b. Affidavit of Carla Loeppky, affirmed March 4, 2021 .....	1368
i. Ex A – Curriculum vitae of Carla Loeppky.....	1377
ii. Ex B – MHSAL Epidemiological Situation Report, January 14, 2021 .....	1388
iii. Ex C – Demographic and Clinical Characteristics of COVID-19 Cases with a Severe Outcome in Manitoba, dated January 11, 2021 .....	1422
iv. Ex D – Impacts of COVID-18 Public Health Measures on Various Health Indicators in Manitoba, dated November 1, 2020 .....	1434
v. Ex E – COVID-19 Novel Coronavirus Covid Response Update, October 15, 2020.....	1479
vi. Ex F – COVID-19 Novel Coronavirus Covid Response Update, presented November 10, 2020 .....	1516

vii. Ex G - COVID-19 Novel Coronavirus Covid Response Update, .....	1570
viii. Ex H – COVID-19 Epidemiological Information, dated March 2, 2021 .....	1596

**VOLUME 7**

c. Affidavit of Jared Bullard, affirmed March 5, 2021 .....	1613
i. Ex A – Curriculum vitae of Jared Bullard.....	1620
ii. Ex B – Curriculum viae of Dr. Van Caesele .....	1647
iii. Ex C – <i>Principles and practice of molecular testing for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Cov-2) during the Coronavirus Disease 2019 (COVID-19) pandemic in Manitoba, Canada, February 24, 2021 .....</i>	1686
d. Affidavit of Lanette Siragusa, affirmed March 5, 2021 .....	1700
i. Ex A – Curriculum Vitae of Lanette Siragusa .....	1709
e. Affidavit of Szilveszter Jozsef Komlodi, affirmed March 5, 2021 .....	1716
i. Ex A – List of resources and support programs available for individuals and businesses, from the Government’s website.....	1728
ii. Ex B – Manitoba Bridge Grant .....	1731
iii. Ex C – Caregiver Wage Support Program .....	1750
iv. Ex D – Dine-in Restaurant Relief Program.....	1757
v. Ex E – Back to Work in Manitoba Wage Subsidy Programs .....	1762
vi. Ex F – Tax and Fee Deferrals .....	1770
vii. Ex G – Manitoba Gap Protection Program.....	1777
viii. Ex H – Manitoba Job Restart Program.....	1780
ix. Ex I – Canada-Manitoba Job Grant.....	1788

x.	Ex J – Covid-19 Novel Coronavirus – Care for Your Mental Health.....	1790
xi.	Ex K – Help Next Door .....	1808
xii.	Ex L – Safe at Home Manitoba Grant Program.....	1811
xiii.	Ex M – List of support programs offered by the federal government .....	1820
xiv.	Ex N – Canada’s COVID-19 Economic Response Plan.....	1824
xv.	Ex O – Additional Support for Canadian Businesses from the Economic Impact of COVID-19 .....	1843

**VOLUME 8**

f.	Affidavit of Brent Roussin, affirmed March 8, 2021 .....	1857	
	i.	Ex 1 – Curriculum vitae of Brent Roussin.....	1920
	ii.	Ex 2 – High-level overview of the structure, current to February 18, 2021 .....	1923
	iii.	Ex 3 – Government of Canada – COVID-19: Main modes of transmission .....	1925
	iv.	Ex 4 – Manitoba First Nations COVID-19 Pandemic Response Coordination Team Weekly Bulletin, February 19, 2021 .....	1930
	v.	Ex 5 – Journal of the American Medical Association, <i>As Their Numbers Grow, COVID-19 “Long Haulers” Stump Experts</i> , September 23, 2020 .....	1935
	vi.	Ex 6 – Nature Human Behaviour, <i>Ranking the effectiveness of worldwide COVID-19 government interventions</i> , December 2020.....	1939
	vii.	Ex 7 – Extracts of the Pan-Canadian Public Health Network, <i>Federal/Provincial/Territorial Public Health Response Plan for Biological Events</i> .....	1958
	viii.	Ex 8 – Pan-Canadian Public Health Network website.....	1985



ix.	Ex 9 – The Royal College of Physicians and Surgeons of Canada, <i>Objectives of Training in the Specialty of Public Health and Preventative Medicine</i> , March 2018.....	1987
x.	Ex 10 – Canadian Public Health Association, <i>Public Health: A Conceptual Framework</i> , March 2017 .....	2009
xi.	Ex 11 – Canadian Nurses Association, <i>Ethics in Practice for Registered Nurses</i> , February 2006 .....	2024
xii.	Ex 12 – Centers for Disease Control and Prevention, <i>High SARS-CoV-2 Attack Rate Following Exposure at a Choir Practice, Skagit County, Washington, March 2020, May 15, 2020</i> .....	2037
xiii.	Ex 13 - Centers for Disease Control and Prevention, <i>High COVID-19 Attack Rate Among Attendees at Events at a Church – Arkansas, March 2020, May 22, 2020</i> .....	2043
xiv.	Ex 14 – Shared Health Manitoba, <i>COVID-19 Infection Prevention and Control Guidance for Personal Care Homes</i> , January 11, 2021 .....	2048
xv.	Ex 15 – Shared Health Manitoba, <i>COVID-19 Infection Prevention and Control Checklist for Personal Care Homes</i> , January 11, 2021 .....	2072
xvi.	Ex 16 – Shared Health Manitoba, <i>COVID-19 Long Term Care/Transitional Care Cohorting Guidelines</i> , November 30, 2020 .....	2079
xvii.	Ex 17 – The Lancet, <i>Genomic evidence for reinfection with SARS-CoV-2: a case study</i> , January 2021 .....	2084
xviii.	Ex 18 – The BMJ, <i>Covid-19: Hong Kong scientists report first confirmed case of reinfection</i> , August 26, 2020 .....	2092
xix.	Ex 19 – The Government of Alberta, <i>Herd immunity and the Great Barrington Declaration</i> , October 28, 2020 .....	2094
xx.	Ex 20 – The Lancet, <i>John Snow Memorandum</i> , October 31, 2020 .....	2098
xxi.	Ex 21 – COVID-19 Infections in Manitoba: Race, Ethnicity and Indigeneity, March 1, 2021 .....	2101

g. Reply Affidavit of James Blanchard, affirmed April 20, 2021 .....	2112
i. Ex A – Curriculum vitae of James Blanchard .....	2115
ii. Ex B – Comments on Dr. Joel Kettner’s “ <i>Expert Report on the COVID-19 pandemic response in Manitoba</i> ”, April 20, 2021 .....	2150

**VOLUME 9**

h. Reply Affidavit of Jared Bullard, affirmed April 29, 2021 .....	2156
i. Ex A – World Health Organization, <i>WHO Information Notice for IVD Users 2020/05</i> , January 13, 2021 .....	2165
ii. Ex B – World Health Organization, Diagnostic testing for SARS-CoV-2, Interim Guidance, September 11, 2020 .....	2168
iii. Ex C – PCR and Ct values in COVID-19 testing – Frequently Asked Questions and Important Considerations .....	2189
i. Reply Affidavit of Jason Kindrachuk, affirmed April 29, 2021.....	2194
i. Ex A – Reply Report.....	2197
j. Reply Affidavit of Brent Roussin, affirmed April 30, 2021.....	2210
i. Ex A – Letter from the Applicants to the Respondents, dated March 19, 2021 .....	2219
ii. Ex B – Letter from the Respondents to the Applicants, dated March 30, 2021 .....	2224
iii. Ex C – Manitoba Emergency Plan, April 2018 .....	2229
iv. Ex D – <i>Federal/Provincial/Territorial Public Health Response Plan for Ongoing Management of COVID-19</i> , August 19, 2020 .....	2339
v. Ex E – News Releases Manitoba, Covid-19 Bulletin #406, 407 and 408 .....	2383
vi. Ex F – News Releases Manitoba .....	2390
vii. Ex G – News Releases Manitoba, <i>New Orders Protect Manitobans Against Third Wave</i> , April 19, 2021 and <i>New</i>	

	<i>Public Health Orders in Place for Vaccinated Personal Care Home Staff, April 20, 2021</i> .....	2407
viii.	Ex H – <i>New Releases Manitoba, Province Launching Covid-19 Rapid Test Asymptomatic Screening Strategy to Protect Manitobans, April 19, 2021 and COVID-19 Enforcement Update, April 20, 2021</i> .....	2414
ix.	Ex I – SafeathomeMB.ca .....	2421

### **VOLUME 10**

k.	Reply Affidavit of Carla Loeppky, affirmed April 30, 2021 .....	2431
	i. Ex A – Letter from the Applicants to the Respondents, dated March 19, 2021 .....	2438
	ii. Ex B – Letter from the Respondents to the Applicants, dated March 30, 2021 .....	2443
	iii. Ex C – List of modelling parameters .....	2448
	iv. Ex D – Public Health Agency of Canada, FluWatch Report .	2452
	v. Ex E – Manitoba Health, Seniors and Active Living Week 12 Bulletin, March 15-21, 2020 .....	2465
	vi. Ex F – Manitoba Health, Seniors and Active Living Week 19-20 Bulletin, March 5-18, 2021 .....	2468
	vii. Ex G – Manitoba Health, Seniors and Active Living, Annual Report of Seasonal Influenza, 2017-2018.....	2480
	viii. Ex H – Manitoba Health, Seniors and Active Living, Annual Report of Seasonal Influenza, 2016-2017.....	2517
	ix. Ex I – Manitoba Health, Seniors and Active Living, Annual Report of Seasonal Influenza, 2015-2016.....	2559
l.	Reply Affidavit of Lanette Siragusa, affirmed April 30, 2021 .....	2604
	i. Ex A – Emails exchanged between the Applicants and Respondents, April 6 – April 8, 2021 .....	2608
<b>4.</b>	<b>List of Exhibits Filed in the Proceedings Under Appeal</b> .....	<b>2633</b>

**VOLUME 11**

<b>5. Judgment, dated February 11, 2022</b> .....	2634
<b>6. Notice of Appeal, dated March 14, 2022</b> .....	2638
<b>7. Judgments Appealed from</b> .....	2646
a. Reasons for Judgment, dated October 21, 2021, 2021 MBQB 218 (Constitutionality of ss. 13 & 67).....	2646
b. Reasons for Judgment, dated October 21, 2021, 2021 MBQB 219 ( <i>Charter</i> , Administrative Law, Division of Powers).....	2670
c. Order for Costs, dated February 1, 2022 .....	2826

**THE QUEEN'S BENCH**  
**Winnipeg Centre**

**APPLICATION UNDER:** *The Constitutional Questions Act, C.C.S.M., c. 180*

**AND UNDER:** The Court of Queen's Bench Rules, M.R. 553/88

**IN THE MATTER OF:** *The Public Health Act, C.C.S.M. c. P210*

**B E T W E E N:**

**GATEWAY BIBLE BAPTIST CHURCH, PEMBINA VALLEY BAPTIST CHURCH,  
REDEEMING GRACE BIBLE CHURCH, THOMAS REMPEL, GRACE COVENANT  
CHURCH, SLAVIC BAPTIST CHURCH, CHRISTIAN CHURCH OF MORDEN, BIBLE  
BAPTIST CHURCH, TOBIAS TISSEN, ROSS MACKAY**

Applicants,

- and -

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF MANITOBA,  
DR. BRENT ROUSSIN in his capacity as CHIEF PUBLIC HEALTH OFFICER OF  
MANITOBA, and DR. JAZZ ATWAL in his capacity as ACTING DEPUTY CHIEF  
OFFICER OF HEALTH MANITOBA**

Respondents.

---

**AFFIDAVIT OF JARED MANLEY PETER BULLARD**  
**AFFIRMED: March 5, 2021.**

---

**DEPARTMENT OF JUSTICE**

[REDACTED]

File No. CI 20-01-29284

**THE QUEEN'S BENCH**  
**Winnipeg Centre**

**APPLICATION UNDER:** *The Constitutional Questions Act, C.C.S.M., c. 180*

**AND UNDER:** The Court of Queen's Bench Rules, M.R. 553/88

**IN THE MATTER OF:** *The Public Health Act, C.C.S.M. c. P210*

**B E T W E E N:**

**GATEWAY BIBLE BAPTIST CHURCH, PEMBINA VALLEY BAPTIST CHURCH,  
REDEEMING GRACE BIBLE CHURCH, THOMAS REMPEL, GRACE COVENANT  
CHURCH, SLAVIC BAPTIST CHURCH, CHRISTIAN CHURCH OF MORDEN, BIBLE  
BAPTIST CHURCH, TOBIAS TISSEN, ROSS MACKAY**

Applicants.

- and -

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF MANITOBA, DR.  
BRENT ROUSSIN in his capacity as CHIEF PUBLIC HEALTH OFFICER OF  
MANITOBA, and DR. JAZZ ATWAL in his capacity as ACTING DEPUTY CHIEF  
OFFICER OF HEALTH OF MANITOBA**

Respondents.

**AFFIDAVIT OF JARED MANLEY PETER BULLARD**

I, JARED MANLEY PETER BULLARD, of the rural municipality of Headingley, in the Province of Manitoba, **AFFIRM AND SAY AS FOLLOWS:**

1. I have personal knowledge of the facts and matters hereinafter deposed to by me, except where stated to be based upon information and belief, in which case I believe them to be true.

2. I am an Associate Professor and Section Head of Infectious Diseases in the Departments of Pediatrics & Child Health and Medical Microbiology at the University of Manitoba. I am a licensed physician and have Fellowships with the Royal College of Physicians and Surgeons of Canada in Pediatrics, Medical Microbiology and Infectious Diseases. I am currently the Associate Medical Director of Cadham Provincial Laboratory (CPL), a position I have held since 2011. CPL is one of the laboratories that performs reverse transcription polymerase chain reaction (RT-PCR) testing for the presence of the SARS-CoV-2 novel coronavirus, which is responsible for the COVID-19 pandemic. Attached as **Exhibit "A"** to my affidavit is a copy of my curriculum vitae (CV).

3. I currently serve on several teams and committees established to respond to the COVID-19 pandemic, including:

- COVID-19 Pandemic Pediatric Incident Command Team – I am the Pediatric Infectious Disease representative on the team.
- SARS-CoV-2/COVID-19 Response Committee. I provide laboratory leadership for the pandemic response and testing operations.
- COVID-19 Public Health Operations Committee. I serve as the laboratory and clinical representative on this provincial committee, which consults and provides recommendations on the public health response to the COVID-19 pandemic.
- Respiratory Virus Public Health Working Group. I am the laboratory and clinical representative on this provincial working group, providing guidance on respiratory viruses, including influenza and SARS-CoV-2.
- Canadian Public Health Laboratory Network CanCOGeN Sequencing Group. I am the provincial co-representative for genetic sequencing of Canadian SARS-CoV-2 isolates on this national committee.
- COVID 19 Vaccine: Vaccine Priority Populations Group and the Clinical/Medical Oversight Group.

4. I have considerable experience and expertise in the design and optimization of RT-PCR diagnostic technology. Among other training, I have received training at the National Microbiology Laboratory to examine state of the art molecular diagnostics in HIV and measles, mumps and rubella including RT-PCR testing. My Bachelor of Science in Medicine, HIV

Immunology also had a focus on RT-PCR testing for HIV diagnostics. During the current pandemic, to date CPL has performed over 230,000 RT-PCR diagnostic tests to identify SARS-CoV-2, which I have assisted in supervising.

5. As outlined in my CV, I have assisted in the preparation of educational materials on various topics related to Covid-19 including the spread of the disease and protecting the public, clinical description and epidemiology, diagnostics and surveillance, therapeutics, infection prevention and control, and public health interventions.

6. My CV lists my peer reviewed journal articles, publications, research collaborations, lectures and presentations on SARS-CoV-2, including on the topic of laboratory diagnostics and the RT-PCR test. I have also peer reviewed a number of manuscripts written by other researchers. A sample of these include:

- “Comparison of Commercial Assays and Laboratory Developed Tests for Detection of SARS-CoV-2” (September 10, 2020, *J. Viral Methods*, co-author)
- “Diagnostic Testing for SARS-CoV-2” (June 3, 2020, *CMAJ*, co-author)
- “Predicting Infectious Severe Acute Respiratory Syndrome Coronavirus 2 From Diagnostic Samples” (May 22, 2020, *Clinical Infectious Diseases*. Lead investigator and author).
- “Positive or Not? Laboratory Testing for Covid-19” (October 2020, Symposium presentation).
- “Clinical Presentation of COVID-19 Infections” (April 2020, National presentation to the College of Family Physicians of Canada)
- Covid-19 Seminar Series: Pediatric Cases, Laboratory Diagnostics and Critical Care” (June 2020, International presentation to the Pacific Island Health Officers’ Association)
- Diagnostic yield of repeat testing for SARS-CoV-2: Experience from a large health system in Los Angeles. (Manuscript peer reviewer for *International Journal of Infectious Disease*; August 2020)
- Development and validation of reserves transcriptase-PCR assays for the testing of SARS-CoV-2 (Manuscript peer review for *Journal of the Association of Medical Microbiology and Infectious Diseases*; August 2020)



- Comparison of RT-PCR Cycle Threshold Values from Respiratory Specimens in Symptomatic and Asymptomatic Children with SARS-CoV-2 Infections (December 2020, Manuscript peer reviewer for JAMA Pediatrics)
- “Infectious period of SARS-CoV-2 in 17 nursing home residents – Arkansas, June-August 2020” (December 2020, Manuscript peer reviewer for Open Forum of Infectious Diseases)
- “SARS CoV-2 Surveillance and Exposure in the Perioperative Setting with Universal testing and Personal Protective Equipment (PPE) Policies” (October 2020, Manuscript peer reviewer for Clinical Infectious Diseases)
- “Respiratory tract samples collected from patients within a region of Quebec, Canada indicate the absence of early circulation of SARS-CoV-2 Infection” (September 2020, Manuscript peer reviewer for Journal of the Association of Medical Microbiology and Infectious Diseases)
- Prevalence of COVID-19 among children and adolescents while easing lockdown restrictions in Cologne, North Rhine-Westphalia, Germany (August 2020, Manuscript peer reviewer for Archives of Disease in Childhood).
- Development and validation of reverse transcriptase-PCR assays for the testing of SARS-CoV-2 (August 2020, Manuscript peer reviewer for Journal of the Association of Medical Microbiology and Infectious Diseases)
- Diagnostic yields of repeat testing for SARS-CoV-2: Experience from a large health system in Los Angeles (August 2020, Manuscript peer reviewer for International Journal of Infectious Disease).
- “SARS-CoV-2 RT-PCR Cycle Thresholds (Ct) values and Correlation with Symptom onset to Test (STT) in Pediatric Patients in Manitoba during the COVID-19 Pandemic” (2018 to present; Supervisor of Pediatric Resident Research Project)
- “Seasonality of Coronaviruses: Implications for COVID-19” (Accepted for publication in Canadian Communicable Disease Report).

7. I was asked to provide my independent, expert opinion on how RT-PCR testing is used to identify the SARS-CoV-2 virus in respiratory samples and diagnose COVID-19. I discuss the accuracy of RT-PCR molecular testing to identify suspected cases of SARS-CoV-2 in a pandemic and compare it to cell culture. I explain cycle threshold (Ct) values in RT-PCR tests and how Ct values correlate to potential infectiousness of positive cases. Finally, I explain the role of RT-PCR testing and the implication of a positive result for the public health response.

8. I wrote the report jointly with Dr. Paul Van Caesele, a professor in the departments of Medical Microbiology & Infectious Diseases, and Pediatrics & Child Care Health at the University of Manitoba. Dr. Van Caesele is also the Medical Director of CPL, a position he has held since 2000, and the co-chair of the Canadian Public Health Laboratory Network. Dr. Van Caesele's curriculum vitae is attached as **Exhibit "B"** to my affidavit.

9. Attached as **Exhibit "C"** to my affidavit is a copy of our expert report entitled "Principles and practice of molecular testing for Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Cov-2) during the Coronavirus Disease 2019 (COVID-19) pandemic in Manitoba, Canada".

10. As we explain in more detail in the report, the RT-PCR test is the most accurate test available for identifying cases of SARS-CoV-2. The Ct value associated with the RT-PCR test represents the number of times that the genetic material in the sample must be amplified (doubled) before the particular genetic material of the virus can be positively identified. The Ct value is inversely related to the amount of virus originally present in a sample. In other words, the higher the Ct value, the less virus initially present. Regardless of the particular Ct value, a positive RT-PCR result represents a true positive case of the SARS-CoV-2 virus.

11. Research has shown that there is a progressively lower probability that the virus can grow in a cell culture (a proxy for an individual being infectious) when the SARS-CoV-2 virus is detected at a Ct value of 25 or higher. This means that the higher the Ct value, the less likely the person is infectious at that time. However, cell culture is only a proxy and the possibility that an individual is infectious at the time of the RT-PCR test or will later become infectious cannot be ruled out based on Ct value alone. Further clinical investigation is required.

12. From a public health perspective, it is important to identify and report all positive cases of SARS-CoV-2, regardless of the Ct value. First, while less likely, some individuals might still be infectious even at a higher Ct value. Secondly, a positive test at a higher Ct value (indicating a lower viral load) may result because the individual is only at the early stages of the COVID-19 disease. In other words, the SARS-CoV-2 virus will continue to multiply in that individual and the person will become infectious in the near future. Finally, even if a person who tested positive at a higher Ct value is no longer infectious, that individual did have COVID-19 and was

infectious at an earlier point in time. Public health will rely on the positive RT-PCR test result to perform contact tracing in order to identify other persons who may have been infected and could spread the disease further. The RT-PCR test also provides public health with a picture of the overall disease burden in the community and its possible locations, which can assist in tailoring the public health response.

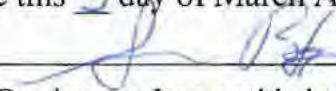
13. I acknowledge that in preparing this report and providing expert evidence, legal counsel for the Government explained that my role is to assist the court to determine the matters in issue. I further acknowledge that it is my duty to provide evidence that is fair, objective and non-partisan and to opine only on matters that are within my area of expertise. This duty prevails over any obligation that I may owe to any party on whose behalf I am engaged.

14. I make this affidavit bona fide.

AFFIRMED before me in the City )  
of Winnipeg, in the Province )  
of Manitoba, this 5<sup>th</sup> day of )  
March, 2021. )  
\_\_\_\_\_)  
A Barrister-at-law entitled to practice )  
in and for the Province of Manitoba )

  
\_\_\_\_\_  
JARED MANLEY PETER BULLARD

This is Exhibit " A " referred to  
in the Affidavit of Jared Manley  
Peter Bullard Affirmed before  
me this 5<sup>th</sup> day of March A.D. 2021

  
\_\_\_\_\_  
A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

## **Dr. Jared Bullard MD, FRCPC**

**Section Head, Pediatric Infectious Diseases**  
**Associate Professor, Pediatrics & Child Health and Medical Microbiology & Infectious Diseases**  
**Associate Medical Director, Cadham Provincial Laboratory**

# **Curriculum Vitae**



**University  
of Manitoba**

**January 2021**

# CURRICULUM VITAE

**Jared Manley Peter Bullard, MD FRCPC**

---

**Business Address:**

████████████████████████████████████████████████████████████████████████████████  
 ████████████████████████████████████████████████████████████████████████████████  
 ████████████████████████████████████████████████████████████████████████████████  
 ████████████████████████████████████████████████████████████████████████████████  
 ████████████████████████████████████████████████████████████████████████████████

**Citizenship:**

Canada/Bahamas

---

**Positions Held:**

Assistant Medical Director – Cadham Provincial Laboratory (CPL), July 2010-November 2011  
 Associate Medical Director – Cadham Provincial Laboratory (CPL), November 2011- present  
 Section Head – Pediatric Infectious Diseases, University of Manitoba, April 2020 - present

---

**Appointments:**

Section Head – Pediatric Infectious Diseases, University of Manitoba, April 2020 - present  
 Associate Professor – Promoted March 31, 2017 in the Departments of Pediatrics & Child Health and Medical Microbiology & Infectious Diseases, University of Manitoba, 2017 – present  
 Assistant Professor – Departments of Pediatrics & Child Health and Medical Microbiology, University of Manitoba, 2010 – 2017  
 Infectious Disease Consultant – Winnipeg Regional Health Authority, 2009 – present  
 Medical Consultant to Cadham Provincial Laboratory – temporary assistant to the Medical Director, August 2009.  
 Medical Consultant at Children’s Hospital, January-October 2008

---

**Education Completed:**

2010	<b>Royal College of Physicians and Surgeons of Canada (FRCPC)</b> Medical Microbiology, University of Manitoba, Faculty of Medicine
2007 to 2010	<b>Fellowship training in Medical Microbiology</b> Completed training in June 2009 at the University of Manitoba, Department of Pediatric Infectious Diseases.
2009	<b>Royal College of Physicians and Surgeons of Canada (FRCPC)</b> Infectious Diseases, University of Manitoba, Faculty of Medicine
2007 to 2009	<b>Fellowship training in Pediatric Infectious Diseases</b> Completed training in June 2009 at the University of Manitoba, Department of Pediatric Infectious Diseases
2008	<b>Royal College of Physicians and Surgeons of Canada (FRCPC)</b> Pediatrics
2004 to 2008	<b>Postgraduate Medical Training in Pediatrics</b> Completed training in June 2008 at the University of Manitoba, Department of Pediatrics
2005	<b>Licentiate of the Medical Council of Canada (LMCC) Part 2</b>
2004	<b>Licentiate of the Medical Council of Canada (LMCC) Part 1</b>
2000 to 2004	<b>Doctorate of Medicine, M.D.</b> Faculty of Medicine, University of Manitoba, 2004

2000 to 2002	<b>Bachelor of Science in Medicine, BSc (Medicine), HIV Immunology</b> University of Manitoba, Department of Medical Microbiology, Faculty of Medicine
1995 to 1999	<b>Bachelor of Science, BSc (4 year with highest distinction), Biochemistry</b> University of Winnipeg, Department of Biochemistry

## Training and Informal Education

2020	<b>Health Canada Division 5 – Drugs for Clinical Trials Involving Human Subjects Stage 1</b> Record ID 3637609
2020	<b>Canadian Good Clinical Practice (GCP) – Investigators 1-Basic</b> Record ID 36397608
2017	<b>Transportation of Dangerous Goods (TDG)</b> Canadian Certification (Certificate 7434)
2016	<b>CMA Physician Leadership Institute</b> Engaging Others
2016	<b>Emergency Spill Response Team</b> Manitoba Member Certified (MB-023-12) by the Public Health Agency of Canada (PHAC)
2015	<b>Manitoba Health Organization &amp; Staff Development (OSD)</b> <ul style="list-style-type: none"> <li>• Conflict Resolution</li> <li>• Media Relations Training</li> </ul>
2015	<b>CMA Physician Leadership Institute</b> Physician as a Coach
2013	<b>CMA Physician Leadership Institute</b> Self-awareness and Effective Leadership
2013	<b>Transportation of Dangerous Goods (TDG)</b> Canadian Certification (Certificate 5732)
2011	<b>WRHA Organization &amp; Staff Development (OSD)</b> <ul style="list-style-type: none"> <li>• Managing the Generational Differences at Work</li> <li>• Progressive Discipline</li> </ul>
2010	<b>The College of American Pathologists (CAP)</b> Initial Team Member Training with Post-Test

## Professional Associations and Memberships

2019	International Union against Sexually Transmitted Infections – Canada (IUSTI-Canada)
2015	American Society of Microbiology (ASM), Member
2010	HIV Medicine Association (HIVMA), Member
2008	Royal College of Physicians and Surgeons of Canada (FRCPC), Fellow (Pediatrics, Infectious Diseases, Medical Microbiology)
2007	Infectious Diseases Society of America (IDSA), Member
2007	Association of Medical Microbiology and Infectious Diseases Canada (AMMI), Member
2004	Canadian Pediatric Society (CPS), Fellow (Global Child & Youth Health, Hospital Pediatrics)
2000	Canadian Medical Association (CMA), Member

## Professional and Academic Affiliations

### Hospital/Laboratory:

2020	<b>COVID-19 Pandemic Pediatric Incident Command Team</b> Section Head Pediatric ID representative
2020	<b>SARS-CoV-2/COVID-19 Response Committee</b> Laboratory leadership addressing the response to the SARS-CoV-2/COVID-19 pandemic and testing operations
2019	<b>Shared Health Clinical Practice Change</b> Diagnostic Testing Recommendations for Investigation of Urinary Tract Infections (UTI)
2014 to present	<b>Manitoba Health FOCUS Facilitator</b> Representative for Cadham Provincial Laboratory to facilitate use of the PEAK communication tool for Departmental/Divisional Alignment Meetings
2014 to 2017	<b>Workplace Wellness Working Group (WWWG)</b> CPL representative to the Manitoba Health WWWG
2013 to present	<b>Cadham Provincial Laboratory Management Committee (LMC)</b>
2012 to 2016	<b>Winnipeg Children's Hospital First Febrile UTI Working Group</b> Infectious Disease consultant providing advice regarding treatment and diagnostics for UTIs
2012 to present	<b>Cadham Provincial Laboratory Quality Assurance (QA) Committee</b>
2011 to present	<b>Cadham Provincial Laboratory Risk Management Committee</b> Chair
2010 to present	<b>Cadham Provincial Laboratory Workplace Health and Safety Committee</b> Employer co-chair

### Provincial:

2021 to present	<b>COVID-19 Vaccine: Vaccine Priority Populations Group</b>
2020 to present	<b>COVID-19 Vaccine: Clinical/Medical Oversight Group</b>
2020 to present	<b>Respiratory Virus Public Health Working Group</b> Laboratory and clinical representative providing guidance on respiratory viruses including influenza and SARS-CoV-2.
2020 to present	<b>COVID-19 Public Health Operations Committee</b> Laboratory and clinical representative on the Manitoba committee providing recommendations and consultation to the public health response for the SARS-CoV-2/COVID-19 pandemic.
2019 to present	<b>Provincial Sexually Transmitted and Blood-borne Infections Outbreak Response Committee (SORC)</b> Member on Testing Sub-Committee and co-chair on Treatment Sub-Committee
2018 to present	<b>Collective Impact Network – HIV/STI Testing and Linkage Working Group</b>
2017 to present	<b>Provincial STBBI Outbreak Management Steering Committee</b>
2015	<b>City of Winnipeg Boil Water Advisory Investigation Committee</b> Laboratory representative and author of CPL report investigating the boil water advisor in Winnipeg, Manitoba in January 2015.
2014 to present	<b>Adverse Events Following Immunization (AEFI) Causality Assessment</b> Consultant for cases of potential AEFI events
2014 to present	<b>Manitoba Perinatal Screening Committee</b> Interdisciplinary team evaluating the provincial newborn screening program
2013 to 2015	<b>Communicable Disease Control, Manitoba Health Reportable Diseases Working Group</b> Revision of the Manitoba Reportable Diseases list to harmonize with National list
2013 to 2017	<b>Manitoba Health Grant Evaluations Committee</b>



	Review and advise on grant applications for funding by Manitoba Health based on core objectives
2013 to present	<b>Public Health Laboratory Committee</b> Chair of the group reviewing important information and data provided by the Public Health team including Cadham Provincial Laboratory
2013 to present	<b>Maternal Serum Screening Committee</b> Interdisciplinary team evaluating the provincial MSS program
2013 to present	<b>HIV Prevention of Mother to Child Transmission (PMTCT) Committee</b> Chair of the group responsible for regular review and implementation of the HIV PMTCT protocol at the Women's Hospital, health Sciences Centre and ultimately on a provincial level.
2012 to present	<b>HIV Point of Care Testing (POCT) Committee</b> Chair of the group responsible for discussing issues and administration of sites currently offering HIV POCT in Manitoba and selection of new sites
2012 to 2017	<b>Communicable Disease Control, Manitoba Health Antibiotic Resistant Organisms (AROs) Revision Committee</b> Review and discussion of Infection Prevention and Control guidance documents
2011 to present	<b>Manitoba HIV Program</b> Pediatric and Laboratory consultant and liaison
2010 to 2012	<b>Manitoba STBBI Strategy Steering Committee</b> Working group of Manitoba Health, Healthy Living and Public Health updating the 1996 Manitoba HIV Strategy Co-chair of the Treatment Pillar

University:

2020 to present	<b>Department of Medical Microbiology &amp; Infectious Diseases Clinical Studies Fund</b> Executive Member as Head of Pediatric Infectious Diseases
2019 to present	<b>Biosafety &amp; Wellness Coordinator</b> For Infectious Diseases, Medical Microbiology, Clinical Microbiology and Pediatric Hematology/Oncology trainees
2016 to 2018	<b>Pediatric Residents' Educational Case Review (ECR)</b> Primary Staff Supervisor and Advisor
2016 to present	<b>Academic Appeals Committee</b>
2015 to 2016	<b>Undergraduate Medical Education Consolidation Committee</b> Medical Microbiology representative
2013 to present	<b>Public Health and Preventative Medicine Residency Training Program Committee</b> Responsible for reviewing individual PHPM resident's progress and discussing ways to help them achieve their academic and professional goals
2011 to 2012	<b>Curriculum Renewal Task Group 7: Health Systems</b> Revision of undergraduate medical education courses regarding systems in Health
2011 to present	<b>Children's Hospital Research Institute of Manitoba (CHRIM)</b> Scientist Member
2010 to 2011	<b>Undergraduate Medical Education (UGME) Curriculum Review and Renewal Planning Committee</b> Responsible for revision of UGME course material in the areas of diagnostics and medical microbiology
2010 to present	<b>Pediatric Infectious Disease Resident Program Committee</b> Responsible for reviewing individual Pediatric Infectious Diseases resident's progress and discussing ways to help them achieve their academic and professional goals
2010 to present	<b>Medical Microbiology Resident Program Committee</b> Responsible for reviewing individual Medical microbiology resident's progress and discussing ways to help them achieve their academic and professional goals

2010 to present	<b>Medical Microbiology Council</b> Voting member as Associate Professor
2009 to 2016	<b>Infectious Diseases/Medical Microbiology Half-Day Committee</b> Review and modification of the existing half-day to ensure preparation for the Royal College exam for these sub-specialties and helping trainees to remain up to date.
2009 to 2013	<b>Pediatric sub-committee for the resident Academic Half-day</b> Optimizing the current pediatric half-day to ensure its compliance with the Royal College of Physicians and Surgeons of Canada objectives
2009 to 2010	<b>Medical Microbiology/Infectious Diseases Fellow Representative</b> Medical Microbiology Council, Faculty of Medicine, University of Manitoba
2008 to 2011	<b>Pediatric Resident OSCE Committee</b> Designing and implementing OSCE stations to prepare residents for the Royal College examination in Pediatrics
2008 to 2009	<b>Chief Resident of Infectious Diseases and Medical Microbiology</b> University of Manitoba

#### National Committees:

2020 to present	<b>Canadian Public Health Laboratory Network (CPHLN) CanCOGeN Sequencing Group</b> Provincial co-representative for genetic sequencing of Canadian SARS-CoV-2 isolates
2019 to present	<b>National Advisory Committee on Sexually Transmitted and Blood-borne Infections</b> Clinical and laboratory provincial representative and Chair of Syphilis sub-group
2019 to present	<b>Canadian Public Health Laboratory Network (CPHLN) Syphilis Diagnostics Working Group</b> Provincial representative and co-chair for diagnosis of congenital syphilis
2018 to present	<b>Canadian Association of HIV Clinical Laboratory Specialists (CAHCLS)</b> Provincial representative
2017 to present	<b>Royal College of Physicians of Surgeons of Canada</b> Infectious Diseases Certification Examiner
2017	<b>Royal College of Physicians of Surgeons of Canada</b> Infectious Diseases Certification Examination Quality Reviewer
2016 to present	<b>Royal College of Physicians of Surgeons of Canada</b> Medical Microbiology Certification Examination Examiner
2016 to 2017	<b>The Canadian Public Health Laboratory Network Gold Standards of Laboratory Tests (GSLT) Working Group</b> Provincial Representative
2015 to 2018	<b>The Canadian Public Health Laboratory Network Antimicrobial Resistance Working Group</b> Provincial Representative
2014 to 2015	<b>Canadian Public Health Laboratory Network (CPHLN) Ebola Working Group</b> Provincial diagnostic laboratory representative
2010 to present	<b>Canadian Pediatric AIDS Research Group (CPARG)</b> Manitoba co-member of CPARG
September 2009	<b>Facilitator at the Severe H1N1 Disease: Preventing Cases, Reducing Mortality</b> Responsible for summarizing key points and recommendations from the breakout session dedicated to Public Health, Primary Practice and Special Populations

International Committees:

2019 to present      **Clinical Infectious Diseases (CID) Editorial Advisory Board**  
 One of six Canadian board members for the CID journal, assisting in peer review of submitted manuscripts and direction of the journal

---

**Academic Awards and Achievements**

2020      **Pediatric Chairs of Canada 2020 COVID Leadership Award**  
 Awarded to the Pediatric Incident Command Team

2019      **Manitoba Medical Student Association Teaching Awards 2017/18**  
 Nominee for the Class of 2021: Teaching in a Small Group Setting Award

2017      **Manitoba Medical Student Association Teaching Awards 2015/2016**  
 Nominee for the Class of 2017 (Med III): Attending – Mentorship and Class of 2018 (Med II): Best Teaching in Small Group Setting awards

2016      **Department of Medical Microbiology & Infectious Diseases Clinical Educator Award 2016**  
 Selected by residents in the Infectious Diseases and Medical Microbiology programs for excellence in teaching

2016      **2015 Pediatrics Faculty Development Fund**  
 Awarded \$500 for attending CMA Physician Leadership Course, University of Manitoba

2016      **Manitoba Medical Student Association Teaching Awards 2014/2015**  
 Nominee for the Med II Pre-clerkship awards in both Innovation and Inspiration categories

2008      **Children’s Hospital Foundation Local Research Competition**  
 Best presentation in the Fellow category

2006      **Professional Association of Residents and Interns of Manitoba Resident of the month December 2006**  
 Voted on by the PARIM committee based on nominations from its members from their positive interactions with the nominated resident

2006      **Manitoba Medical Students Association Resident Award for Teaching Excellence**  
 Voted on by medical students in their graduating year from over 350 residents

2004      **Dr. Harold Popham Scholarship**  
 Highest academic standing going into post-graduate studies in the field of Pediatrics

2002      **Nicholson Prize**  
 BSc (medicine) Project with Most Scientific Merit

2002      **Merck, Sharp & Dome Scholarship**  
 Best Basic Sciences BSc (medicine) project

2002      **National Student Research Forum (NSRF) Award**  
 Attended NSRF in Galveston, Texas in April 2003

2002      **American Society for Clinical Pathology Award**  
 Academic Excellence and Achievement

2001      **Morris Neamon Award**  
 Excellence in first year of the BSc (medicine) program

1999      **Gold Medalist in Biochemistry (4 year)**  
 University of Winnipeg

1999      **Student Merit Award in Biochemistry**  
 Society of Chemical Industry

## Professional Activities

### Newsletters and Educational Products:

- November 2020 *College of Family Physicians of Canada (CFPC) COVID-19 eLearning Course for Family Physicians*  
Module 2 COVID-19: Spread of disease and protecting the public  
Content expert and editor of national resource for CFPC members CME
- Spring 2020 *The Manitoba COVID-19 Report*  
Conceptualized, and Faculty Lead and Editor for, a collaborative report generated by idle medical and graduate students, residents and infectious diseases/medical microbiology/clinical microbiology fellows with assistance by the Neil John MacLean Health Sciences Library librarian team to review COVID-19 literature and research in the domains of Clinical Description and Epidemiology, Diagnostics & Surveillance, Therapeutics, Infection Prevention & Control, Public Health Interventions and Pediatric Corner. Eight weekly reports were distributed to practitioners in Manitoba, Canada and internationally.  
<https://www.mbcovid19report.com/>

### Peer Reviewed Journal Articles:

- January 2021 *Congenital Syphilis Diagnosed Beyond the Neonatal Period in the United States, 2014-2018*  
Manuscript peer reviewer for Pediatrics
- December 2020 *Comparison of RT-PCR Cycle Threshold Values from Respiratory Specimens in Symptomatic and Asymptomatic Children with SARS-CoV-2 Infections*  
Manuscript peer reviewer for JAMA Pediatrics
- December 2020 *Infectious period of SARS-CoV-2 in 17 nursing home residents – Arkansas, June-August 2020*  
Manuscript peer reviewer for Open Forum of Infectious Diseases (OFID)
- November 2020 *Sub-optimal adherence to prenatal screening guidelines of Chlamydia trachomatis and Neisseria gonorrhoeae infection in a Montreal tertiary care hospital: a retrospective cohort study*  
Manuscript peer reviewer for Canadian Communicable Disease Report (CCDR)
- November 2020 *SARS-CoV-2 antibody status in decedents undergoing forensic postmortem examination in Maryland, May 24 to June 30, 2020*  
Manuscript peer reviewer for Open Forum Infectious Diseases (OFID)
- October 2020 *SARS CoV-2 Surveillance and Exposure in the Perioperative Setting with Universal testing and Personal Protective Equipment (PPE) Policies*  
Manuscript peer reviewer for Clinical Infectious Diseases
- September 2020 *Findings among Indigenous participants of the Tracks survey of people who inject drugs in Canada, Phase 4, 2017-2019*  
Manuscript peer reviewer for Canadian Communicable Disease Report (CCDR)
- September 2020 *Respiratory tract samples collected from patients within a region of Quebec, Canada indicate the absence of early circulation of SARS-CoV-2 infection*  
Manuscript peer reviewer for Journal of the Association of Medical Microbiology and Infectious Diseases (JAMMI).
- August 2020 *Prevalence of COVID-19 among children and adolescents while easing lockdown restrictions in Cologne, North Rhine-Westphalia, Germany*  
Manuscript peer reviewer for Archives of Disease in Childhood
- August 2020 *A pilot RCT evaluating InThistoGether, an mHealth HIV Prevention Program for Ugandan Youth*

- August 2020 Manuscript peer reviewer for Pediatrics  
*Development and validation of reverse transcriptase-PCR assays for the testing of SARS-CoV-2*
- August 2020 Manuscript peer reviewer for Journal of the Association of Medical Microbiology and Infectious Diseases (JAMMI)  
*Diagnostic yield of repeat testing for SARS-CoV-2: Experience from a large health system in Los Angeles*
- May 2020 Manuscript peer reviewer for International Journal of Infectious Disease  
*Positive Tracheal SARS-CoV-2 RNA Test After Three Negative SARS-CoV-2 RNA Tests in a Patient with COVID-19*
- May 2020 Manuscript peer reviewer for Canadian Journal of Anesthesia  
*Surveillance of laboratory exposures to human pathogens and toxins: Canada 2019*
- December 2019 Manuscript peer reviewer for Canadian Communicable Diseases Report (CCDR)  
*Routine HIV testing in acute care hospitals: Changing practice to curb a local HIV epidemic in Vancouver, BC*
- June 2019 Manuscript peer reviewer for Preventive Medicine  
*Review of Rates of Hospitalization and Infection-Related Hospitalization Among HIV-Exposed Uninfected Children Compared to HIV-Unexposed Uninfected Children in the United States, 2007–2016*
- April 2019 Manuscript peer reviewer for Clinical Infectious Diseases  
*Review of Incidence and progression of echocardiographic abnormalities in HIV-infected older children and adolescents taking antiretroviral therapy: A prospective cohort study*
- November 2018 Manuscript peer reviewer for Clinical Infectious Diseases  
*Review of Substance Use, Demographic, and Socioeconomic Factors are Independently Associated with Post-Partum HIV Care Engagement in the Southern United States, 1999-2016*
- August 2018 Manuscript peer reviewer for Clinical Infectious Diseases  
*Maternal and Infant Bone Mineral Density One Year after Delivery in a Randomized Controlled Trial of Maternal Tenofovir Disoproxil Fumarate to Prevent Mother-to-Child Transmission of Hepatitis B Virus*
- July 2017 Manuscript peer reviewer for Clinical Infectious Diseases  
*The Impact of Gestational Age at ART initiation on Adverse Birth Outcomes*
- May 2017 Manuscript peer reviewer for Clinical Infectious Diseases  
*First record of locally acquired human babesiosis in Canada caused by Babesia duncani: a case report*
- March 2017 Manuscript peer reviewer for SAGE Open Medical Case Reports  
*Performance of point-of-care birth HIV testing in primary health care clinics: an observational cohort study*
- July 2016 Manuscript peer reviewer for Clinical Infectious Diseases  
*Failure to suppress HIV in children on antiretroviral treatment in low- and middle-income countries: a meta-analysis*
- April 2016 Manuscript peer reviewer for Clinical Infectious Diseases  
*Prevalence of locomotor disorders among people living with HIV followed in the Department of Infectious and Tropical Diseases, Abidjan, Côte d'Ivoire*
- April, June 2016 Manuscript peer reviewer for the Canadian Journal of Infectious Diseases and Medical Microbiology  
*N-terminal pro-B-type Natriuretic Peptide for the Progressive Prediction of Severe Hand, Foot and Mouth Disease*
- July 2015 Manuscript peer reviewer for BMC Infectious Diseases  
*Incidence, risk factors, and outcomes of opportunistic infections in pediatric renal transplant recipients*
- May 2015 Manuscript peer reviewer for Pediatric Transplantation  
*Mycoplasma hominis as a Cause of Septic Hip Arthritis in a Neonate: The First Case Report*
- Manuscript peer reviewer for the Journal of Medical Microbiology

May 2015	<i>High prevalence of K65R drug resistance mutation in HIV-1 infected infants exposed to maternal therapy of lamivudine, zidovudine and either nevirapine or nelfinavir in breast milk</i> Manuscript peer reviewer for Clinical Infectious Diseases
August 2014	<i>Pregnancy and HIV disease progression: a systematic review and meta-analysis</i> Manuscript peer reviewer for Clinical Infectious Diseases
August 2013	<i>A Multicentre Study of Initiation of Antiretroviral Therapy and Transmitted Drug Resistance in Antiretroviral Naïve Adolescents and Young Adults with HIV in New York City</i> Manuscript peer reviewer for Clinical Infectious Diseases
August 2013	<i>A Multicentre Study of Initiation of Antiretroviral Therapy and Transmitted Drug Resistance in Antiretroviral Naïve Adolescents and Young Adults with HIV in New York City</i> Manuscript peer reviewer for Clinical Infectious Diseases
August 2013	<i>Chikungunya Fever in Canada: Common Presentations and Management Challenges highlighted by Two Reported Cases</i> Manuscript peer reviewer for Canadian Medical Association Journal
September 2012	<i>Polymerase-Chain-Reaction-based Diagnosis of Viral Pulmonary Infections in Immunocompromised Children</i> Manuscript peer reviewer for Pediatric Pulmonology
August 2012	<i>Spinal bone mineral density increases in HIV-infected children treated with long-term combination antiretroviral therapy</i> Manuscript peer reviewer for Clinical Infectious Diseases

Grants Review:

2019	<i>Children's Hospital Research Institute of Research (CHRIM) Basic Science Operational Grant Reviewer</i>
2014	<i>Public Health Agency of Canada (PHAC) GRDI 6 Virology Subcommittee Grant proposal reviewer</i>

Abstract Review:

2014, 2016	<b>Canadian Association of HIV Research (CAHR)</b> Pediatric and Laboratory HIV Abstract Reviewer
------------	------------------------------------------------------------------------------------------------------

Academic Theses Reviewed:

2013	<b>University of Manitoba Bachelor of Science (Medicine)</b> Thesis Title: "“You’d be surprised how many kids don’t know this stuff. They act like they do, but they don’t”": Designing Healthy Sexuality Initiatives with At-Risk Youth Internal Examiner for Ms. Heather Ashdown
2012	<b>University of Manitoba Bachelor of Science (Medicine)</b> These Title: Understanding the impact of HIV among vulnerable populations in South India. Internal Examiner for Ms. Melina Zylberman
2011	<b>University of Manitoba Bachelor of Science (Medicine)</b> These Title: Supportive care in the management of severe pneumonia in Nigerian children. External Examiner for Ms. Tito Daodu

Chair activities:

2016                      **Co-chair at the 25<sup>th</sup> Annual Canadian Association of HIV Research (CAHR)**  
Clinical Care Session, Clinical Sciences Track  
Winnipeg, MB, Canada May 13, 2016

Royal College of Physicians and Surgeons of Canada Exam Committees:

2017                      Infectious Diseases Certification Exam Committee  
2017                      Infectious Diseases Certification Exam Quality Reviewer and Committee  
Member  
2016                      Medical Microbiology Certification Exam Committee

**Teaching and Students Supervised/Mentored**Graduate Level Students Supervised:

2012 to 2014              ***Screening Tests for Congenital Infectious Diseases in Manitoba: Are all Pregnant Women in Manitoba Screened?***  
Co-supervisor of Arwa Faizo, Masters of Science (MSc)  
Graduated in October 2014

Graduate Level Courses Taught:

2017, 2019, 2021        *Parasitology Course MMIC 7140*. Laboratory skills supervisor. University of Manitoba, Winnipeg, MB.  
2016, 2018              *Clinical Virology MMIC 7210*. Guest lecturer, 3 separate lectures (Herpesviruses, Mumps/Measles/Rubella, Introduction to Virology). University of Manitoba, Winnipeg, MB.  
2015                      *Parasitology Course MMIC 7140*. Laboratory skills co-supervisor. University of Manitoba, Winnipeg, MB.  
2013, 2015, 2017        “Staphylococcus aureus”. Guest lecturer. *University of Manitoba, Clinical Bacteriology MMIC 7040*. Winnipeg, MB.  
2011, 2015, 2017        “Enterococci”. Guest lecturer. *University of Manitoba Clinical Bacteriology MMIC 7040*. Winnipeg, MB.

Undergraduate Medical Students Supervised:

2018                      ***Surveillance of Echinococcus multilocularis in the periurban and urban area of Winnipeg, Manitoba in coyotes and domestic dogs***  
Primary supervisor of Carmen Tse with Drs. Pierre Plourde and Richard Rusk  
Med 2 Summer Research Program  
Awarded the MED II Summer Research Best Scientific Prize 2018  
Published in Canadian Communicable Disease Report (CCDR) July 2019  
2015                      ***Descriptive Epidemiology of HIV Point-of-Care Testing in Manitoba from 2010 to the Present (June 2015)***  
Primary supervisor of James Johnston with Dr. Joss Reimer  
Med 2 Summer Research Program  
Presented at the Association for Medical Microbiology and Infectious Diseases (AMMI) Annual Conference March 2016  
Published in Sexually Transmitted Infection October 2017

2012 *Clinical Correlation of EBV and CMV viral loads as predictors of disease and therapeutic monitoring in blood and marrow transplant patients in Manitoba*  
Co-investigator with Dr. Donna Wall, Jesse Marantz  
BSc (medicine) Project 2012-13  
Student unable to complete research due to personal reasons

### Undergraduate Students Mentored:

2020 **Med 1 and Med 2 Panel Discussions: Beyond the Bedside**  
Invited speaker to discuss medical practice outside of direct clinical care with University of Manitoba Medical Students in their first and second years

2019 **Med 1 and Med 2 Panel Discussions: Beyond the Bedside**  
Invited speaker to discuss medical practice outside of direct clinical care with University of Manitoba Medical Students in their first and second years

2018 **Internal Medicine Interest Group: Infectious Diseases Panel Discussion**  
Invited by the University of Manitoba Students IMIG to discuss careers in ID

2017 **Public Health Panel Discussion**  
Invited by the University of Manitoba Students Public Health Interest Group to discuss and mentor medical students about careers in Public Health (provincial and public health laboratory focus)

2011 to 2018 **"Speed Date a Pediatrician"**  
Invited by the University of Manitoba Medical Students Pediatric Interest Group to discuss and mentored medical students about a career in Pediatric Infectious Diseases

2012 to 2015 **Faculty Mentor to University of Manitoba Medical Students**  
Providing guidance and advice to medical students on their journey through 4 years of medical school

### Undergraduate Student Teaching:

November 2020 WRH232 Perinatal Infections II tutorial: M2 students  
November 2020 PAEP 7084: HIV and Infections in the Immune Suppressed  
October 2020 Physician Assistant Year 1 Lecture: Practical Diagnostic Microbiology  
September 2020 Transition to Clerkship (TTC) Childhood History Taking/Physical Examination Bootcamp: M3 students

November 2019 WRH232 Perinatal Infections II tutorial: M2 students  
November 2019 Physician Assistant Year 1 Lecture: Practical Diagnostic Microbiology  
November 2019 PAEP 7084: HIV and Infections in the Immune Suppressed  
September 2019 BII Tutorial M1: Respiratory Infections in the Immunocompromised  
August 2019 BII Tutorial M2: Infections in the Immune Compromised Host  
February 2019 Adolescent History Taking: M1 students  
November 2018 WRH232 Perinatal Infections II tutorial: M2 students  
May 2018 Pediatric Clinical Skill Teaching: M1 students  
February 2018 Adolescent History Taking: M1 students  
November 2017 Pediatric Observed History and Physical: M3 clerks  
May 2017 Pediatric Clinical Skills Teaching: M2 students  
May 2017 Integration Case 13 (CM372/376) Adolescent Medicine: M2 students  
November 2016 WRH232 Perinatal Infections II tutorial: M2 students  
May 2016 Pediatric Clinical Skills Teaching, cardio-respiratory exam: M1 students  
April 2016 CM341/342 Integration Case 5 Neonate with Lethargy: M2 students  
November 2015 WRH232 Perinatal Infections II tutorial: M2 students  
November 2015 Pediatric Observed History and Physical: M3 clerks  
September 2015 Pediatric Observed History and Physical: M3 clerks  
May 2015 LRTI tutorial: M2 students  
February 2015 Pediatric Clinical Skills Teaching: M2 students



January 2015	Pediatric Observed History and Physical: M3 clerks
December 2014	Pediatric Clinical Skills Teaching: M2 students
October 2014	Pediatric Clinical Skills Teaching: M2 students
September 2014	Pediatric Observed History and Physical: M3 clerks
December 2013	Pediatric ID UGME M3 Academic Half-day session
October 2013	SF109 <i>Staphylococcus aureus</i> tutorial: M1 students
October 2013	SF111 Streptococcus spp. tutorial: M1 students
July 2013	Pediatric ID UGME M3 Academic Half-day session
February 2013	Pediatric Observed History and Physical: M3 clerks
September 2012	Pediatric ID UGME M3 Academic Half-day session
October 2011	SF109 <i>Staphylococcus aureus</i> tutorial: M1 students
November 2011	SF111 Streptococcus spp. tutorial: M1 students
July 2011	Pediatric ID UGME M3 Academic Half-day session
April 2011	Pediatric ID UGME M3 Academic Half-day session
January 2011	Pediatric ID UGME M3 Academic Half-day session
September 2010	Pediatric ID UGME M3 Academic Half-day session
2010 to 2018	<i>The Infectious Diseases/Medical Microbiology Case of the Week (ID/MM COTW).</i> Produce, administer, and review cases that reinforce key ID and MM principles to medical students in their first and second years through the OPAL online system at the University of Manitoba

#### Postgraduate Trainees Supervised:

2020 to present	<b><i>Therapeutic factors influencing the disclosure process of HIV status on Manitoba children and adolescents born with HIV</i></b> Supervisor of Trisha Vera Physician's Assistant Capstone Project Participant recruitment and interview
2020 to present	<b><i>Correlation of Syphilis Serology Chemiluminescent Immunoassay (CMLA) to Rapid Plasma Reagin (RPR) to Assess Disease Activity</i></b> Co-Supervisor of Dr. Matthew Kochan Drafting research proposal
2019 to present	<b><i>Radiological features of congenital syphilis in Manitoba 2015-2020</i></b> Co-supervisor with Dr. John Bonanni of Dr. Andrea Marks Pediatric Resident Research Project Protocol being drafted, consulting with REB
2018 to present	<b><i>SARS-CoV-2 RT-PCR Cycle Thresholds (Ct) values and Correlation with Symptom onset to Test (STT) in Pediatric Patients in Manitoba during the COVID-19 Pandemic</i></b> Supervisor of Dr. Jonathan Ripstein Pediatric Resident Research Project Data collection and analysis
2017 to 2019	<b><i>Syphilis in Pregnancy and Infant Outcomes in Manitoba from 2012-2017</i></b> Supervisor of Drs. Alison Lopez and Santana Lee Data analysis and manuscript preparation
2016 to 2019	<b><i>Detection of HIV in Urine from Patients with Known HIV-1 Infection utilizing the Aptima™ HIV-1 Quant Dx Assay: A Proof of Concept Study</i></b> Supervisor of Dr. Jennifer Wiebe Pediatric Resident Research Project Manuscript preparation and revisions
2015 to 2016	<b><i>Ixodes scapularis, Fighting Back! A Clinician's Guide to Lyme disease testing in Manitoba: A Critical Appraisal of Current and Proposed Testing Methods</i></b> Supervisor of Elizabeth Paulson Physician's Assistant Capstone Project Mentor Final paper and poster presentation completed

2015 to 2018	<i>Clinical and Epidemiological Characteristics and outcomes of Children Infected with Enterovirus D-68 in Manitoba in 2010 and 2014</i> Supervisor of Dr. Santina Lee Pediatric Resident Research Project Presented at the Local Pediatric Resident Research Competition
2014 to 2017	<i>Bloodborne Sexually Transmitted Infection Testing Discrepancies in the Pediatric Population in Manitoba: A Retrospective Database Review</i> Supervisor of Dr. Teryl Sansom Pediatric Resident Research Project Presented at 29 <sup>th</sup> Annual Local Pediatric Resident and Fellow Research Competition (2017)
2013	<i>First In Vivo Evidence of a Rare Mutation Causing Drug-Resistant HSV Stomatitis</i> Co-advisor for Dr. Aly-Khan Lalani Podium presentation at CancerCare Manitoba and Department of Medicine Research Day Second Prize by a Core resident for a case report at Medicine Research Day
2010 to 2014	<i>Clinical and Microbiological characteristics of peritoneal dialysis-associated peritonitis (PDAP) and exit site infections (ESI) in pediatric patients in Manitoba from 1992 to 2010</i> Co-supervisor of Dr. Samantha Witt Pediatric Resident Research Project Presented at Children's Hospital Foundation Local Research Competition (2013)

Postgraduate Trainees Mentored:

June 2019	<i>Pediatric Resident Journal Club Host</i>
May 2018	<i>Pediatric Resident Journal Club Mentor</i> Select, review and provide guidance for residents in their scholarly review of recent diagnostic Pediatric literature
June 2015	<i>Pediatric Resident Journal Club/Mentoring Session</i> Hosted and led discussions on work-life balance with the Pediatric Resident group
2011 to 2015	<b>Pediatrician Mentor for Dr. Diana Popescu</b> Provision of personal and professional guidance to Pediatric Residents during their training

Postgraduate Teaching:

August 2020	Infectious Diseases/Medical Microbiology Resident Academic Half-day: Pediatric HIV Cases
August 2020	Pediatric Resident R1 Academic Half-day: ABCs of Antibiotics
November 2019	Physician Assistant Student Lecture: Practical Diagnostic Microbiology for Future Physician Assistants
November 2019	Physician Assistant Student Case Studies: Infections in Special Populations 3 (HIV and Immunocompromised)
December 2019	STACER for Dr. Kaitlyn Hogue (Pediatric Resident)
July 2019	Pediatric Resident R1 Academic Half-day: ABCs of Antibiotics
June 2019	STACER for Dr. James Johnston (Pediatric Resident)
November 2018	Physician Assistant Student Case Studies: Infections in Special Populations 3 (HIV and Immunocompromised)
August 2018	Infectious Diseases/Medical Microbiology Resident Academic Half-day: Pediatric HIV NIH Guideline Review: Part 2 – Pediatric/Adolescent Guidelines
July 2018	Pediatric Resident R1 Academic Half-day: ABCs of Antibiotics

June 2018	Physician Assistant Student Case Studies: Infections in Special Populations 3 (HIV and Immunocompromised)
June 2018	Pediatric Resident Academic Half-day: Practical Diagnostic Microbiology for the Pediatric Clinician
May 2018	Infectious Diseases/Medical Microbiology Resident Academic Half-day: Pediatric HIV NIH Guideline Review: Part 1 – Perinatal Guidelines
February 2018	STACER for Dr. William Li (Pediatric Resident)
July 2017	Pediatric Resident R1 Academic Half-day: ABCs of Antibiotics
May 2017	Infectious Diseases/Medical Microbiology Resident Academic Half-day: Pediatric HIV Cases
May 2017	Physician Assistant Student Case Studies: GI and GU Infections
January 2017	Pediatric Resident R4 Royal College Examination Preparation
July 2016	Pediatric Resident R1 Academic Half-day: ABCs of Antibiotics
June 2016	PAEP 7084: Infections in special populations – Neonates, pregnancy, hospitalized patients: Physician Assistant course
May 2016	Pediatric Resident R4 OSCE
May 2016	Infectious Diseases/Medical Microbiology Resident OSCE
May 2016	Family Medicine Resident Academic Half Day: Lower Respiratory Tract Infections (LRTIs)
March 2016	STACER for Dr. Teryl Sansom (Pediatric Resident)
January 2016	Pediatric Residents Academic Half-day: Antimicrobial Resistance
December 2015	STACER for Dr. Shannon Mohoric (Pediatric Resident)
July 2015	Pediatric Resident R1 Academic Half-day: ABCs of Antibiotics
June 2015	STACER for Dr. Miriam Katzman (Pediatric Resident)
May 2015	Pediatric Resident R4 OSCE
February 2015	Senior Pediatric Resident Morning Report: 5 sessions (Feb-Dec 2015)
December 2014	Infectious Diseases/Medical Microbiology Resident OSCE
December 2014	STACER for Dr. Rachael Gardner (Pediatric Resident)
November 2014	Infectious Diseases/Medical Microbiology Resident Academic Half-day: Pediatric HIV Cases
October 2014	Pediatric Resident R4 Royal College Examination Preparation
August 2014	Pediatric Resident R1 Academic Half-day: ABCs of Antibiotics
July 2014	Pediatric Resident Academic Half-day: Common Pediatric ID Problems II
May 2014	Physician Assistant Student Case Studies: Sepsis and CNS Infection
March 2014	Pediatric Resident OSCE
October 2013	Public Health and Preventative Medicine Resident Academic Half-day: STBBI Testing and Public Health Implications
September 2013	Pediatric Resident Academic Half-day: Pediatric HIV/AIDS
July 2013	Pediatric Resident R1 Academic Half-day: ABCs of Antibiotics
July 2013	STACER for Dr. Megan Cooney (Pediatric Resident)
May 2013	Pediatric Resident R4 Royal College OSCE Preparation
May 2013	Pediatric Resident R4 OSCE
March 2013	Pediatric Resident OSCE
January 2013	STACER for Dr. Diana Popescu (Pediatric Resident)
January 2013	Infectious Diseases/Medical Microbiology Resident Academic Half-day: Viral Monitoring in the Immunocompromised Host
November 2012	Pediatric Resident R4 Royal College Examination Preparation
May 2012	Pediatric Resident R4 Royal College OSCE Preparation
May 2012	Pediatric Resident R4 OSCE
March 2012	Pediatric Resident OSCE
June 2011	Pediatric Resident Academic Half-day: Infection Control Practices (ICP)
May 2011	Pediatric Resident R4 Royal College OSCE Preparation
January 2011	Structured Assessment of Clinical Evaluation Report (STACER) for Dr. Meghan McPherson (Pediatric Resident)
November 2010	Pediatric Resident OSCE
October 2010	Pediatric Residents Academic Half-day: Pediatric HIV
July 2010	Physician Assistant Student Lecture: Sepsis, Fevers and FUOs

July 2010 to present

Primary supervisor of trainees rotating through CPL:  
 Dr. Josh Aquin, Public Health and Preventative Medicine, August 2020  
 Dr. Carl Boodman, Adult ID and Medical Microbiology, April-May 2020  
 Dr. Robert Taylor, Clinical Microbiology, January-February 2020  
 Dr. Jessica Kafka, Clinical Microbiology, November 2019  
 Dr. Sarah Lesperance, Public Health and Preventative Medicine, September 2019  
 Dr. Milena Semproni, Adult ID, February 2019  
 Dr. Thomas Fear, Adult ID, January 2019  
 Dr. Santana Lee, Pediatric ID, October 2018  
 Dr. Jordyn Lerner, Public Health and Preventative Medicine, July 2018  
 Dr. Natalie Casaclang, Public Health and Preventative Medicine, June 2018  
 Dr. Sarah Henni, Adult ID, April 2018  
 Dr. Alison Lopez, Pediatric ID, December 2017  
 Dr. Rupeena Purewal, Pediatric ID, September 2017  
 Dr. Peter Benoit, Public Health and Preventative Medicine, May 2017  
 Dr. Salem Agabawi, Adult ID, April 2017  
 Dr. Joanna Joyce, Adult ID, March 2017  
 Dr. Vanessa Tran, Clinical Microbiology, January 2017  
 Dr. Lydia Chen, Public Health and Preventative Medicine, December 2016  
 Dr. Sameer Kassim, Medical Microbiology, May-June 2017, June-August 2016, December 2013  
 Dr. Chloe Bogaty, Adult ID/Medical Microbiology, March 2016, July 2017, March-April 2018  
 Dr. Beverly Wudel, Adult ID, February 2016  
 Dr. Jasdeep Atwal, Public Health and Preventative Medicine, July 2015  
 Dr. Davinder Singh, Public Health and Preventative Medicine, May 2015  
 Dr. Rachel Dwilow, Pediatric ID, May 2015  
 Dr. Abed El-Allegry, Public Health and Preventative Medicine, April 2015  
 Dr. Cheryl Foo, Pediatric ID, January 2015  
 Dr. Maher Al-Harbi, Adult ID, November 2014  
 Dr. Matthew Gilmour, Clinical Microbiology, October 2014  
 Dr. Vanessa Poliquin, Reproductive ID, October 2014  
 Dr. Marc Wallace, Public Health and Preventative Medicine, September 2014  
 Dr. Safa Edagiz, Medical Microbiology, May 2014  
 Dr. Siddarth Kogilwaimath, Adult ID, March 2014  
 Dr. Majid Daraj, Adult ID, February 2014  
 Dr. Michael Isaac, Public Health and Preventative Medicine, October 2013  
 Dr. Susan Cuvelier, Gastroenterology/Hepatology, August 2013  
 Dr. Meaghan O'Brien, Gastroenterology/Hepatology, July 2013  
 Dr. Lorine Pelly, Pediatric ID, April 2013  
 Dr. Lauren MacKenzie, Adult ID, February 2013  
 Dr. Ilan Schwartz, Adult ID, January 2013  
 Dr. Shadi Sepehri, Clinical Microbiology, January 2013, September 2011  
 Dr. Nora Al-Fattoh, Pediatric ID, November 2012  
 Dr. Adrienne Morrow, Community Medicine, September 2012  
 Dr. Heejune Chang, Community Medicine, July 2012  
 Dr. Guillaume Poliquin, Pediatric ID, April 2012  
 Dr. Yahya Al-Fifi, Adult ID, February 2012  
 Dr. Assim Al-Saedi, Adult ID, January 2012  
 Dr. Joss Reimer, Community Medicine, July 2011  
 Dr. Terry Wuerz, Adult ID, May 2011  
 Dr. Alaa Al-Juaid, Pediatric ID, March 2011  
 Dr. Brent Roussin, Community Medicine, August 2010  
 Dr. Sandra Allison, Community Medicine, July 2010

---

## Research Collaborations

- 2020 **Canadian Paediatric Surveillance Program (CPSP) for Congenital Syphilis**  
Principal investigator with Dr. Carsten Krueger  
Finalizing questionnaire
- 2020 **Evaluation of Point-of-Care Testing for detection of SARS-CoV-2 infection**  
Local co-investigator with Drs. Guillaume Poliquin, Paul Sandstrom, Adrienne Myers, John Kim, Yoav Keynan and Michael Becker  
Evaluation of POCT under way
- 2020 **Canadian Population Serological Survey Utilizing Antenatal Serum Samples (CANCOVID-Preg)**  
Manitoba Lead and co-investigator, project for the COVID-19 Immunity Task Force  
Samples being collected and analyzed
- 2020 **Manitoba COVID-19 Serology (MaCS) Network**  
Co-investigator with Drs. Lauren MacKenzie, Yoav Keynan, Sylvain Lothier *et al.*  
Research Manitoba COVID-19 Rapid Response Grant for \$448,500
- 2020 **Rapid research in the CHILD Cohort to inform Canada's response to the COVID-19 pandemic: investigating the prevalence and predictors of SARS-CoV-2 infection, and the health and psychosocial impact of the COVID-19 crisis on Canadian families**  
Knowledge User for Dr. Meghan Azad  
CIHR Grant for \$1,689,795
- 2020 **A Multi-centre, Adaptive, Randomized, Open-label, Controlled Clinical Trial of the Safety and Efficacy of Investigational Therapeutics for the Treatment of COVID-19 in Hospitalized Patients (CATCO)**  
Local co-investigator in CATCO-ADULT  
Local principal investigator in CATCO-KIDS, co-investigator Dr. Lauren Kelly  
Awaiting recruitment in Wave 2  
Project discontinued at national level
- 2020 **SARS-CoV-2 and COVID-19 in children admitted to Canadian Hospitals: Understanding clinical spectrum and severity. A Paediatric Investigators Collaborative Network on Infections in Canada (PICNIC) study**  
Local co-investigator with Dr. Rachel Dwilow  
Supported by the Children's Hospital Research Institute of Manitoba (CHRIM)  
Manuscript in draft
- 2020 **Correlation of positive COVID-19 respiratory samples with time from symptom onset to sample, RT-PCR cycle threshold (Ct) values and viral viability through cell culture**  
Primary investigator with co-investigators Drs. Kerry Dust, Duane Funk, Jim Strong and Guillaume Poliquin  
Investigation to predict infectious SARS-CoV-2 from diagnostic samples  
Supported by the National Microbiology Laboratory  
Manuscript published in Clinical Infectious Diseases (CID)  
Currently drafting pediatric infectivity manuscript  
Recruiting for ICU/hospitalized patient infectivity study
- 2020 **Serology-based tests for Healthcare Workers exposed to COVID-19**  
Co-investigator with Drs. Ken Kasper, Yoav Keynan, Allen Kraut, Mike Drebot, Robbin Lindsay and Tim Booth  
Study to determine seroconversion in exposed healthcare workers from a hospital outbreak in Winnipeg  
Supported by the National Microbiology Laboratory  
Analysis phase
- 2020 **Point of care testing to identify COVID-19**  
Co-investigator with Drs. Ken Kasper and Yoav Keynan

- Validation of the Cepheid GeneXpert and Spartan Cube for SARS-CoV-2 detection  
Supported by the National Microbiology Laboratory  
Final report completed
- 2019 **A Study to Evaluate the Accuracy, Usability and Readability of the INSTI HIV Self Test Performed by Observed Intended Users in Canada**  
Co-investigator at Manitoba Site with Dr. Laurie Ireland  
Sponsored by bioLytical Laboratories, Inc.  
Recruitment complete, data analysis
- 2016 **Mother to Child Transmission of Hepatitis B and C in Manitoba**  
Co-investigator with Drs. Stacy Chapman, Safa Edagiz, Sameer S. Kassim, Jared Bullard, Paul Van Caesele and Joanne Embree (PI)  
Presented at AMMI/CACMID in May 2018  
Manuscript being prepared for publication
- 2015 **Evaluation of HIV Screening Among Admitted Patients to the Health Sciences Centre (HSC) Medical Wards**  
Co-investigator with Drs. Majid Darraj, Yoav Keynan, Marissa Becker, Anas Merdad, Beverly Wudel  
Gilead Grant for \$32,400  
Manuscript published
- 2015 **Testing Innovation: Bridging the Gaps to Sexually Transmitted and Blood Borne Infections (STBBI) Testing Among Youth at risk in Select Non-Urban Settings**  
Collaborator with group looking to provide innovative STBBI testing strategies incorporating HIV point of care testing (POCT) in non-urban settings in Atlantic Canada and the Prairies
- 2015 **Infective Complications after allogeneic Hematopoietic Stem Cell Transplants (HSCT) in Chronic Lymphocytic Leukemia (CLL) in comparison with Follicular Lymphoma (FL)**  
Co-investigator with Drs. D. Sytnik (PI), P. Lambert, K. Weber, K. Paulson, M. Seftel, J. Johnston and R. Kumar  
Presented at Canadian Bone and Marrow Transplant Group Conference (March 2016) and CCOLD (April 2016)
- 2015 **Early Pediatric Initiation – Canadian Child Cure Cohort Study (EPIC<sup>4</sup>)**  
Local PI with Dr. J. Embree  
Examine the timing of antiretroviral therapy initiation and its impact on human immunodeficiency virus (HIV) reservoir size in the context of vertically-acquired HIV infection.  
Canadian Institute of Health Research (CIHR) grant for \$1.95 million  
Study finalized, no Manitoba participants  
Manuscript published
- 2014 **Missed Opportunities for Diagnosis of HIV Epidemiological Study (MODES)**  
Co-investigator with M. Becker (PI), S. Shaw, Laurie Ireland, L. McClarty, C. Ens, N. Yu, J. Wylie, P. Van Caesele, Y. Keynan, Ken Kasper, and J. Blanchard  
Determining clinical and epidemiological risk factors associated with missed opportunities in patients ultimately diagnosed with HIV  
Gilead Grant for \$96,000  
Multiple provincial presentations to stakeholders
- 2012 **Discrepancies in Testing Practices for Sexually Transmitted and Blood-Borne Infections in Manitoba: A Retrospective Database Review**  
Primary investigator with co-investigators Kellee Hodge, Dr. Michael Isaac, Dr. Pierre Plourde, Craig Ross, Dr. Paul Van Caesele and Bohdanna Kinasevych.  
Data presented at Manitoba STBBI Meetings
- 2010 **Point of Care Testing in the Emergency Department**

Co-investigator with Drs. Marissa Becker, Ken Kasper, Natalie Bridger (PI), Paul Van Caesele, Wes Palatnick and Carla Pindera  
 Gilead Canada Grant for \$80,000.00  
 Presented at CAHR 2012, published in 2013

---

## Publications

### Peer-reviewed publications:

1. Lagace-Wiens P., **Bullard J.**, Cole R. and Van Caesele P. "Seasonality of Coronaviruses: Implications for COVID-19". Accepted in Canadian Communicable Disease Report (CCDR), in press.
2. Dust K., Hedley A., Nichol K., Stein D., Adam H., Karlowsky J.A., **Bullard J.**, Van Caesele P. and Alexander D. "Comparison of Commercial Assays and Laboratory Developed Tests for Detection of SARS-CoV-2". *J Virol Methods*. Sept 10, 2020. Doi: <https://doi.org/10.1016/j.jviromet.2020.113970>.
3. Boodman C., Lagacé-Wiens P. and **Bullard J.** "Diagnostic testing for SARS-CoV-2". *CMAJ*, June 3, 2020. Doi: <https://doi.org/10.1503/cmaj.2008585>.
4. **Bullard J.**, Dust K., Funk D., Strong J.E., Alexander D., Garnet L., Boodman C., Bello A., Hedley A., Schiffman Z., Doan K., Bastien N., Li Y., Van Caesele P.G. and Poliquin G. "Predicting infectious SARS-CoV-2 from diagnostic samples". *Clin Infect Dis*, ciaa631, <https://doi.org/10.1093/cid/ciaa638> (published online May 22 2020).
5. Boodman C., Lee S. and **Bullard J.** "Idle medical students review emerging COVID-19 research". *Med Educ Online*. 2020 Dec; 25(1):1770562. Doi: 10.1080/10872981.2020.1770562. PMID 32441229.
6. Bitnun A, Ransy DG, Brophy J, et al. "Clinical Correlates of Human Immunodeficiency Virus-1 (HIV-1) DNA and Inducible HIV-1 RNA Reservoirs in Peripheral Blood in Children With Perinatally Acquired HIV-1 Infection With Sustained Virologic Suppression for at Least 5 years". *Clin Infect Dis*. 2020. February 14; 70(5): 859-66. Collaborators including **Bullard J.** Doi: 10.1083/cid/ciz251. PMID: 30919879
7. Lopez AA., Dwilow R., **Bullard J.** and Mujawar Q. "A Case of Refractory Diphyllbothriasis in a Young Pediatric Patient". *Journal Pediatric Infectious Diseases Society* 2020; Jan 23:piaa001. doi: 10.1093/jpids/piaa001.
8. Tse CCK., **Bullard J.**, Rusk R., Douma D, Plourde PJ. "Surveillance of Echinococcus tapeworm in coyotes and domestic dogs of Winnipeg, Manitoba". *Can Commun Dis Rep* 2019;45(7/8): 171-6.
9. Lau L., Wudel B., Lee E., Darraj M., Richert Q., Trajtman A., Bresler K., **Bullard J.**, Kasper K., Becker M., and Keynan, Y. "Evaluation of the Utility of Point-of-Care HIV Testing on a Canadian Internal Medicine Inpatient Unit". *Can J Infect Dis Med Microbiol* 2017. November; 1-6. PMID: 8495307.
10. Johnston J.B., Reimer J.N., Wylie J.L., **Bullard J.** "Observational study of the populations accessing rapid point-of-care HIV testing in Winnipeg, Manitoba, Canada, through a retrospective chart review of site records". *Sex Transm Infect*. 2017 Oct 7. pii: sextrans-2017-053195. doi: 10.1136/sextrans-2017-053195. [Epub ahead of print]. PMID: 28988194
11. Gupta S., Taylor T., Patterson A., Liang B., **Bullard J.**, Sandstrom P., Van Domselaar G., and Ji H. "A Robust PCR Protocol for HIV Drug Resistance Testing on Low-Level Viremia Samples". *Biomed Res Int*. 2017;2017:4979252. doi: 10.1155/2017/4979252. Epub 2017 Apr 3. PMID: 28473986
12. Shaw S.Y., Ireland L., McClarty L.M., Loepky C., Yu N., Wylie J.L., **Bullard J.**, Van Caesele P., Keynan Y., Kasper K., Blanchard J.F., and Becker M.L. "Prior history of testing for syphilis, hepatitis B and hepatitis C among a population-based cohort of HIV-positive individuals and their HIV-negative controls". *AIDS Care*. 2016 Jun 23:1-6. PMID: 27339807
13. German G.J., Jamieson F.B., Gilmour M., Almohri H., **Bullard J.**, Domingo M.C., Fuller J., Girouard G., Haldane D., Hoang L., Levett P.N., Longtin J., Melano R., Needle R., Patel S.N.,

- Rebbapragada A., Reyes R.C., and Mulvey M.R. “Interim Recommendations for the Reporting of Extensively Drug Resistant and Pan Drug Resistant Isolates of *Enterobacteriaceae*, *Pseudomonas aeruginosa*, *Acinetobacter* spp. and *Stenotrophomonas maltophilia*”. *Can Commun Dis Rep* 2016; 42-4:91-7.
14. Ross C., Shaw S., Marshall S., Stephen S., Bailey K., Cole R., Wylie J., **Bullard J.**, Van Caesele P., Reimer J., Plourde, P. “Impact of social media campaign targeting men who have sex with men during an outbreak of syphilis in Winnipeg, Canada”, *Can Comm Dis Rep*. 2016; 42-2:45-49.
  15. Foo C.P.Z., McDermid A., Grudeski E., Booth TF, **Bullard J.** “A 9 month old girl with respiratory failure and rhomboencephalitis”, *Can J Infect Dis Med Microbiol* 2015 Sept-Oct.; 241-2. PMID: 26600807
  16. **Bullard, J.**, Ahsanuddin A., Perry A., Lindsay L.R., Iranpour M., Dibernardo A., Van Caesele, P.G. “The first case of locally acquired tick-borne *Babesia microti* infection in Canada”. *Can J Infect Dis Med Microbiol*. 2014 Nov-Dec; 25(6): e87-e89. PMID 25587297
  17. Becker M.L., Thompson L., Pindera C., Bridger N., Lopez C., Keynan Y., **Bullard J.**, Van Caesele, P.G. “Feasibility and success of HIV point-of-care testing in an emergency department in an urban Canadian setting.” *Can J Infect Dis Med Microbiol*. 2013 Spring; 24(1): 27-31. PMID: 24421789
  18. Forbes J.C., Alimenti A.M., Singer J., Brophy J.C., Bitnun A., Samson L.M., Money D.M., Lee T.C., Lapoint N.D., Read S.E. “A national review of vertical HIV transmission”. *AIDS*. March 27, 2012, 26(6): 757-63. 28 Collaborators including **Bullard, J.** PMID: 22210635
  19. Fanella S.T., Pinto M.A., Bridger N.A., **Bullard, J.**, Coombs J.M., Crockett M.E., Olekson K.L., Poliquin P.G., Van Caesele P.G., Embree J.E. “Pandemic (H1N1) 2009 influenza in hospitalized children in Manitoba: nosocomial transmission and lessons learned from the first wave.” *Infection Control and Hospital Epidemiology*. 2011 May; 32(5): 435-43. PMID: 21515973

#### Other publications:

1. **Bullard, J.**, Embil J.M. “Nitpicking the Details about Lice”. *Canadian Journal of CME*. April 2008, 20(4).

## Poster and Oral Presentations

### National Presentations:

#### Poster Presentations

1. Kassim, S., **Bullard J.**, McGeer A. “Epidemiology of Viral Respiratory Infections and Preventative Measures in High Acuity Units in Manitoba [VIRIAC-MB]”. Annual Association of Medical Microbiology and Infectious Diseases (AMMI). Ottawa, ON. April 2019. *Presented by S. Kassim*.
2. Wudel B., Darraj M., Lau L., Trajtman A., Richert Q., Lee E., Bresler K., Keynan Y. **Bullard J.** “Feasibility and Acceptance of HIV Point-of-Care Testing on an Internal Medicine Inpatient Unit”. 25<sup>th</sup> Annual Canadian Conference on HIV/AIDS Research (CAHR). April, 2017. *Presented by B. Wudel*.
3. Sytnik D., Lambert P., Weber K., Paulson K., Seftel M., **Bullard J.**, Johnston J., Kumar R. “Infective Complications after Allogeneic Hematopoietic Stem Cell Transplants in Chronic Lymphocytic Leukemia in Comparison with Follicular Lymphoma”. Canadian Bone and Marrow Transplant Group Conference. Vancouver, BC. April, 2016. *Presented by D. Sytnik*.
4. Sytnik D., Lambert P., Weber K., Paulson K., Seftel M., **Bullard J.**, Johnston J., Kumar R. “Infective Complications after Allogeneic Hematopoietic Stem Cell Transplants in Chronic Lymphocytic Leukemia in Comparison with Follicular Lymphoma”. Canadian Conference on Lymphoproliferative Disorders (CCOLD). Lake Louise, Alberta. March, 2016. *Presented by D. Sytnik*.
5. Walkty A., Karlowsky J., **Bullard J.** “Time to Reporting of Positive Blood Cultures for Pediatric Patients Assessed at a Children’s Hospital Emergency Department”. Annual Association of Medical Microbiology and Infectious Diseases (AMMI). Vancouver, BC. March, 2016. *Presented by A. Walkty*.



6. Johnston J., Wylie J., Reimer J., **Bullard J.** “Descriptive Epidemiology of HIV Point-of-Care Testing (POCT) in Manitoba from 2011 to 2014”. Annual Association of Medical Microbiology and Infectious Diseases (AMMI). Vancouver, BC. March, 2016. *Presented by J. Johnston.*
7. Shaw, S., Becker M., Ireland L., Ens C., McClarty L., Yu B., Keynan Y., **Bullard J.**, Wylie J., Van Caesele P., Kasper K. “A population-based examination of bacterial sexually transmitted infections testing and history prior to HIV diagnosis among HIV cases and HIV-negative controls: the Missed Opportunity for Diagnoses Epidemiological Study (MODES)”. 23<sup>rd</sup> Annual Canadian Conference on HIV/AIDS Research (CAHR). April, 2015. *Presented by S. Shaw.*
8. Rank C., Bangura H., Krajden M., Zahariadis G., **Bullard J.**, Halverson J., Kim J., Archibald C.P., Sandstrom P., Brooks J. “Subtypes and transmitted drug resistance among recent HIV infections in four Canadian provinces, 2000-2008.” 21<sup>st</sup> Annual Canadian Conference on HIV/AIDS Research (CAHR). April, 2012. *Presented by C. Rank.*
9. Ramdahin S., Fowke K.R., Wayne S., **Bullard J.**, Plummer F., Embree J. “Design of Novel, Sensitive and Specific HIV Nested Primers for Polymerase Chain Reaction of Lymphocyte DNA.” Annual Canadian Conference on HIV/AIDS Research (CAHR). April, 2002. *Presented by S. Ramadahin.*
10. Xiao-Juan M., **Bullard J.**, Ramdahin S., Fowke K.R. “Development of an African Clade-Optimized Quantitative Assay for HIV RNA Viral Load Determinations.” Annual Canadian Conference on HIV/AIDS Research (CAHR). June, 2001. *Presented by M. Xiao-Juan.*

#### Oral Presentations

1. Chapman S., **Bullard J.**, Kassim S., Edagiz S., Van Caesele P. Embree J. “Evaluation of Adherence to Clinical Guidelines for the Prevention of Mother to Child Transmission of Hepatitis B and C in Manitoba, Canada”. Annual Association of Medical Microbiology and Infectious Diseases (AMMI). Vancouver, BC. May 2018. *Presented by P. Van Caesele.*
2. **Bullard J.**, Dust K., Van Caesele P.G. “Morbilliform rash associated with coronavirus detection during an outbreak of measles in Manitoba.” Annual Association of Medical Microbiology and Infectious Diseases (AMMI) Meeting. Vancouver, BC. April, 2016. *Presented by J. Bullard.*
3. Becker M., Thompson L., Bridger N., Pindera C., Keynan Y., **Bullard J.**, Van Caesele P.G., Kasper K. “Point of Care HIV Testing in Tertiary Care Emergency Department in Winnipeg, Canada.” Oral presentation. 21<sup>st</sup> Annual Canadian Conference on HIV/AIDS Research (CAHR). April, 2012. *Presented by M. Becker.*
4. **Bullard J.**, Embree J. “The Pediatric HIV Experience in Manitoba, Canada 1989 to 2007.” Children’s Hospital Foundation Local Research Competition in the Fellow’s category. Winnipeg, MB. March, 2008. *Presented by J. Bullard.*

#### International Presentations:

#### Poster Presentations:

1. **Bullard J.**, Baxter M., Adam H., Hoban D., Zhanel G. “Antimicrobial Susceptibilities of Wound Isolates in Canada from 2007 to 2010: the CANWARD Surveillance Study.” IDSA Annual Meeting. Boston, MA. October, 2011. *Presented by J. Bullard.*
2. **Bullard, J.**, Embree, J. “The Pediatric HIV Experience in Manitoba, Canada 1989 to 2007”. St. Jude PID Conference. Memphis, TN. February, 2009. *Presented by J. Bullard.*

#### Oral Presentations:

1. **Bullard J.**, Ramdahin S., Wayne S., Fowke K.R. “The Role of Dendritic Cells and DC\_SIGN in mediating resistance to HIV infection.” National Student Research Forum (NSRF). Galveston, TX. April, 2003. *Presented by J. Bullard.*

Local Presentations:

## Keynote Address:

1. "Syphilis Gone Wild". Keynote speaker. Canadian Society for Medical Laboratory Sciences (CSMLS). Winnipeg, MB. May 2019.
2. "Zika Virus – What's the Deal?". Keynote Speaker. *Manitoba Association of Asian Physicians (MAAP) Summer Symposium*. Hecla Island, MB. August, 2017.
3. "Diagnostic testing for STBBIs in 2012: What you should know about GC, syphilis and HIV POCT". Keynote speaker. *Winnipeg Regional Health Authority New and Emerging Issues in STBBIs*. Winnipeg, MB. March, 2012.

## Grand Rounds Presentations:

1. "Confessions of a Hypomaniac Black Ukrainian during Wave 1.0 of the COVID-19 Pandemic". Invited Speaker. *Department of Pediatrics & Child Health*. Winnipeg, MB. November 2020.
2. "COVID Update #6". Invited speaker at the Department of Anesthesiology Grand Rounds, University of Manitoba, Winnipeg, MB. April 2020
3. "Chlamydia, Gonorrhoea and Syphilis, Oh My! Sexually Transmitted Infections in Manitoba Adolescents 2017". Invited co-speaker *Pediatric Grand Rounds, University of Manitoba*, Winnipeg, MB. May, 2017.
4. "Help Us Help You: A Review of Microbiology Testing that Every Pediatrician Can Use". Invited speaker. *Pediatric Grand Rounds, University of Manitoba*. Winnipeg, MB. October, 2013.
5. "A review of the new Women's Hospital HIV Guidelines: reducing HIV mother-to-child transmission in HIV-positive mothers". Guest presenter. *Pediatric Grand Rounds*. Winnipeg, MB. March, 2011.
6. "What's Really Going On at Winnipeg Children's Hospital: A Glimpse into the Microbial World of CK5 and the Units". Recruitment presentation. *University of Manitoba Recruitment Presentation at Pediatric Grand Rounds*. Winnipeg, MB. May, 2010.

## Symposium Presentations:

1. "Positive or Not? Laboratory Testing for COVID-19". Invited Speaker. Bug Day 2020. Winnipeg, MB. October 2020.
2. "How Do I Interpret the Results of Lumbar Puncture and Treat Meningitis". Invited Speaker. 15-Minute Consultations for Common Ailments. Winnipeg, MB. March 2020.
3. "How can I avoid rash decisions in childhood viral exanthema?". Invited speaker. Manitoba College of Family Medicine Annual Scientific Assembly. Winnipeg, MB. April 2019.
4. "Update on STBBI Diagnostics and Screening Testing 2015". Invited speaker. *Healthy Sexuality & Harm Reduction Sex and STIigma Matters*. Winnipeg, MB. May, 2015.
5. "Discrepancies in Testing Practices for Sexually Transmitted and Blood-Borne Infections in Manitoba: A Retrospective Database Review". Invited speaker. *HIV Program Research Day*. Winnipeg, MB. March, 2015.
6. "Ebola". Invited speaker. *Manitoba Congress for Medical Laboratory Services*. Winnipeg, MB. October, 2014.
7. "What can we Learn from Testing: An Examination of HIV and STBBI Testing Rates in Manitoba?" Invited speaker. *Canadian Association of Nurses in AIDS Care (CANAC) XXII Annual Conference*. Winnipeg, MB. April, 2014.
8. "Update on STBBI Diagnostic Testing". Invited Speaker. *Sex and Drug Matters Annual Winnipeg Regional Health Authority, Population and Public Health Conference*". Winnipeg, MB. March, 2014.

9. "STBBI Diagnostic Testing Update". Invited Speaker. *Sex Matters: From Precedents to Practice, a Conference on Preferential Populations and Sexually Transmitted and Blood Borne Infections, Winnipeg Regional Health Authority Population and Public Health*. Winnipeg, MB. March, 2013.
10. "Viruses!!" Invited Speaker. *Manitoba Congress for Medical Laboratory Services*. Winnipeg, MB. October, 2012.
11. "Prepare to be Boarded! The Waterborne Infectious Risks of Travel". Invited speaker. *Manitoba 10<sup>th</sup> Annual Travel Conference*. Winnipeg, MB. April, 2012.
12. "Viruses!!". Invited lecturer. *Manitoba Blood & Marrow Transplant Program 20<sup>th</sup> Anniversary Symposium*. Winnipeg, MB. November, 2011.
13. "A Case of HIV MTCT in Manitoba in 2010 and Review of Epidemiological and Clinical Characteristics of Maternal and Pediatric HIV in Manitoba, Canada from 1989 to 2010". Invited speaker. *Manitoba HIV Conference*. Winnipeg, MB. November, 2011.
14. "A Tale of 3 Viruses". Special seminar. *Recruitment presentation at Cadham Provincial Laboratory*. Winnipeg, MB. April, 2010.
15. "Weirdness in Kids". Invited speaker. *Diagnostic Services of Manitoba Grand Rounds*. Winnipeg, MB. May, 2009.  
"Listeria Hysteria". Invited Speaker. *Manitoba Society of Medical Laboratory Technologists Conference*. Winnipeg, MB. October, 2008.

#### Invited Lectures and Sessions:

1. "Panel Discussion: COVID-19 in Northern Manitoba". Invited panelist for Ongomiizwin – Health Services (Virtual) Annual Meeting. Manitoba. January 2021.
2. "Confessions of a Hypomanic Black Ukrainian during Wave 1.0 of the COVID-19 Pandemic". Invited Speaker. *Department of Medical Microbiology & Infectious Diseases Seminar Series*. Winnipeg, MB. October 2020.
3. "Questions around COVID-19". Winnipeg Police Service Cadets special presentation. Invited speaker, August 2020.
4. "SARS-CoV-2: Just how infective is this virus?". University of Manitoba CPD: COVID-19 Clinical Updates Webinar. May 2020.
5. "Tick Diseases". Invited presenter. *University of Manitoba Department of Pediatrics Small Group Discussion*. Winnipeg, MB. May 2019.
6. Master of Ceremony (MC) for the *Department of Pediatrics & Child Health Retreat Annual Retreat*. Winnipeg, MB. March 2019.
7. "Syphilis Gone Wild". Invited Speaker. *Manitoba Pediatric Society (MPS)*. Winnipeg, MB. November 2019.
8. "HIV Testing in Manitoba: Data from HIV Testing Day 2018", Invited Speaker. *Collective Impact Network – Testing and Linkage WG Meeting*, Winnipeg, MB. October 2018.
9. Master of Ceremony (MC) for the *Department of Pediatrics & Child Health Retreat Annual Retreat*. Winnipeg, MB. March 2018.
10. "A Journey through HIV in Manitoba from Newborns to Bathhouses to Awkward Teenage Moments". Invited Speaker. *Department of Medical Microbiology & Infectious Diseases Seminar Series*. Winnipeg, MB. March 2018.
11. "Carbapenemase Producing Enterobacteriaceae (CPE)". Invited Speaker. *Annual Infection Practices & Control Education Day*. January 2018.
12. Master of Ceremony (MC) for the *Department of Pediatrics & Child Health Retreat and Appreciation Dinner*. Winnipeg, MB. May, 2017.
13. "Zika Virus: What's the deal?". Invited speaker. *Clinical & Research Nursing Network (CRNN)*. Winnipeg, MB. May, 2017.
14. "Syphilis is back!". Invited presenter. *University of Manitoba Department of Pediatrics Small Group Discussion*. Winnipeg, MB. January 2017.
15. Master of Ceremony (MC) for the *Department of Pediatrics & Child Health Retreat and Appreciation Dinner*. Winnipeg, MB. February, 2016.

16. "The Biting Truth about Lyme Disease". Invited presenter. *University of Manitoba Department of Pediatrics Small Group Discussion*. Winnipeg, MB. December, 2015.
17. "HIV Prevention of Mother to Child Transmission and Point of Care Testing". Invited speaker. *St. Boniface General Hospital Obstetrics/Gynecology High-Risk Rounds*. Winnipeg, MB. June, 2014.
18. "Important ID Topics in Pediatric Hem/Onc Patients". Invited speaker. *Hem/Onc Nursing Educational Day, Health Sciences Centre*. Winnipeg, MB. November, 2013.
19. "CMV in Renal Solid Organ Transplants". Invited Speaker. *Department of Pediatric Nephrology, University of Manitoba*. Winnipeg, MB. April, 2013.
20. "HIV: Transition from Adolescence to Adulthood". Invited speaker. *Manitoba HIV Program Continuing Education Series*. Winnipeg, MB. February, 2013.
21. "Viruses!!" Invited Speaker. *Collaborative Adult and Pediatric BMT Education Day*. Winnipeg, MB. January, 2012.
22. "Antiretrovirals: What you need to know and how to use them". Invited presenter. *University of Manitoba Department of Pediatrics Small Group Discussion*. Winnipeg, MB. November, 2011.
23. A Case of HIV MTCT in Manitoba in 2010 and Review of Epidemiological and Clinical Characteristics of Maternal and Pediatric HIV in Manitoba, Canada from 1989 to 2010". Invited speaker. *Manitoba HIV Program's CME Guest Lecture Series*. Winnipeg, MB. April, 2011.
24. "HIV Testing: An Update for 2010". Invited presenter. *University of Manitoba Department of Pediatrics Small Group Discussion*. Winnipeg, MB. September, 2010.

#### National Presentations:

##### Symposium Presenter:

1. "COVID-19: Pathophysiology of the Virus". 2020 Canadian Association of Physician Assistants (CAPA) Annual Conference. October 2020.
2. "Ask Anything: COVID-19 for Rural Practitioners". BC Rural Health Conference (RHC): Webinar Series/University of British Columbia (UBC) CPD. May 2020.  
<https://ubccpd.ca/courses/rhcwebinars>
3. "Clinical Presentation of COVID-19 Infections". The College of Family Physicians of Canada (CFPC) Presentation. April 2020. <https://www.youtube.com/watch?v=cIU-3xUWUfA>
4. "Keeping Children Safe". Coping during COVID-19: Canadian Medical Association (CMA) Joule COVID-19 Learning Series. April 2020. <https://joulecma.ca/joule-covid-19-learning-series>
5. "HIV-exposed infants in Manitoba: collaborative efforts to prevent infection". Invited speaker. *Infant Feeding in HIV in Canada CIHR Planning Grant Meeting*. Toronto, ON. January, 2016.
6. "Viral Therapy and Monitoring in the Solid Organ and Bone Marrow Transplant Patient". Invited speaker. *Pediatric Grand Rounds, Memorial University*. St. John's, NFLD. June, 2013.
7. "What We Should Know About Pneumococcal Disease in Kids". Invited speaker. *Canadian Respiratory Conference*. Niagra Falls, ON. May, 2011.

#### International Presentations:

##### Invited Lectures and Sessions:

1. "COVID-19 Seminar Series: Pediatric Cases, Laboratory Diagnostics and Critical Care". Pacific Island Health Officers' Association (PIHOA), webinar. June, 2020. <https://www.pihoa.org/covid-19-clinical-training-course-materials/>

## Media and Podcasts

### Local Media/Podcasts:

1. “Ottawa, Manitoba on same pandemic page for return to school”. Interview with Maggie Macintosh, Winnipeg Free Press. August 2020. <https://www.winnipegfreepress.com/special/coronavirus/ottawa-manitoba-on-same-pandemic-page-for-return-to-school-572070392.html>
2. “Local research suggests COVID-19 not infectious after eight days”. Interview with Michelle Gerwing, CTV News Winnipeg. May 2020. <https://winnipeg.ctvnews.ca/local-research-suggests-covid-19-not-infectious-after-eight-days-1.4955543>.
3. “Pediatric Inflammatory Diseases associated with COVID-19”. Interview with Richard Cloutier, Global News 680 CJOB. May 2020. <https://omny.fm/shows/news-on-cjob/dr-jared-bullard#description>.
4. “Simple precautions can keep enterovirus away”. Winnipeg Free Press, Health Column. September 2014.

### National Media/Podcasts:

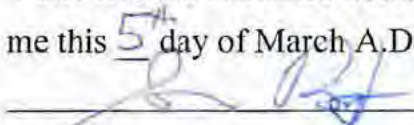
1. “When is a case of COVID still COVID? Critics suggest the gold-standard of testing could be too sensitive”. Interview with Sharon Kirkey, National Post. October 2020. <https://nationalpost.com/news/canada/when-is-a-case-of-covid-still-covid-critics-suggest-the-gold-standard-of-testing-could-be-too-sensitive>
2. “COVID-19 not very infectious 8 days after symptoms occur, Winnipeg study suggests”. Interview with Bartley Kives, CBC News. May 2020. <https://www.cbc.ca/news/canada/manitoba/covid19-infectious-period-1.5583722>.
3. “Local research suggests COVID-19 not infectious after eight days”. Interview with Angela Kokott, Global News 770 CHQR, Calgary AB. May 2020. <https://omny.fm/shows/afternoons-with-rob-breakenridge/interview-with-dr-bullard>.
4. “Update: Testing for COVID-19 in Canada”: A Public Health Podcast. April 2020. <https://nccid.ca/podcast-2019-ncov/#subMenuSection0>.
5. “Testing for 2019-nCoV”. Infectious Questions: A Public Health Podcast. February 2020. <https://nccid.ca/podcast-2019-ncov/>
6. “Congenital Syphilis Risks and Prevention”. National Collaborating Centre for Infectious Diseases (NCCID) podcast, January 2019. <https://nccid.ca/webcast/congenital-syphilis-risks-and-prevention-jared-bullard/>

### International Media/Podcasts:

1. “FactCheck: No, a claim by an Irish doctor that PCR tests have a 97% false positive rate is not true”. Interview with Anthony King, TheJournal.ie. December 2020. <https://www.thejournal.ie/factcheck-pcr-tests-irish-video-5304097-Dec2020/>
2. “Factchek: Nee, ‘Oxford-studie’ zegt niet dat covidtest 70% valspositieven oplevert”. Interview with Brecht Castel, Knack. September 2020. <https://www.knack.be/nieuws/factchecker/factcheck-nee-oxford-studie-zegt-niet-dat-covidtest-70-valspositieven-oplevert/article-longread-1647383.html>
3. “Minnesota’s broad COVID-19 testing under microscope”. Interview with Jeremy Olson, Star Tribune. September 2020. <https://www.startribune.com/broad-covid-19-testing-under-microscope/572396572/>
4. “Behind the Paper: Predicting infectious SARS-CoV-2 from diagnostic samples”. Invited contribution to Nature Research Microbiology Community. June 2020. [https://naturemicrobiologycommunity.nature.com/users/411193-jared-bullard/posts/predicting-infectious-sars-cov-2-from-diagnostic-samples?utm\\_source=digest\\_mailer&utm\\_medium=email&utm\\_campaign=daily\\_digest](https://naturemicrobiologycommunity.nature.com/users/411193-jared-bullard/posts/predicting-infectious-sars-cov-2-from-diagnostic-samples?utm_source=digest_mailer&utm_medium=email&utm_campaign=daily_digest)

5. "Winnipeg research suggests virus not very infectious eight days after onset". Radio Canada International. May 2020. <https://www.rcinet.ca/en/2020/05/27/winnipeg-research-suggests-virus-not-very-infectious-eight-days-after-onset/>.

This is Exhibit " B " referred to  
in the Affidavit of Jared Manley  
Peter Bullard Affirmed before  
me this 5<sup>th</sup> day of March A.D. 2021

  
\_\_\_\_\_  
A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

# **Paul Van Caesele, MD FRCPC**

Professor

Department of Medical Microbiology & Infectious Diseases  
Department of Pediatrics and Child Health

Max Rady College of Medicine, Rady Faculty of Health Sciences

## **CURRICULUM VITAE**



**University  
of Manitoba**

December 2020



## CURRICULUM VITAE of Paul Van Caesele MD FRCPC

### TABLE OF CONTENTS

<b>IDENTIFICATION .....</b>	<b>3</b>
<b>EDUCATION AND TRAINING .....</b>	<b>3</b>
DEGREES AND CERTIFICATIONS.....	3
PROFESSIONAL EXAMINATIONS .....	3
SPECIAL SKILLS AND CONTINUING EDUCATION .....	4
AWARDS & HONOURS.....	4
<b>WORK EXPERIENCE &amp; ADMINISTRATION.....</b>	<b>5</b>
ACADEMIC POSITIONS AND APPOINTMENTS .....	5
EMPLOYMENT AND CONTRACT EXPERIENCE .....	5
Current .....	5
Prior .....	5
COMMITTEES AND OTHER SERVICE.....	6
Cadhams Provincial Laboratory (CPL) and/or Manitoba Department of Health .....	6
Legislative and/or Regulatory Consultation .....	7
Diagnostic Laboratory Systems (not public health).....	7
National & Other .....	7
Reviewerships and Examination Boards.....	8
University of Manitoba .....	9
<b>CLINICAL &amp; PROFESSIONAL SERVICE.....</b>	<b>10</b>
PROFESSIONAL LICENSURE .....	10
CLINICAL APPOINTMENTS .....	10
PROFESSIONAL MEMBERSHIPS .....	10
CONFERENCES & MEETINGS .....	10
REVIEWERSHIPS .....	11
NEWSLETTER CONTRIBUTIONS .....	11
CAREER PLANNING .....	11
<b>TEACHING .....</b>	<b>12</b>
UNDERGRADUATE: DIDACTIC OR TUTORIAL .....	12
POSTGRADUATE: DIDACTIC OR TUTORIAL.....	13
STUDENT SUPERVISION.....	13
Supervision of Graduate Students.....	13
Student Thesis Advisory Committee(s).....	15
OTHER TEACHING .....	15
INVITED PRESENTATIONS.....	16
<b>RESEARCH .....</b>	<b>19</b>
RESEARCH INTERESTS.....	19
GRANTS AND FINANCIAL AWARDS.....	19
PUBLICATIONS .....	20
Books.....	20
Peer Reviewed Publications .....	21
Publications as Part of Networks .....	26
Communications & Reports .....	28
Published Abstracts, Presentations & Posters.....	30
REGISTERED ISOLATES OR SEQUENCES .....	38
Sequences .....	38

# Paul Van Caesele, MD FRCPC

---

---

## IDENTIFICATION

---

**Business Address:**

[REDACTED]

[REDACTED]

**Faculty Address:**

[REDACTED]

**Citizenship:**

Canada

**Security clearance:**

Secret (2003)

---

---

## EDUCATION AND TRAINING

---

### DEGREES AND CERTIFICATIONS

1995 to 2000

**Medical Microbiology Specialty (FRCPC)**  
University of Manitoba, Faculty of Medicine

1991 to 1995

**Doctor of Medicine (MD)**  
University of Manitoba, Faculty of Medicine

1988 to 1991

**Bachelor of Sciences (BSc. Gen)**  
University of Manitoba, Faculty of Science  
Major in Chemistry/Microbiology, Dean's Honour List, 1989 to 1991

---

### PROFESSIONAL EXAMINATIONS

Medical Council of Canada Part I – 1995

Medical Council of Canada Part II – 1997

Medical Microbiology (FRCPC) – June 2000

---

**SPECIAL SKILLS AND CONTINUING EDUCATION**

Summer Field Epidemiology Training Program Certificate, 1998  
 E. coli O157:H7 Workshop, LCDC, Winnipeg, Manitoba, 1998  
 Teaching Improvement Project Systems Certificate (T.I.P.S.), 1998-99  
 Workplace Hazardous Materials Information System, 1997 to present  
 Manitoba Emergency Management Course, 2000  
 Transport of Dangerous Goods Certified, 2001 to present  
 Emergency Response Assistance Plan Certified, 2001 to present  
 College of American Pathologists Inspector Self-Study Course, 2004, 2009;  
     Team Leader Training, 2007, 2015  
 Private Pilot License/ Aeronautical Radiotelephone Operator License, 1990 (current)  
 University of Manitoba Animal User Certificate, 2005  
 Prenatal Screening Course, Rhode Island, 2005  
 Training for Tri-Council Policy Statement: Ethical Conduct for Research involving Humans, 2007  
 National Institutes of Health Certificate in Protecting Human Research Participants, 2008  
 Teaching and Evaluation Professionalism, 2008  
 Faculty Development for Teachers of International Medical Graduates, 2008  
 CMPA Delegation and Supervision of Medical Trainees, 2014  
 Governing for Quality and Patient Safety, Canadian Healthcare Association, 2014  
 Manitoba Government Training Workshops and Online Courses (M=Mandatory)  
     Introduction to Office Access (I and II), 2002  
     Personal Health Information Act (M), 2014, 2016, 2017, 2019  
     Effective Communication Strategies for Difficult Conversations, 2014  
     Powerful Listening, 2015  
     Values and Ethics in the Manitoba Government, 2015 (M)  
     Respectful Workplace and Harassment Prevention, 2016 (M), 2018 (M)  
     Introduction to Manitoba's Comptrollership Framework, 2016 (M)  
     Information Security Awareness, 2016 (M)  
     The Accessibility for Manitobans Act, 2016 (M)  
     Inclusion and Diversity in the Workplace, 2016 (M)  
     Lean Online Series, 2018  
 Algonquin College: Fundamentals of OCAP, 2016  
 Accessible Customer Service, August 2017 (University of Manitoba mandatory online course)  
 Tri-Council TCPS 2: CORE Ethical Conduct for Research, 2021  
 University of Manitoba PHIA and FIPPA for Researchers, 2021

---

**AWARDS & HONOURS**

1988 – Euclid Medal for Excellence in Mathematics  
 1990 – UFCW Local 832 Scholarship Award  
 1994 – Earl S. Bryngelson Award in Family Medicine  
 2000 – Canadian Society for Circumpolar Health Travel Award  
 2007 – (Nomination) Manitoba Service Excellence Award (West Nile Virus Team)  
 2010 – Best Overall Poster Presentation, Epidemiology & Public Health, 26<sup>th</sup> International  
     Papillomavirus Conference  
 2011 – Lancet Paper of the Year, 2010 (March) JAMA Article  
 2013 – GTEC Award for Excellence in Collaboration (as partner to eHealth)

**Student Awards**

2017 – Canadian Student Health Research Symposium, Student Dean of Medicine Award of  
     Excellence, Poster 29, Dr. Davinder Singh (MSc. Thesis supervised)  
 2019 – Dept. of Pediatrics & PGME, Child Health Research Days Resident Award, Gold Award, Dr.  
     Bhreagh Phipps (resident project supervised)  
 2019 – Manitoba Student Health Research Poster Competition, Community Health Sciences Bold  
     Idea Student Award, Lexy Anderson (MSc. Thesis advised)

---

---



---

## WORK EXPERIENCE & ADMINISTRATION

---

### ACADEMIC POSITIONS AND APPOINTMENTS

**University of Manitoba, Rady Faculty of Health Sciences, Max Rady College of Medicine**

**Professor (Nil-Salary) – Dept. of Medical Microbiology & Infectious Diseases, 2017-present**

Assistant Professor (Nil-Salary) – Medical Microbiology, 2000-2007

Associate Professor (Nil-Salary) – Medical Microbiology & Infectious Diseases, 2007-2017

Program Director, Medical Microbiology Fellowship Training Program, 2006-2010

Cross Appointment – Dept. of Pediatrics and Child Health, 2005-present

Associate Member – Manitoba Institute for Child Health, 2005-2013 (lapsed)

---

### EMPLOYMENT, WORK AND CONTRACT EXPERIENCE

#### Current

**Medical Director – Cadham Provincial Laboratory (CPL), July 2000-present**

**Responsibilities:** Medical and administrative leadership of the Manitoba provincial public health laboratory. CPL consists of seven administrative sections with four distinct lab sections of excellence: Newborn Screening and Public Health Chemistry, Virus Detection, Public Health Bacteriology, and Serology & Parasitology. The 120+ professional and technological staff working there are engaged in laboratory-based screening programs, outbreak and emerging disease response, disease surveillance, consultation, research and education activities. The annual budget in 2019/20 was approximately \$20 Million.

**Context:** A public health laboratory is a key component of the local, national and international public health infrastructure, and must stay abreast of and contribute to broad direction in all three spheres.

**Accreditation:** When best practices are employed, the quality and safety of a medical laboratory are assured through external accreditation, preferably that of peers. CPL has maintained full accreditation with the following agencies throughout my tenure:

- College of American Pathologists
- Manitoba Quality Assurance Program (MANQAP)

#### Prior

Acting Medical Advisor – MB Communicable Diseases Control Branch, 2008-2010

Director – Percy E. Moore and Norway House Hospital Laboratories, July 2000- 2012

Medical Consultant – Manitoba Worker's Compensation Board, 2009

Director – St. Amant Centre Laboratory, August 2000-April 2001

Director – Mt. Carmel Clinic Laboratory, August 2000-April 2001

Medical Consultant – THiiNC Health Incorporated, *Operational Review of the Ontario Public Health Laboratory System*, Jul-Sep 2005

Program Director – University of Manitoba Medical Microbiology Training Program, 2006-2010

Transit Field Researcher – City of Winnipeg, Dept. of Transportation, 1991-1995

Research Assistant – Dept. of Geology, University of Manitoba, 1989-1990

---

**COMMITTEES AND OTHER SERVICE****Cadham Provincial Laboratory (CPL) and/or Manitoba Department of Health**

- Chair – CPL, Laboratory Management Committee, 2000 to present
- Chair – Manitoba Perinatal Screening Committee, 2000 to present
  - Chair – Cystic Fibrosis Working Group, 2009-2011
  - Member – Metabolic Working Group, 2017 to present
  - Chair – SCID/PID Screening Implementation Working Group, 2020-2021
- Chair – CPL Quality Assurance Committee, 2002 to present
- Chair – MACID Sub-committee on HIV testing, 2000-2002
- Chair – HIV Antibody Testing Planning and Implementation Group, 2003 to 2010
- Chair – Pandemic Influenza Laboratory Planning Committee, 2009-2010
  - Member – Manitoba Health (MH) Pandemic Clinical Care Group, 2009-2010
  - Member – MH Pandemic Surveillance and Planning Group, 2009-2010
  - Member – MH Pandemic Scientific Advisory Committee, 2009-2010
  - Member – H1N1 Strategic Advisory Group, 2009-2010
- Chair – CPL Laboratory Information Management System Steering Committee, 2006-2010
- Member/Chair – CPL Policy & Procedure Committee, 2002 to present
- Co-chair – Manitoba Maternal Serum Screening Committee, 2000 to present
- Lead – Manitoba ERAP Team and Biohazard Response Team, 2000 to present
  - MB ERAP Provincial Territorial Response Coordinator (PTRC), 2009 to present
- Member – Manitoba Public Health Laboratory Committee (PHLC), 2000 to present
  - Acting Chair – PHLC, 2009 to 2011
  - Secretary – PHLC, 2000 to 2011
- Member – Public Health Branch Management Committee, 2000-2007, 2011-2019
- Member – Manitoba Advisory Committee on Infectious Diseases, 2000-2007
- Member – Manitoba Blood Advisory Committee, 2005-2015
- Member – Manitoba Public Health Protocol Steering Committee, 2006-2009
- Member – Manitoba Provincial Vaccine Advisory Committee, 2013 to present
- Member – West Nile Virus Advisory and Scientific Advisory Committees, 2004 to present
- Member – MACID Advisory Sub-committee on Tuberculosis, 2001 to 2006
- Member – Manitoba Tuberculosis Steering Committee, 2012 to present
- Member – F/P/T Pandemic Influenza Working Group, 2000-2009
- Member – Manitoba HPV Advisory Committee, 2007-2012
  - Member – Provincial HPV Integrated Committee, 2012-2014
- Member (Mgmt.) – Manitoba Health Workplace Safety & Health Committee, 2008-2010
- Member – Manitoba Health Extended Management Committee, 2012 to present
- Member – Information Communication and Technology (ICT) Internal Working Group, 2014-2015
- Member – Infoway Pan Canadian CD Surveillance Solution Set Project Mgmt Committee, 2006-2007
- Member – MB Panorama Public Health Advisory Group, 2013 to present
  - Member – Collaborative Laboratory Expert Review Group, 2013
  - Member – CD Investigations Working Group, 2014 to present
- Member – MB Provincial Syphilis Outbreak Response Team, 2015-2016
- Member – Provincial STBBI Outbreak Management Steering Committee, 2016 to present
- Member – Intergovernmental Newborn Screening Working Group, 2014 to present
- Member – Universal Newborn Hearing Screening Working Group, 2014-2017
- Member – Manitoba Quality and Patient Safety Council, 2016-2019
- Member – Healthcare Associated Infection (HAI) Indicator Working Group, 2017-2019
- Member – MHSAL Business Process Coordination Group, 2018 to present
- Member – CPL eHealth\_hub Project Steering Committee, 2018-2019
- Member – STBBI Special Advisory Committee, 2019
  - Chair, Testing Subcommittee, 2019
- Member – WRHA STBBI Outbreak Response Team (SORT), 2019 to present
- Member – Department Integration Network, 2019 to present

- Member – STBBI PUSH Committee, 2020 to present
- Member – Provincial Respiratory Virus Steering Committee, 2020 to present
  - Member – Respiratory Virus Public Health Working Group, 2020 to present
  - Member – Respiratory Virus Public Health Operations Group, 2020 to present
- Member – Manitoba Health COVID-19 Incident Command Structure:
  - Member – Unified Public Health Operations, 2020 to present
  - Member – Long Term Care Asymptomatic Staff Testing Working Group, 2020 to present
  - Member – Winnipeg Urban Indigenous Rapid Test Site Working Group, 2020 to present

### **Legislative and/or Regulatory Consultation**

- Member – Manitoba Health Standing Committee on Diagnostic Services, 2002 to present
- Member – MB College of Physicians – Subcommittee on Laboratory Medicine, 2000-2005
- Councillor – Medical Laboratory Technologists Transitional Council, 2003-2007
- Member – National Notifiable Disease Expert Advisory Committee, 2004-2007
- Member – MB College of Physicians – Laboratory Accreditation Standards Committee, 2006-2008
- Guest – The Commons Standing Committee on Health, March 2009 (by teleconference)
- Member – MB *Human Pathogens and Toxins Act* Consultation Steering Committee, 2010-2013
- Member – Pharmacy Act and Regulations Implementation Working Group, 2012-2013
- Member – Universal Newborn Hearing Screening Implementation Group, 2015-2017
- Member – Manitoba Public Health Protocol Advisory Committee, 2015 to present
- Member – RN Ordering Pilot Working Group, 2019 to present

### **Diagnostic Laboratory Systems (not public health)**

- Director – Diagnostic Services of Manitoba Board of Directors, 2011 to 2018
  - Member – Patient Safety and Quality Committee of DSM Board, 2011 to 2018
  - Chair - Patient Safety and Quality Committee of DSM Board, 2014 to 2018
  - Member – Executive Committee of the Board, 2014 to 2018
- Interim Chair – Quality and Patient Safety Interim Committee of the Interim Board, Shared Health Manitoba, 2018 to present
- Laboratory Inspection Team Leader – College of American Pathologists, 2004 to present
  - Trinity Health – St. Joseph’s Laboratory (Minot, ND), 2004
  - Minot AFB 5<sup>th</sup> Medical Group (ACC) SGSAL (North Dakota), 2007
  - Luther Midlefort Mayo Health System (Wisconsin, as Molecular Pathology specialist), 2009
  - Oklahoma State Public Health Laboratory, 2012
  - Kentucky Cabinet for Health and Family Services Public Health Laboratory, 2014
- Member – Clinical Microbiology Proficiency Testing (CMPT) Clinical Bacteriology Advisory Committee, 2003-2007
- Member – Manitoba Health Community Laboratories Policy Advisory Committee, 2011 to present
- Member – MHLS Point of Care Testing (POCT) Advisory Committee, 2014
- Member – WRHA/DSM Provincial Point of Care Testing Advisory Committee, 2016 to present
- Member – WRHA Prenatal Diagnosis Discipline Committee, 2012 to present

### **National & Other**

- Associate Member – Canadian Public Health Laboratory Network (CPHLN), 2000 to present
  - Co-Chair Elect – CPHLN, 2007 to 2009, 2016-2018
  - Co-Chair – CPHLN, 2009-2011, 2018 to present
  - Past-Chair – CPHLN, 2011-2013
  - Co-Chair & Member – CPHLN Subcommittee on Bioterrorism, 2002-2007
  - Co-Chair & Member – CPHLN Laboratory Preparedness and Emergency Response Issue Group, 2007 to present
  - Member – Laboratory Directors’ Council, 2001 to present
  - Member – CPHLN Subcommittee on Laboratory Standards, 2003-2008

Member – Pandemic Influenza Laboratory Planning Network, 2005 to present  
 Member – Listeria Task Group, 2008-2009  
 Member – Biorepository Working Group, 2015-2017  
 Member – Zika Virus Working Group, 2016-2017  
 Member – Respiratory Virus Infection (ReVI) Working Group, 2017 to present  
 Member – Whole Genome Sequencing (WGS) Steering Committee, 2017 to present  
 Member – Lyme Disease Diagnostics Working Group, 2019 to present  
 Member – Spartan and COVID-19 POC Testing Working Group, 2020 to present  
 Member – CPHLN CanCOGen Steering Committee, 2020 to present  
 Member – Pan-Canadian Public Health Network (PHN) Communicable and Infectious Diseases Steering Committee, 2018-2020  
 Member – Expert Advisory Group on Rubella in Canada, 2001  
 Member – Special Pathogens Advisory Committee (CSCHAH), 2016 to present  
 Active Member – Association of Medical Microbiology and Infectious Diseases Canada (AMMI)  
 Member – Human Health Resources Working Group of AMMI, 2011-2014  
 Member/AMMI representative – Canadian Alliance of Laboratory Medicine, 2016 to present  
 Member – Point of Care Testing Working Group, 2018 to present  
 Member – Red River College Medical Laboratory Science Advisory Committee, 2007-2009  
 Member – iEHR Project Steering Committee, 2011-2013  
 Member – Manitoba Electronic Health Record (EHR) Business Advisory Committee, 2010 to present  
 Member – Health Sciences Centre Infection Control Committee, 1996-1999  
 Member – St. Boniface General Hospital MRSA Outbreak Control Committee, 1998  
 Member – Foodborne Illness Outbreak Response Protocol (FIORP) Team, 2007 to present  
 Member – Canadian Food Laboratory Forum, 2012 to present  
 Member – International Lyme Symposium Organizing Committee, 2010-2012  
 Member – Manitoba Centre for Health Policy Project Advisory Group, “Systematic Investigation of Manitoba’s Provincial Lab Data for Population Health & Health Services Research” 2011-12  
 Member – Planning Committee of Annual Manitoba Travel Health Conference, 2015-2018  
 Member – COVID-19 Federal/Provincial/Territorial Logistics Advisory Committee, 2020  
 Member – Canadian COVID-19 Immune Task Force (CITF) Leadership Group, 2020 to present

### **Reviewerships and Examination Boards**

Examiner – Medical Council of Canada, 1997-98  
 Examiner – Royal College of Physicians and Surgeons of Canada (RCPSC) Examination Board/Committee for Medical Microbiology (EBMM), 2005 to present  
 Chair – RCPSC EBMM, 2010-2015  
 Past-Chair – RCPSC EBMM, 2015-2018  
 Executive Sub-Committee of EBMM, 2013-2016  
 Member – RCPSC Specialty Committee in Medical Microbiology, 2008-2010, 2016-present, *ex officio* 2010-2016  
 Member – RCPSC – Kuwait Institute of Medical Specialization (KIMS) Clinical Microbiology Examination Board, 2017 to present  
 Member – RCPSC Examination Committee, 2016-2018  
 Academic Promotions External Reviewer  
 Dalhousie University, Dept. of Pathology, 2008, 2018  
 Memorial University of Newfoundland, Faculty of Medicine, 2016  
 McGill University, 2019  
 Manuscript Review for Peer-Reviewed Periodicals  
*Anaerobe*, 2002-03;  
*Canadian J. of Emergency Medicine*, 2005;  
*Canadian Journal of Infectious Diseases & Medical Microbiology*, 2001, 2003, 2015;  
*Canadian Medical Association Journal*, 2008;  
*Clinical Infectious Diseases*, 2001-2002, 2005;  
*Journal of the Association of Medical Microbiology and Infectious Diseases Canada*, 2017;  
*Viral Immunology* 2012  
 Manuscript Editor, Professional non-peer Review

*Pharmacist's Letter Canada, 2020*

External Reviewer – National Laboratory Reference Services, 2005 to present

### **University of Manitoba**

Voting Member – Department of Medical Microbiology Council, 1999 to present

Member – Department of Medical Microbiology Headship Review Committee, 1998

Member – Infectious Diseases Core Curriculum Sub-Committee, 1998

Member – Faculty of Medicine Undergraduate Laboratory Medicine Training Committee, 2001-2005

Member – PGME Program Directors Committee, 2007-2009

Member – Section of Pediatric Infectious Diseases Committee, 2007 to present

Member – ID/MM Academic Half Day Committee, 2009-2010

Member - Dept.of Pediatrics & Child Health, Pediatric Infectious Diseases Search Committee, 2010

Member – Section of Infectious Diseases, Antimicrobial Stewardship Committee, 2011

University of Manitoba Training Committees:

Member – Adult Infectious Diseases Training Program Committee, 1996-2010

Member – Pediatric Infectious Diseases Training Committee, 2006 to present

Member – Clinical Microbiology Training Committee, 2009-2010

Member – Medical Microbiology Training Committee, 1998 to present

Chair – Medical Microbiology Training Committee, 2006 to 2010

Member – Anatomic Pathology/General Pathology Residency Committee, 2007-2008

Member – Community Medicine Training Committee, 2007-2008, 2019 to present

---



---

## CLINICAL & PROFESSIONAL SERVICE

---

### PROFESSIONAL LICENSURE

Province of Manitoba, Medical Microbiology Specialist, July 2000 – present  
Territory of Nunavut, Medical Microbiology Specialist, July 2000-2001 (lapsed)

---

### CLINICAL APPOINTMENTS

Medical Staff, Pediatric Infectious Diseases – Winnipeg Regional Health Authority, 2000-present  
Admit/Treat/Consult/Discharge Privileges  
Member – St. Amant Centre Medical Staff, 2001 to present  
Associate Director and Travel Health Specialist – WRHA Travel Health and Tropical Medicine  
Clinic, 2001 to present

---

### PROFESSIONAL MEMBERSHIPS

Canadian Infectious Diseases Society, since 1997; & AMMI Canada, since 2005  
Professional Association of Residents and Interns of Manitoba, 1995-2000  
Canadian Association for Clinical Microbiology and Infectious Diseases, since 1999  
Royal College of Physicians and Surgeons of Canada, since 2000  
American Society for Microbiology, since 1997  
College of Physicians and Surgeons of Manitoba, registered since 1995  
Canadian Owners and Pilots Association, 1993-2006  
Manitoba Medical Association/Doctors Manitoba, since 2000  
Canadian Medical Association, since 2015  
Association of Public Health Laboratories, since 2001  
American Society of Tropical Medicine and Hygiene, since 2005  
Clinical Laboratory Standards Institute (CLSI), Active Member (CPL) since 2002

---

### CONFERENCES & MEETINGS

American Society for Microbiology General Meeting: Miami 1997, Atlanta 1998, Orlando 2001  
ICAAC: Toronto 2000, San Diego 2002  
Conjoint Meeting on Infectious Diseases (AMMI-CACMID): Edmonton 1999, Halifax 2002,  
Montreal 2003, 2011, Vancouver 2018.  
Canadian Public Health Laboratory Network Semi-Annual or Annual Meeting, 2001 to present  
International Congress on Circumpolar Health (ICCH): Harstad, Norway, 2000  
Association of Public Health Laboratories (APHL/CSTE): Portland 2001  
NOWECOMM 2004. Workshop on molecular diagnostics. Vancouver 2004  
CHICA (Manitoba) Annual Conference: Winnipeg 2005, 2008, 2010  
Manitoba Annual Travel Health Conference: Winnipeg 2001, 2002, 2005-2014, 2016, 2017, 2018  
PulseNet Canada Annual Meeting, Winnipeg 2007, 2010, 2013  
North American Laboratory Summit for Influenza: Toronto 2008, Vancouver 2010 (Moderator)  
Severe H1N1 Disease: Preventing Cases, Reducing Mortality, 2009 (Moderator)  
Canadian Public Health Association Centenary Annual Conference, Winnipeg 2009  
Network of Networks, Toronto 2011  
Canadian Institute for Public Health Inspectors Annual Meeting and Conference, Winnipeg, 2013.  
Annual Meeting of Canadian Association of HIV Clinical Laboratory Specialists (CAHCLS), 2013-  
present

---

**REVIEWERSHIPS**

Academic Promotions External Reviewer

Dalhousie University, Dept. of Pathology, 2008, 2018

Memorial University of Newfoundland, Faculty of Medicine, 2016

McGill University, 2019

Manuscript Review for Peer-Reviewed Periodicals

*Canadian Journal of Infectious Diseases & Medical Microbiology*, 2001, 2003, 2015;

*Journal of the Association of Medical Microbiology and Infectious Diseases Canada*, 2017;

*Anaerobe*, 2002-03;

*Clinical Infectious Diseases*, 2001-2002, 2005;

*Viral Immunology* 2012;

*Canadian Medical Association Journal*, 2008;

*Canadian J. of Emergency Medicine*, 2005;

External Reviewer – National Laboratory Reference Services, 2005 to present

**NEWSLETTER CONTRIBUTIONS**

1. Mighty Microbes, an Infection Control Newsletter for Manitoba Infection Control Practitioners
  - September 2000 – Phippen D, Van Caesele P. Parainfluenza Virus
  - March 2001 – Phippen D, Van Caesele P. RSV Update
  - June 2001 – Phippen D, Van Caesele P. Cryptosporidium update
  - September 2001 – Phippen D, Van Caesele P. Scabies update
  - March 2002 – Phippen D, Van Caesele P. ESBLs
  - September 2002 – Phippen D, Van Caesele P. Hepatitis A Virus update
  - December 2002 – Phippen D, Van Caesele P. Small round enteric viruses
  - March 2003 – Phippen D, Van Caesele P. Human metapneumovirus
  - October 2004 – Van Caesele P. Tularemia
  - March 2005 – Van Caesele P. CA-MRSA.
  - December 2005 – Thompson G, Van Caesele P. Avian influenza
  - April 2006 – Thompson G, Van Caesele P. Mycoplasma pneumonia
  - September 2006 – Thompson G, Van Caesele P. E. coli O157:H7
  - June 2006 – Thompson G, Van Caesele P. Mumps
  - June 2010 – Kadkhoda K, Van Caesele P. Measles.
2. Cadham Provincial Laboratory – Public Health in Action, 2001-2005 (2 articles)
3. Communicable Disease Control Newsletter (2 articles)
4. Just Us – An HIV positive community Newsletter, 2001 (1 article)
5. Manitoba Health Physician's Newsletter, 2002- (3 articles)
6. College of Physicians and Surgeons of Manitoba Newsletter, 2001 (1 article)
7. Clinical Microbiology Proficiency Testing (CMPT) Critiques Newsletter, contributor to a number of critiques, 2003-2007

Numerous work-related pamphlets, Fact Sheets, Protocols, Procedures, Policies and white-papers.

**CAREER PLANNING**

Manitoba High School Career Fair (Medical Microbiology and laboratory medicine), January 2003

Medical Microbiology as a Career, University of Manitoba Faculty of Medicine Career Evening,

Feb 2007 & April 2008

---



---

## TEACHING

---

Except where indicated, all teaching is under the University of Manitoba, Rady Faculty of Health Sciences.

---

### UNDERGRADUATE: DIDACTIC OR TUTORIAL

#### i. Laboratory Medicine (Mini-Hospital)

1997-2000	In training: over 80 hours of Lab Medicine tutorials
2000-2001	50 hours
2001-2002	50 hours
2002-2003	37 hours
2003-2004	10 hours
2004-2005	3 hours
2005-2006	14 hours

#### ii. Med I, Block 3, LM007, Serology (Lecture)

Annually from 2006-2016 (1 hour each year)

#### iii. Tutorials

1997-2000	In training: over 42 hours of ID/Microbiology tutorials			
2005	WRH 232	Perinatal Infections	Nov 14	2 hours
	-----	Pediatric ID	Nov 21	1 hour
2006	RS071	Pneumonia 3	May 4	1 hour
	SF120	Tuberculosis	Oct 26	1 hour
	SF143	Prevention & Control	Nov 2	1 hour
2007	NE090	CNS Infections	Mar 8	1 hour
	SF120	Tuberculosis	Oct 31	1 hour
	SF143	Prevention & Control	Nov 7	1 hour
2008	LM007	Serology	Feb 13	2 hours
2015	WRH232	Perinatal Infections	Nov 23	2 hours
2016	WRH234	Perinatal Infections	Nov 29	2 hours
2017	RS232	Upper Respiratory Infections	May 15	2 hours
	RS235	Lower Respiratory Infections	May 23	2 hours
	WRH2	Perinatal Infections	Nov 28	2 hours
2018	RS232	Upper Respiratory Infections	May 14	2 hours
2019	EVAL8	Evaluating Treatment	Oct 30	1 hour
	WRH2	Perinatal Infections	Nov 28	2 hours
2020	WRH2	Perinatal Infections	Nov 24	2 hours

#### iv. Medical Microbiology and Infectious Diseases HYG 1280

2018	Skin and Soft Tissue Infection	2 hours
2019-2021	Skin and Soft Tissue Infection II	1 hour

---

**POSTGRADUATE: DIDACTIC OR TUTORIAL**
**i. Clinical Bacteriology, 97.704/ MMIC 7040 (Course Leader 2000-2012)**

1999-2000	Meningococcus & Moraxella, 2 hours (Lecturer only)
2000-2001	52 hours
2001-2002	52 hours
2002-2003	50 hours
2003-2004	50 hours
2004-2005	50 hours
2007-2008	22 hours
2009-2010	16 hours
2011-2012	14 hours (last year as Course Leader)

**Note:** The above only reflects direct teaching hours and does not include the considerable effort expended in overseeing and administering the course, including guidance of lecturers, developing, invigilating and marking exams and assignments, & other administrative duties.

**ii. Clinical Virology, 97.713 / MMIC 7210 (Lecturer)**

2003-2004	Respiratory Viruses, 2 hours; Pox/Papilloma/Papovaviruses	1 hour
2005-2006	Respiratory Viruses, 2 hours; Pox/Papilloma/Papovaviruses	1 hour
2016, 2018	Influenza, Parainfluenza and Metapneumovirus	2 hours
	RSV, Rhinovirus and Coronaviruses	1 hour
	Gastroenteritis Viruses	1 hour

**iii. Clinical Parasitology, 97.714 / MMIC 7140 (Lecturer)**

2002-2003	Tissue Protozoa	2 hours
2008	Tissue Protozoa	2 hours
	Nematodes	3 hours
2010	Tissue Protozoa	2 hours
	Nematodes	3 hours
2012	Tissue Protozoa	2 hours
	Nematodes	3 hours
2015, 2017	Tissue Protozoa	2 hours
2019, 2021	Tissue Protozoa 1 and 3	3 hours
	Laboratory, Protozoa	3 hours
	Intestinal Nematodes	2 hours

**iv. The Ecology of Infectious Diseases MMIC 7220**

2007	Preparing for Pandemic Influenza	1 hour
------	----------------------------------	--------

**v. Half Day Sessions**

2005	Pediatrics	Malaria & Malnutrition	Dec 14	2 hours
2013	ID/MM	Viral Diagnostics	Jan 9	2 hours

---

**STUDENT SUPERVISION**
**Supervision of Graduate Students**

- a. As University of Manitoba Medical Microbiology Training Program Director (2006-2010)
  - Don Vinh MD, 2006\*
  - Philippe Lagace-Wiens MD, 2006-2008
  - Ahmed Haleis MD, 2006-2009

- Andrew Walkty MD, 2006-2009\*\*
- Oscar Larios MD, 2006-2009\*\*
- Majid Al-Shamrani MD, 2005-2006\*
- Jared Bullard MD, 2007-2010\*\*
- Safa Edagiz MD, 2010

\*Left the program

\*\*In combination with Infectious Diseases Training Program

b. As Site Director for Cadham Provincial Laboratory (CPL) for clinical training programs (2000-2010):

- Ken Von Kuster MD (General Pathology), Feb-Mar 2001
- Sarah Forgie, MD (Pediatric ID, May-Jun 2001
- Shannon MacDonald MD (Community Medicine), Aug 2001
- Marilyn Kirkpatrick MD (General Pathology-Hematopathology), Nov 2001-Jan 2002
- Frank Bovell MD (ID), Jan-Mar 2002
- Lisa Richards MD (Community Medicine), Jul-Aug 2002
- Nora Alfattoh MD (Pediatric ID), Nov-Dec 2002
- Marissa Becker MD (ID), Feb & Nov 2003
- Samira Mubareka MD (ID & Medical Microbiology), Mar-Apr 2003
- Michael Routledge MD (Community Medicine), May-Jun 2003
- Evelyn Lo MD (ID), Oct-Nov 2003
- William Libich MD (Community Medicine), Nov 2003
- Graham Tipples PhD (Clinical Microbiology), Jan-Feb 2004
- Cathy Smith MD (ID), Apr-Jun 2004
- Don Vinh MD (ID), May-Jun 2005
- Denise Koh MD (Community Medicine), Jul-Aug 2006
- Ghanem Al-Hujailan MD (ID), Sep-Nov 2006
- Camelia Stefanovici MD (General Pathology), Jun 2007
- Mario Calvo MD (Otorhinolaryngology), Sep-Oct 2007
- Sergio Fanella MD, (Pediatric Infectious Diseases), Oct 2007
- Ahmed Al-Suwaidi MD (Pediatric ID), Nov-Dec 2007
- Oscar Larios MD (ID & Medical Microbiology), Nov 2007-Jan 2008
- Andrew Walkty MD (ID & Medical Microbiology), Jan –Feb 2008
- Ahmed Haleis MD (Medical Microbiology), Mar 2008
- Stu Skinner MD (ID), May-Jun 2008
- Nataliya Skuridina MD (Community Medicine), May-Jun 2008
- Richard Rusk MD (Community Medicine), July-Aug 2008
- Karen Robinson MD (Community Medicine), Dec 2008-Jan 2009
- Kamran Kadkhoda PhD (Clinical Microbiology), Jan-Feb 2009
- Yoav Keynan MD (ID), May 2009
- Jared Bullard MD (ID & Medical Microbiology), Jul-Sep 2009
- Majid Al-Shamrani MD (ID), Aug-Sep 2009
- Nathalie Bridger MD (Pediatric Infectious Diseases), Nov-Dec 2009
- Salah Mahmud MD PhD (Community Medicine), Jan 2010
- Jonathon Gabor MD (ID), Mar 2010
- Terry Wuerz MD (ID), April 2010
- Brent Roussin MD (Community Medicine), May, Jul-Aug 2010
- Sandra Allison MD (Community Medicine), July 2010

**Note:** after this point the role of Site Director was turned over to another specialist physician and I provided only 1-2 hours of direct didactic contact per resident, or covered in the Site Director's absence.

c. Postgraduate Student Research Supervision:

Structured research project supervision as part of accredited residency programs:

- Drs. Safa Edagiz and Sameer Kassim (Medical Microbiology). *Mother to child transmission of hepatitis B and C in Manitoba*. 2015-2016. Co-supervisor with Drs. Joanne Embree and Jared Bullard.

- Dr. Bhreagh Kennedy (Pediatrics). *The effect of varicella vaccination on the incidence of herpes zoster in Manitoba*. 2017-2020. Co-supervisor with Dr. Guillaume Poliquin.
  - Dr. Rachel Dwillow (Pediatric Tuberculosis). *A participatory mixed-methods evaluation of Manitoba's tuberculosis program*. 2017. Scholarship Oversight Committee member for American Board of Pediatrics Scholarly Activity Work Product.
- d. As Pediatric Infectious Diseases Consultant at Winnipeg Children's Hospital (2000-present):  
In this position I have supervised post-graduate and undergraduate medical trainees on an almost routine basis. The list is quite long, and includes local and external trainees from the following fields of training (not an exclusive list):
- Pediatrics
  - Pediatric Infectious Diseases
  - Adult Infectious Diseases
  - Medical Microbiology
  - Clinical Microbiology
  - Obstetrics and Gynaecology
  - General Surgery
  - Undergraduate Medical Trainees
- e. As Travel Medicine Specialist at WRHA Travel Health and Tropical Medicine Clinic, (2001- present):  
In this position I have supervised post-graduate and undergraduate medical trainees on a steady but infrequent basis.

### Student Thesis Advisory Committee(s)

- a. Arwa Faizo, MSc. (Dept of Medical Microbiology, University of Manitoba) *Prenatal screening of potential infectious diseases in Manitoba*. 2014
- b. Kerry Dust, PhD. (Dept. of Medical Microbiology & Infectious Diseases, University of Manitoba). *Significance of HPV E6 PDZ binding domain on transformation of primary human neonatal keratinocytes*. Ex officio. 2019.
- c. Dr. Davinder Singh, MSc. (Dept. of Community Health Sciences, University of Manitoba). *The effect of timing of oseltamivir prophylaxis in controlling influenza A H3N2 and influenza B outbreaks in long term care facilities in Manitoba, Canada, 2014-2015: A retrospective cohort study*. 2019
- d. Dr. George Okoli, PhD. (College of Pharmacy, University of Manitoba) *Individual and provider factors associated with differential seasonal influenza vaccine uptake in Manitoba*. 2019.
- e. Alexandria Anderson, MSc. (in progress, Dept. Of Community Health Sciences, University of Manitoba) *Achieving health equity for individuals living with HIV in Manitoba: Identifying potential cancer disparities using population-based data*. Since 2018.
- f. Saba Shaikh, MSc. (in progress, Dept. of Medical Microbiology & Infectious Diseases, University of Manitoba) *Expression of Mumps Virus Fusion and Hemagglutinin protein glycoproteins to achieve stable cell line for Jeryl Lynn vaccine strain and Gentotype G*. Since 2020.

### OTHER TEACHING

- a. Victoria General Hospital Central Services Technology Certification Course (Lecturer), 1998
  - Anatomy and Physiology (2 hours)
  - Microbiology I (2 hours)
  - Microbiology II (2 hours)
- b. Health Sciences Centre Respiratory Technology Training Course (Lecturer), 1999

- Gram Positive Bacteria (1 hour)
  - Gram Negative Bacteria (1 hour)
- c. Bayer Canada Preceptorship Program, May 1999
- Infections in the Neutropenic Host (2 hours)
- d. University of Manitoba Faculty of Nursing Practicum Seminars (Surgery) 2001-2002
- Surgical Site Infections (2 hours annually)
  - Infection Control (2 hours annually)
- e. Manitoba Health Infection Control Practitioner Refresher Course, 2000-2004
- Infection and Immunity (2 hours annually)
  - Virulence and Antibiotics (2 hours annually)
- f. Federal Hospital Continuing Medical Education Series, 2000-2007
- Meningitis (2000)
  - Scabies (2001)
  - The Bugs of Summer (2002)
  - Indoor Moulds and Human Health (2003)
  - Sexually Transmitted Diseases (2004, 2007)
- g. As Medical Director of Cadham Provincial Laboratory (CPL), annually oversee, orient and approve delegated supervision of the following trainees at CPL:
- Government of Manitoba STEP students
  - University of Manitoba Faculty of Science Co-Op Students
  - Red River College Medical Laboratory Technology Trainees
  - Neeginan College Medical Laboratory Assistant Trainees
  - Robertson College Medical Laboratory Assistant Trainees
  - Novice Infection Prevention and Control Practitioner (Practicum)

## INVITED PRESENTATIONS

1. Scabies. Gimli Medical Staff. Gimli, Manitoba. May 2001.
2. Bioterrorism. Manitoba Society of Clinical Chemists Annual Meeting. Winnipeg, November, 2002.
3. Meningitis. Central Regional Health Authority Infection and Prevention Control Day, Oct 2002.
4. West Nile Virus: After the Fever: Diagnosis, Treatment & Prevention. Brandon Public Health Day. Brandon, Manitoba. October 2003.
5. Acanthamoeba keratitis. University of Manitoba Department of Ophthalmology Grand Rounds, Winnipeg, Manitoba, December 2003.
6. Unravel the Mystery of Microbiology Reports. Canadian Society of Hospital Pharmacists. Winnipeg, MB. May 15, 2005.
7. What's the Bug? Interpreting Microbiology Reports. 2005 National Education Conference, CHICA Canada, Winnipeg, Manitoba, 2005.
8. Marine toxins and envenomation. Manitoba 5<sup>th</sup> Annual Travel Health Conference, Winnipeg, Manitoba, April 2006.

9. Laboratory waste and its management. CSMLS/MSMLT 2006 National Congress, Winnipeg, Manitoba, May 2006.
10. What's happening out there: Global shifts in disease. Manitoba 6<sup>th</sup> Annual Travel Conference, Winnipeg, Manitoba, April 2008.
11. Specimen Collection: Microbiology Laboratory Rules and Etiquette. CHICA Manitoba Annual Meeting, Winnipeg, Manitoba, June 2008.
12. Battling the enemy within: HPV vaccine and detection. MSMLT Annual Congress, Winnipeg, Manitoba, October 2008.
13. HPV: Detection and surveillance, the view from the lab. International Centre for Infectious Diseases (ICID), Winnipeg, Manitoba. November 2008.
14. Seafood Poisoning: What's in your sushi? Manitoba 7<sup>th</sup> Annual Travel Health Conference, Winnipeg, Manitoba, April 2009.
15. Travel Clinics as GeoSentinel sites. Manitoba 7<sup>th</sup> Annual Travel Health Conference, Winnipeg, Manitoba, April 2009.
16. Diagnosing Influenza A H1N1. Internal Medicine Grand Rounds, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba. June 23, 2009.
17. Diagnosis: Lessons learned – current recommendations vs. clinical reality. Severe H1N1 Disease: Preventing cases, Reducing Mortality Conference, Winnipeg, Manitoba, September 2 & 3, 2009.
18. What you should know about Infection Control. Manitoba Para-Optometric Association Annual Conference, Winnipeg, Manitoba. June 2010.
19. Role of a Public Health Laboratory during Pandemic. CHICA Manitoba Infection Prevention and Control Conference, Winnipeg, MB. June 18, 2010.
20. An Update on Newborn Screening in Manitoba: Past, Present and Future. Pediatric Grand Rounds, Faculty of Medicine, University of Manitoba, Winnipeg, Manitoba, February 24, 2011.
21. Cadham Can Do: So What Does Cadham Provincial Laboratory Do? Manitoba Health Employee Growth Day, Winnipeg, MB. October 18, 2011.
22. Lyme Diagnostics: Challenges Controversies and Needs. International Lyme Disease Symposium. Winnipeg, Manitoba. March 19, 2012.
23. Newborn screening for cystic fibrosis: the child who tastes like salt. MCMLS Annual Congress, Winnipeg, Manitoba, October 2012.
24. Triage for travel-related diseases. WRHA Triage Update 2012, Winnipeg, MB, October 2012.
25. Microbiology testing and the eye: Proper specimen collection, microbiology laboratory use & etiquette. Manitoba Optometrist Association Annual Meeting. April 2013.
26. Diagnostic Virology: A primer on the art and science for IPC. WRHA Infection Prevention and Control Annual Education Day, Winnipeg, Manitoba, January 2016.
27. The Travelling Germophobe. Manitoba 15<sup>th</sup> Annual Travel Health Conference, Winnipeg, Manitoba, April 2018.



28. The COVID-19 Pandemic: Looking Back to Move Forward. Bug Day 2020, Winnipeg, Manitoba, October 20, 2020.

29. COVID-19, A Primer. Manitoba Chapter - Risk and Insurance Management Society Annual Meeting, 2020, Winnipeg Manitoba, October 27, 2020.

30. Leaving no child behind: Best practices for promoting equitable, ethical and community oriented expansion of newborn screening in Canada (presenter & panel member). 12<sup>th</sup> Canadian Science Policy Conference, virtual. November 17, 2020.

### **Department of Medical Microbiology & Infectious Diseases Research Seminars**

1. What's New at CPL? March 20, 2002
  2. Looking for Pearls; A dive into the data. March 9, 2016
-

---

## RESEARCH

---

### RESEARCH INTERESTS

#### Organized Research

My persisting research interests focus on collaborative team approaches to methodical inquiry in laboratory screening programs, diagnostic and public health virology, sexually-transmitted infections, and enteric and respiratory disease. All have the common denominator of leveraging the expertise and information held by public health labs to answer policy and applied science questions.

#### Responsive Inquiry

Public health laboratory practice is largely about building systems, responses and capacity. As emerging and re-emerging disease arises, and as outbreaks or wider scale epidemics occur, countless questions and opportunities to inquire emerge. As a public health practitioner, it is a best practice to sift through the available information as it is produced to generate better understandings of the epidemiology of and response to disease. These requirements cannot be part of a thoroughly planned research agenda, as the outbreaks and their behaviours are not amenable to such prediction.

#### Advancement and Support

As an academic in a leadership position situated in Government, it has become my role to steer and connect other public health, basic science and clinical researchers together, and to continue to advocate for the role and interest of Government in research and education. This advocacy extends into Government(s), academia and community, and includes finding resources and supporting facilities for conduct of research.

---

### GRANTS AND FINANCIAL AWARDS

1. From: BiochemPharma Amount: \$5,000 Date: 2001  
To: Manitoba Health (principle investigator for funding, co-investigator for study)  
For: Relationship between the size of naïve T cell repertoire and the development of immune response to influenza vaccine among the elderly
2. From: CRTI Amount: \$1,200,000 Date: 2002-2003  
To: Canadian Public Health Laboratory Forum (co-participant) & National Microbiology Lab  
For: National real-time network for identification of bioterrorist agents
3. From: CIHR Amount: \$655,833 Date: 2003-2006  
To: SAFER study group (co-investigator)  
For: Second and first trimester evaluation of risk of fetal trisomies
4. From: MMSF Amount: \$30,000 Date: 2005-2006  
To: P Van Caesele, M Dawood  
For: Development of monoclonal antibodies against vaccinia virus
5. From: HSC Research Foundation Amount: \$35,000 Date: 2006  
To: E Rubinstein, E Bow, P Hazelton, C Bernstein, H Singh, G Hammond, P Van Caesele  
For: Diarrheal syndromes in lymphoma patients

6. From: CIHR Amount: \$93,594 Date: 2007  
To: D Skowronski, L Roos, G DeSerres, G Hammond, B Law, Y Li, C Metge, P Van Caeseele  
For: Influenza vaccine effectiveness against serious outcomes
7. From: MICH Amount: \$40,000 Date: 2007  
To: E Rubinstein, J Wylie, P Van Caeseele, P Hazelton, S Fanella  
For: Acute infectious diarrhea in pediatric cases
8. From: NIH Amount: \$3,623,676 USD Date: 2008-2011
9. From: CIHR Amount: \$500,000 Date: 2008-2011  
To: M. Loeb and the Hutterite Influenza Team (includes P Van Caeseele)  
For: A randomized trial of influenza vaccination in Hutterite children
10. From: CIHR Amount: \$105,304 Date: 2007-2009  
To: C Beaudoin, J Wylie, M Dawood, T Larsen, M Sloane, P Van Caeseele, M Wood  
For: Epidemiology of STI and BBP in an inmate population
11. From: CIHR Amount: \$8,440 Date: 2007-2013  
To: J Wylie, A Jolly, C Beaudoin, M Dawood, P Van Caeseele  
For: Determining risk space in Canada's vulnerable populations
12. From: Gilead Sciences Canada Amount: \$ 80,000 Date: 2010-2011  
To: M Becker, K Kasper, C Pindera, N Bridger, P Van Caeseele, J Bullard, L Thompson  
For: Point of Care Testing in the Emergency Department
13. From: Children's Hosp. Foundation Amount: \$157,175 Date: 2011-2012  
To: H Pasterkamp, C Rockman-Greenberg, P Van Caeseele  
For: Newborn Screening for Cystic Fibrosis in Manitoba
14. From: PHAC Amount: \$94,000 Date: 2011-2012  
To: P Van Caeseele, S Mahmud  
For: Sentinel Network for Influenza Surveillance
15. From: MMSF Amount: \$15,000 Date: 2020  
To: K. Pylypiuk, P Van Caeseele, B. Chodirker, et al  
For: Amongst Pregnant Women in Manitoba, are false-positive Maternal Serum Screening results associated with adverse pregnancy outcomes? A 15-Year Cohort Study
16. From: CIHR Amount: \$825,367 Date: 2020-2021  
To: D. Money, et al (P Van Caeseele as key collaborator)  
For: CANCOVID-Preg: Canadian Surveillance of COVID-19 in Pregnancy: Epidemiology and Maternal and Fetal Outcomes.
- 

## PUBLICATIONS

### Books

1. **Van Caeseele P.** Infectious Diseases and Medical Microbiology Fellows' Handbook, 1<sup>st</sup> Ed., Privately Published, Winnipeg, 1999.

### Peer Reviewed Publications

1. Cooper CL, **Van Caesele P**, Canvin J, Nicolle LE. Chronic prosthetic device infection with *Francisella tularensis*. *Clinical Infectious Diseases* 1999; 29: 1589-91.
2. **Van Caesele P**, Alfa MJ, Harding GKM. Assessment of the FAN anaerobic bottle for culture of continuous ambulatory peritoneal dialysis fluid using the BacT/Alert System. *Diagnostic Microbiology and Infectious Disease* 2000; 36: 85-90.
3. **Van Caesele P**, Macaulay A, Orr P, Aoki F, Martin B. Rapid pharmacotherapeutic intervention for an influenza A outbreak in the Canadian Arctic: lessons from the Sanikiluaq experience. *International Journal of Circumpolar Health* 2001; 60: 640-648.
4. Alfa MJ, Robson D, McFarlane N, Davi M, Bernard K, **Van Caesele P**, Harding GKM. *Clostridium neonatale*: a new Clostridium species associated with an outbreak of necrotising enterocolitis in a neonatal intensive care unit. *Clinical Infectious Diseases* 2002;35:S101-S105.
5. Boyd D, **Van Caesele P**, Wylie J, Giercke S, Cabral T, Hizon R, Mulvey M. Molecular characterization of the vanE gene region from a vancomycin resistant *Enterococcus faecalis* isolated in Canada. *Antimicrobial Agents and Chemotherapy* 2002; 46: 1977-1979.
6. Bastien N, Ward D, **Van Caesele P**, Brandt K, Lee S, McNabb G, Li, Y. Human metapneumovirus infection in the Canadian population. *Journal of Clinical Microbiology* 2003, 41; 4642-4646.
7. Tsang RSW, Lau AKH, Sill ML, Halperin SA, **Van Caesele P**, Jamieson F, Martin IE. Polymorphisms of the fimbriae *fim3* gene of *Bordetella pertussis* strains isolated in Canada. *Journal of Clinical Microbiology*. 2004; 42: 5364-5367.
8. Nicolle LE, Gutkin A, Smart G, Dawood M, Drebot M, **Van Caesele P**, Giulivi A, Minuk GY. Serological studies of West Nile virus in a liver transplant population. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2004;15: 271-274.
9. Bastien N, Anderson K, Hart L, **Van Caesele P**, Brandt K, Milley D, Hatchette T, Weiss EC, Li Y. Human coronavirus NL63 infection in Canada. *Journal of Infectious Diseases*. 2005; 191: 503-506.
10. Tracz D, Boyd D, Bryden L, Hizon R, Giercke S, **Van Caesele P**, Mulvey M. Increase in |\*bital\*|ampC|\*eital\*| promoter strength due to mutations and deletion of the attenuator in a clinical isolate of cefoxitin resistant |\*bital\*| *Escherichia coli* |\*eital\*| as determined by RT-PCR. 2005. *Journal Antimicrobics and Chemotherapy*. 2005; 55: 768-72.
11. Mubareka S, Alfa M, Harding GK, Booton G, Ekins M, **Van Caesele P**. *Acanthamoeba* keratitis in a soft contact lens wearer molecularly linked to well water. *The Canadian Journal of Infectious Diseases and Medical Microbiology*. 2006; 17: 120-122.
12. Lagace-Wiens P, Koschik C, **Van Caesele P**. *Dientamoeba fragilis* – an emerging intestinal parasite. *Canadian Medical Association Journal*. 2006; 175: 468-469.
13. Sandhu A, Gross M, Wylie J, **Van Caesele P**, Plourde P. *Pseudomonas aeruginosa* necrotizing chondritis complicating high helical ear piercing case report. *Canadian Journal of Public Health*. 2007 (Jan-Feb); 98: 74-77.
14. Yusuf S, Piedmonte G, Auais A, Demmler G, Krishnan S, **Van Caesele P**, Singleton R, Broor S, Parveen S, Avendano L, Parra J, Chavez-Bueno S, Murgia De Sierra T, Simoes E, Shaha S, Welliver R. The relationship of meteorological conditions to the epidemic activity of respiratory syncytial virus. *Epidemiology and Infection*. 2007(October) ; 135(7): 1077-90.

15. Hatchette TF, Bastien N, Berry J, Booth TF, Chernesky M, Couillard M, Drews S, Ebsworth A, Fearon M, Fonseca K, Fox J, Gagnon JN, Guercio S, Horsman G, Jorowski C, Kuschak T, Li Y, Majury A, Petric M, Ratnam S, Smeija M, **Van Caesele P**, and the **Pandemic Influenza Laboratory Preparedness Network**. The limitations of point of care testing for pandemic influenza: what clinicians and public health professionals need to know. *Canadian Journal of Public Health*. 2009 (May-June); 100(3): 204-7.
16. Loeb M, Russell ML, Moss L, Fonseca K, Fox J, Earn DJ, Aoki F, Horsman G, **Van Caesele P**, Chokani K, Vooght M, Babiuk L, Webby R, Walter SD. Effect of influenza vaccination of children on infection rates in Hutterite communities: a randomized trial. *Journal of the American Medical Association (JAMA)*. 2010 (March); 303(10):943-50.
17. MacRae AR, Chodirker BN, Davies GA, Palomaki GE, Knight GJ, Minett J, Kavsak PA, Toi A, Chitayat D, **Van Caesele PG**. Second and first trimester estimation of risk for Down syndrome; implementation and performance in the SAFER study. *Prenatal Diagnosis*. 2010 (May); 30 (5): 459-66.
18. Martin IE, Lefebvre B, Sawatzky P, Hoang L, **Van Caesele P**, Horsman G, Ang L, Bourgault AM, Ng LK. Identification of prolyliminopeptidase-negative *Neisseria gonorrhoeae* strains in Canada. *Sexually Transmitted Diseases*. 2010(July); 38(1): 40-42.
19. Mahmud S, Becker M, Keynan Y, Elliott L, Thompson L, Fowke K, Avery L, **Van Caesele P**, Harlos S, Blanchard J, Dawood M. Estimated cumulative incidence of pandemic (H1N1) influenza among pregnant women during the first wave of the 2009 pandemic. *Canadian Medical Association Journal*. 2010 (Oct 5);182(14):1522-4.
20. Tyrell GGJ, Lovgren M, St Jean T, Hoang L, Patrick DM, Horsman G, **Van Caesele P**, Sieswerda LE, McGeer A, Laurence RA, Bourgault AM, Low DE. Epidemic of Group A *Streptococcus M/emmm59* causing invasive disease in Canada. *Clinical Infectious Diseases* 2010 Dec 1; 51 (11): 1290-7.
21. Fanella ST, Pinto MA, Bridger NA, Bullard JM, Coombs JM, Crockett ME, Olekson KL, Poliquin PG, **Van Caesele PG**, Embree JE. Pandemic (H1N1) 2009 influenza in hospitalized children in Manitoba: nosocomial transmission and lessons learned from the first wave. *Infection Control and Hospital Epidemiology*. 2011 May; 32(5); 435-43.
22. Hottes TS, Skowronski DM, Hiebert B, Janjua NZ, Roos LL, **Van Caesele P**, Law BJ, DeSerres G. Influenza vaccine effectiveness in the elderly based on administrative databases: change in immunization habit as a marker for bias. *PLoS One*. 2011; 6(7):e22618.Epub 2011 Jul 26.
23. Mahmud S, Hammond G, Elliott L, Hilderman T, Kurbis C, Caetano P, **Van Caesele P**, Kettner J, Dawood M. Effectiveness of the pandemic H1N1 influenza vaccine against laboratory-confirmed H1N1 infections: population-based case-control study. *Vaccine*. 2011 Oct 19; 29(45): 7075-81. Epub 2011 Aug 30.
24. Walkty A, **Van Caesele P**, Hilderman T, Buchan S, Weiss E, Sloane M, Fatoye B. Mumps in prison: description of an outbreak in Manitoba, Canada. *Canadian Journal of Public Health*. 2011 Sep-Oct; 102(5): 341-4.
25. Alharbi S, **Van Caesele P**, Consunji-Araneta R, Zoubeydi T, Fanella S, Souid AK, Alsuwaidi AR. Epidemiology of severe pediatric adenovirus lower respiratory tract infections in Manitoba Canada 1991-2005. *BMC Infectious Diseases*. 2012 Mar 13;12:55.
26. Tyrrell G, Lovgren M, Ibrahim Q, Garg S, Chui L, Boone T, Mangan C, Patrick D, Hoang L, Horsman G, **Van Caesele P**, Marrie T. Epidemic of invasive pneumococcal disease, Western Canada, 2005-2009. *Emerging Infectious Diseases*. 2012 May; 18(5): 733-40.

27. Mahmud S, **Van Caesele P**, Hammond G, Kurbis C, Hilderman T, Elliott L. No association between 2008-09 influenza vaccine and Influenza A(H1N1) pdm09 virus infection, Manitoba, Canada, 2009. *Emerging Infectious Diseases*. 2012 May; 18(5): 801-10.
28. Kruk T, Ratnam R, Preiksatis J, Lau A, Hachette T, Horsman G, **Van Caesele P**, Timmons B, Tipples G. Results of a continuous monitoring of the performance of Rubella Virus IgG and Hepatitis B Virus surface antibody assays using trueness controls in a multicentre trial. *Clinical Vaccine and Immunology*. 2012 October; 19 (10): 1624-32.
29. Kim TH, Russell M, Fonseca K, Aoki F, Horsman G, **Van Caesele P**, Chokani K, Voight M, Babiuk L, Moss L, Webby R, Earn D, Singh P, Howse C, Loeb M. Characteristics of respiratory viral infections during influenza season in Canadian Hutterite communities. *Influenza and Other Respiratory Viruses*. 2012 (Oct 19); epub.
30. Thompson LH, Mahmud S, Keynan Y, Blanchard J, Slater J, Dawood M, Fowke K, **Van Caesele P**, Becker M. Serological survey of the novel influenza A H1N1 in inner city Winnipeg Manitoba, 2009. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2012 (Summer); 23(2); 65-70.
31. Skowronski DM, Janjua N, De Serres G, Dickinson J, Winter A-L, Mahmud S, Sabaiduc S, Gubbay J, Charest H, Petric M, Fonseca K, **Van Caesele P**, Kwindt T, Krajden M, Eshaghi A, Li Y. Interim estimates of influenza vaccine effectiveness in 2012/13 from Canada's Sentinel Surveillance System Network, January 2013. *Eurosurveillance*. 2013 (January 31); 18 (5): pii=20394.
32. Wylie J, **Van Caesele P**, Gilmour M, Sitter D, Guttek C, Giercke S. Evaluation of a new chromogenic agar medium for detection of Shiga Toxin-producing *Escherichia coli* (STEC) and relative prevalence of O157 and non-O157 STEC, Manitoba, Canada. *Journal of Clinical Microbiology*. 2013 (Feb); 51 (2); 466-471.
33. Becker M, Thompson LH, Pindera C, Bridger N, Lopez C, Keynan Y, Bullard J, **Van Caesele P**, Kasper K. Feasibility and success of HIV point-of-care testing in an emergency department in an urban Canadian setting. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2013 (Spring); 24(1); 27-31.
34. DeRiviere L, Stopera S, **Van Caesele P**, Lotocki R. Comparative models of cervical cancer screening in Manitoba. *Health Care Quarterly*. 2013; 16 (1): 77-85.
35. Clark CG, Kruczkiewicz P, Guan C, McCorrister SJ, Chong P, Wylie J, **Van Caesele P**, Tabor HA, Snarr P, Gilmour M, Taboada EN, Westmacott G. Evaluation of MALDI-TOF mass spectroscopy methods for determination of *Escherichia coli* pathotypes. *Journal of Microbiological Methods*. 2013 Sep; 94(3): 180-91. Doi: 10.106/j.mimet.2013.06.020. Epub 2013 Jun 28.
36. Martin I, Sawatzky P, Liu G, Allen V, Lefebvre B, Hoang L, Lovgren M, Haldane D, **Van Caesele P**, Horsman G, Garceau R, Ratnam S, Wong T, Gilmour M. Antimicrobial susceptibilities and distribution of sequence types of *Neisseria gonorrhoeae* isolates in Canada: 2010. *Canadian Journal of Medical Microbiology*. 2013 Oct; 59(10): 671-8. Doi: 10.1139/cjm-2013-0367. Epub 2013 Aug 27.
37. Jilkina O, Thompson JR, Kwan L, **Van Caesele P**, Rockman-Greenberg C, Schroeder M. Retrospective TREC testing of newborns with Severe Combined Immunodeficiency and other primary immunodeficiency diseases. *Molecular Genetics and Metabolism Reports*. 2014; 1: 324-333.
38. Skowronski D, Janjua NZ, Sabaiduc S, De Serres G, Winter AL, Gubbay JB, Dickinson J, Fonseca K, Charest H, Bastien N, Li Y, Kwindt T, Mahmud S, **Van Caesele P**, Krajden M, Petric M. Influenza A/Subtype and B/Lineage Effectiveness Estimates for the 2011-2012 Trivalent Vaccine:

Cross-Season and Cross-Lineage Protection with unchanged vaccine. *Journal of Infectious Diseases*. 2014 Apr 1.

39. Skowronski D, Chambers C, Sabaiduc S, De Serres G, Dickinson J, Winter A, Fonseca K, Gubbay J, Charest H, Petric M, Krajden M, Mahmud S, **Van Caesele P**, Kwindt T, Eshaghi A, Bastien N, Li Y. Interim estimates of 2013/14 vaccine effectiveness against influenza A(H1N1)pdm09 from Canada's surveillance network, January 2014. *Euro Surveillance*. 2014 Feb 6; 19(5). Pii: 20690. Erratum in : *Euro Surveillance*. 2014; 19(6): 20698.

40. Mataseje LF, Boyd DA, Delpont J, Honag L, Imperial M, Lefebvre B, Kuhn M, **Van Caesele P**, Willey BM, Mulvey MR. *Serratia marcescens* harbouring SME-type class A carbapenemases in Canada and the presence of blaSME on a novel island, SmarGII-1. *Journal of Antimicrobials and Chemotherapy*. 2014 Jul; 69(7): 1825-9.

41. Skowronski D, Janjua N, De Serres G, Sabaiduc S, Eshaghi A, Dickinson J, Fonseca K, Winter A, Gubbay J, Krajden M, Petric M, Charest H, Bastien N, Kwindt T, Mahmud S, **Van Caesele P**, Li Y. Low 2012-13 influenza vaccine effectiveness associated with mutation in the egg-adapted H3N2 vaccine strain not antigenic drift in circulating viruses. *PLoS One*. 2014 Mar 25; 9(3): e92153.

42. Schillberg E, Isaac M, Deng X, Peirano G, Wylie J, **Van Caesele P**, Pillai D, Sinnock H, Mahmud S. Outbreak of invasive *Streptococcus pneumoniae* serotype 12F among a marginalized inner-city population in Winnipeg, Canada, 2009-2011. *Clinical Infectious Diseases*. 2014 Sep 1; 59(5): 651-7.

43. Bullard J, Ahsanuddin A, Perry A, Lindsay R, Iranpour M, Dibernardo A, **Van Caesele P**. The first case of locally acquired tick-borne *Babesia microti* infection in Canada. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2014 Nov-Dec; 25(6): 87-89.

44. Hinds A, Bozat-Emre S, **Van Caesele P**, Mahmud S. Comparison of the epidemiology of laboratory-confirmed influenza A and influenza B cases in Manitoba, Canada. *BMC Public Health*. 2015 Jan 30; 15(1): 35.

45. Skowronski DM, Chambers C, Sabaiduc S, DeSerres G, Winter AL, Dickinson JA, Gubbay J, Fonseca K, Charest H, Krajden M, Petric M, Mahmud S, **Van Caesele P**, Bastien N, Eshaghi A, Li Y. Integrated sentinel surveillance linking genetic, antigenic and epidemiologic monitoring of influenza vaccine-virus relatedness and effectiveness during the 2013-14 influenza season. *Journal of Infectious Diseases*. 2015 Sep 1; 212(5): 726-39.

46. Wylie JL, **Van Caesele P**. Interpretation of laboratory detection trends for *Chlamydia trachomatis* and *Neisseria gonorrhoeae*: Manitoba, Canada, 2000-2012. *Sexually Transmitted Infections*. 2016 Feb; 92(1): 55-57.

47. Teatero S, Athey TB, **Van Caesele P**, Horsman G, Alexander DC, Melano RG, Li A, Flores A, Shelburne S, McGeer A, Demczuk W, Martin I, Fittipaldi N. Emergence of serotype IV Group B *Streptococcus* adult invasive disease in Manitoba and Saskatchewan, Canada, is driven by clonal sequence type 459 strains. *Journal of Clinical Microbiology*. 2015 Sep ; 53(9): 2919-26.

48. Sawatzky P, Liu G, Dillon J, Allen V, Lefebvre B, Hoang L, Tyrrell G, **Van Caesele P**, Levett P, Martin I. Quality assurance for antimicrobial susceptibility testing of *Neisseria gonorrhoeae* in Canada, 2003 to 2012. *Journal of Clinical Microbiology*. 2015 Nov; 53(11): 3649-9.

49. Mahmud S, Bozat-Emre S, Hammond G, Elliott L, **Van Caesele P**. Did the H1N1 vaccine reduce the risk of admission with influenza and pneumonia during the pandemic? *PLoS One*. 2015 Nov 23; 10(11): e0142754.

50. Poliquin V, Wylie J, Cole R, Yudin M, **Van Caesele P**. Preparedness for implementing change in neonatal ocular prophylaxis policies. *Journal of Obstetrics and Gynaecology of Canada*. 2016 Jan; 38(1): 7-8.
51. Ross C, Shaw S, Marshall S, Stephen S, Bailey K, Cole R, Wylie J, Bullard J, **Van Caesele P**, Reimer J, Plourde P. Impact of social media campaign targeting men who have sex with men during an outbreak of syphilis in Winnipeg, Canada. *Canada Communicable Disease Report*. 2016 Feb 4; 42(2): 45-49.
52. Wang B, Russell M, Moss L, Fonseca K, Earn D, Aoki F, Horsman G, **Van Caesele P**, Chokani K, Vooght M, Babiuk L, Webby R, Walter S, Loeb M. Effect of influenza vaccination in infection rate in Hutterite communities: Follow-up study of a randomized trial. *PLoS One*. 2016 Dec 15; 11(12): e0167281.
53. Shaw S, Ireland L, McClarty L, Loeppky C, Yu N, Wylie J, Bullard J, **Van Caesele P**, Keynan Y, Kasper K, Blanchard J, Becker M. Prior history of testing for syphilis, hepatitis B and hepatitis C among a population-based cohort of HIV-positive individuals and their HIV-negative controls. *AIDS Care*. 2017 Jan; 29(1): 67-72.
54. Wang B, Russell M, Fonseca K, Earn D, Horsman G, **Van Caesele P**, Chokani K, Vooght M, Babiuk L, Walter S, Loeb M. Predictors of influenza A molecular viral shedding in Hutterite communities. *Influenza and Other Respiratory Viruses*. 2017 Feb 16; doi:10.1111/irv.12448.
55. Anid G, Isaac M, Penner C, **Van Caesele P**, Tsang R, Kadkhoda K. A non-healing syphlid: Another face of the great imitator. *ID Cases*. 2017 Feb 11; 8: 14-16.
56. Gu, K, **Van Caesele P**, Dust K, Ho J. Atypical pneumonia due to human bocavirus in an immunocompromised patient. *Canadian Medical Association Journal*. 2017 May 15; 189 (19): E697-E699.
57. Demczuk W, Martin I, Hoang L, **Van Caesele P**, Lefebvre B, Horsman G, Haldane D, Gubbay J, Ratnam S, German G, Daley Bernier J, Strudwick L, McGeer A, Zhanel G, Van Domselaar G, Graham M, Mulvey M. Phylogenetic analysis of emergent *Streptococcus pneumoniae* serotype 22F causing invasive pneumococcal disease using whole genome sequencing. *PLoS One*. 2017 May 22; 12 (5): e0178040.
58. Mataseje L, Boyd D, Fuller J, Haldane D, Hoang L, Lefebvre B, Melano R, Poutanen S, **Van Caesele P**, Mulvey M. Characterization of OXA-48-like carbapenemase producers in Canada, 2011-14. *Journal of Antimicrobials and Chemotherapy*. 2017 December. Doi:10.1093/jac/dkx462.
59. Tsang R, Ahmad T, Tyler S, Lefebvre B, Deeks S, Gilca R, Hoang L, Tyrell G, **Van Caesele P**, Van Domselaar G, Jamieson F. Whole genome typing of the recently emerged Canadian serogroup W *Neisseria meningitidis* sequence type 11 clonal complex isolates associated with invasive meningococcal disease. *International Journal of Infectious Diseases*. 2018 February 4; 69: 55-62.
60. Demczuk W, Martin I, Desai S, Griffith A Caron-Poulin L, Lefebvre B, McGeer A, Tyrrell G, Zhanel G, Gubbay J, Hoang L, Levett P, **Van Caesele P**, Raafat Gad R, Haldane D, Zahariadis G, German G, Daley Bernier J, Strudwick L, Mulvey M. Serotype distribution of invasive *Streptococcus pneumoniae* in adults 65 years of age and over after the introduction of childhood 13-valent pneumococcal conjugate vaccination programs in Canada, 2010-2016. *Vaccine*. 2018 July 25; 36(31): 4701-4707.
61. Golden A, Adam H, Karlowsky J, Baxter M, Nichol K, martin I, Demczuk W, **Van Caesele P**, Gubbay J, Lefebvre B, Levett P, Zahariadis G, Haldane D, Gad R, German G, Gilmour M, Mulvey M, Hoban D, Zhanel G, Canadian Antimicrobial resistance Alliance (CARA). Molecular characterization of predominant *Streptococcus pneumoniae* serotypes causing invasive infection sin



- Canada: the SAVE study, 2011-2015. *Journal of Antimicrobics and Chemotherapy*. 2018 July 1; 73(Supp 7): 20-31.
62. Singh D, Jiang D, **Van Caesele P**, Loeppky C. The effect of timing of oseltamivir chemoprophylaxis in controlling influenza A H3N2 outbreaks in long-term care facilities in Manitoba, Canada, 2014-2015: a retrospective cohort study. *Infection Control and Hospital Epidemiology*. 2018 August; 39(8): 955-960.
63. El-Matary W, Stafanovici C, **Van Caesele P**, Deora V, McCurdy J. Detection of cytomegalovirus in colonic mucosa of children with inflammatory bowel disease. *Journal of Pediatric Gastroenterology and Nutrition*. 2018 August; 67(2): 221-224.
64. Rubin T, Rockman-Greenberg C, **Van Caesele P**, Cuvelier G, Kwan L, Schroeder M. Newborn screening for IKBKB deficiency in Manitoba, using genetic mutation analysis. *Journal of Clinical Immunology*. 2018 October; 38(7): 742-744.
65. Thompson LH, Nugent Z, Wylie J, Loeppky C, **Van Caesele P**, Blanchard J, Yu N. Laboratory detection of first and repeat chlamydia cases influenced by testing patterns: a population-based study. *Microbial Insights*. 2019 February 27; 12: 11786361198297975.
66. Martin I, Sawatzky P, Allen V, Lefebvre B, Hoang L, Naidu P, Minion J, **Van Caesele P**, Haldane D, Gad RR, Zahariadis G, Corriveau A, German G, Tomas K, Mulvey M. Multi-drug resistant *Neisseria gonorrhoeae* in Canada, 2012-2016. *Canada Communicable Diseases Report*. 2019 February 7; 45 (2-3): 45-53.
67. Tsang R, Hoang L, Minion J, **Van Caesele P**, Kus J, Lefebvre B, Haldane D, Garceau R, German G, Zahariadis G, Hanley B. Increase in ST-11 serogroup W *Neisseria meningitidis* invasive meningococcal disease in Canada, 2016-2018. *Canada Communicable Disease Report*. 2019 Jun 6; 45(6): 164-169.
68. Tsang R, Shuel M, Ahmad T, Hayden K, Knox N, Van Domselaar G, Hoang L, Tyrrell G, Minion J, **Van Caesele P**, Kus J, Ulanova M, Lefebvre B, Haldane D, Garceau R, German G, Zahariadis G, Hanley B, Kondola K, Patterson M. Whole genome sequencing to study the phylogenetic structure of serotype a *Haemophilus influenzae* recovered from patients in Canada. *Canadian Journal of Microbiology*. 2020 Feb; 66(2): 742-744.
69. Bullard J, Dust K, Strong J, Alexander D, Garnett L, Boodman C, Bello A, Hedley A, Schiffman Z, Doan K, Bastien N, Li Y, **Van Caesele P**, Poliquin G. Predicting infectious SARS-CoV-2 from diagnostic samples. *Clinical Infectious Diseases*. 2020 May 22; ciaa638.
70. **Van Caesele P, Canadian Public Health laboratory Network**, Bailey D, Canadian Society for Clinical Chemists, Forgie S, Association of Medical Microbiology and Infectious Diseases Canada, Dingle TC, Canadian Association for Clinical Microbiology and Infectious Diseases, Krajden M, **COVID-19 Immunity Task Force**. *Canadian Medical Association Journal*. 2020 Aug 24; 192(34): E973-979.
71. Dust K, Hedley A, Nichol K, Stein D, Adam H, Karlowsky J, Bullard J, **Van Caesele P**, Alexander D. Comparison of commercial assays and laboratory developed tests for detection of SARS-CoV-2. *Journal of Virological Methods*. 2020 Nov 28; 285: 113970.

### Publications as Part of Networks

1. Mulvey MR, Boyd D, Cloeckart A, Ahmed R, Ng L, and the **Provincial Public Health Laboratories**. Emergence of multidrug-resistant *Salmonella* Paratyphi B dT+, Canada. *Emerging Infectious Diseases*. 2004; 10: 1307-10.

2. Woodward D, Clark C, Caldeira R, Ahmed R, Soule G, Bryden L, Tabor H, Melito P, Foster R, Walsh J, Ng LK, Malclom G, Strockbine N, Rodgers F, and the **Canadian Public Health Laboratory Network**. Identification and characterization of *Shigella boydii* 20 serovar nov., a new and emerging *Shigella* serotype. *Journal of Medical Microbiology*. 2005; 54: 741-748.
3. Pagotto F, Ng LK, Clark C, Farber J, and the **Canadian Public Health Laboratory Network**. Canadian listeriosis reference service. *Foodborne Pathogens and Disease*. 2006; 3: 132-137.
4. **Canadian Public Health Laboratory Network**. The laboratory diagnosis of Lyme borreliosis: guidelines from the Canadian Public Health Laboratory Network. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2007; 18:145-148.
5. **Pandemic Influenza Laboratory Preparedness Network**. Annex C: Pandemic Influenza Laboratory Guidelines. In Public Health Agency of Canada. The Canadian Pandemic Influenza Plan for the Health Sector. 2006 December. ISBN 0-662-44409-4
6. Mataseje LF, Xiao J, Kost S, Ng LK, Doré K, Mulvey MR; **Canadian Public Health Laboratory Network**. Characterization of Canadian cefoxitin-resistant non-typhoidal Salmonella isolates, 2005-06. *Journal of Antimicrobics and Chemotherapy*. 2009; 64(4): 723-30.
7. Clark CG, Farber J, Pagotto F, Ciampa N, Doré K, Nadon C, Bernard K, Ng LK; **Canadian Public Health Laboratory Network**. Surveillance for *Listeria monocytogenes* and listeriosis, 1995-2004. *Epidemiology and Infection*. 2010; 138(4): 559-72.
8. Demczuk WH, Finley R, Nadon C, Spencer A, Gilmour M, Ng LK, PulseNet Canada, CIPARS, **Canadian Public Health Laboratory Network**. Characterization of antimicrobial resistance, molecular and phage types of *Salmonella enterica* serovar Typhi isolations. *Epidemiology and Infection*. 2010 October; 138 (10): 1414-26.
9. Graham M, Liang B, Van Domeselaar G, Bastien N, Beaudoin C, Tyler S, Kaplen B, Landry E, **National Influenza A/H1N1pdm Genomics Study Team (NIGST)**, Li, Y. Nationwide molecular surveillance of pandemic H1N1 influenza A virus genomes: Canada 2009. *PLoS One*. 2011 Jan 7; 6(1): e16087.
10. Martin I, Jayaraman G, Wong T, Liu G, Gilmour M, and the **Canadian Public Health Laboratory Network**. Trends in antimicrobial resistance in *Neisseria gonorrhoeae* isolated in Canada: 2000-2009. *Sexually Transmitted Disease*. 2011 Oct; 38(10):892-8.
11. Nesbitt A, Ravel A, Murray R, McCormick R, Savelli C, Finley R, Parmley J, Agunos A, Majowicz SE, Gilmour M; the Canadian Integrated Program for Antimicrobial Resistance Surveillance Public Health Partnership; the **Canadian Public Health Laboratory Network**. *Epidemiology and Infection*. 2011 Dec 14:1-16.
12. Demczuk W, Martin I, Griffith A, Lefebvre B, McGeer A, Shane A, Zhanel GG, Tyrell GJ, Gilmour M, **Canadian Public Health Laboratory Network**. Serotype distribution of invasive *Streptococcus pneumoniae* in Canada during the introduction of the 13-valent pneumococcal conjugate vaccine, 2010. *Canadian Journal of Microbiology*. 2012 Aug; 58(8): 1009-17.
13. Knabel SJ, Reimer A, Verghese B, Lok M, Ziegler J, Farber J, Pagotto F, Graham M, Nadon C, **Canadian Public Health Laboratory Network**, Gilmour M. Sequence typing confirms that a predominant *Listeria monocytogenes* clone caused human listeriosis cases and outbreaks in Canada from 1988 to 2010. *Journal of Clinical Microbiology*. 2012 May; 50(5): 1748-50.
14. Demczuk W, Martin I, Giffith A, Lefebvre B, McGeer A, Lovgren M, Tyrell G, Sherrard L, Adam H, Gilmour M, Zhanel GG, Toronto Bacterial Diseases Network, **Canadian Public Health**

**Laboratory Network.** Serotype distribution of invasive *Streptococcus pneumoniae* in Canada during the introduction of the 13-valent pneumococcal conjugate vaccine, 2010. *Canadian Journal of Microbiology*. 2013 Dec; 59(12): 778-88.

15. Chernesky M, Jang D, Martin I, Hoang L, Naidu P, Levett P, Wylie J, Rebbapragada A, Ratnam S, Smieja M, Weinbaum B, Getman D, **The Canadian MG Study Group.** *Mycoplasma genitalium* antibiotic resistance-mediating mutations in Canadian women with or without *Chlamydia trachomatis* infection. *Sexually Transmitted Diseases*. 2017 July; 44(7): 433-435.

## Communications & Reports

1. **Van Caesele P,** Giercke S, Wylie J, Amin S, Ofner-Agostini M, Boyd D, Mulvey M. Identification of the first *Enterococcus faecalis* harbouring *vanE* in Canada. *Canada Communicable Disease Report* 2001 June 15; 27: 101-104.
2. **As a participant of Health Canada.** Proceedings of a meeting of the expert advisory group on rubella in Canada. *Canada Communicable Disease Report*. 2002; 28S4: 1-24.
3. Macey JF, Roberts A, Lior L, Tam TW, **Van Caesele P.** Outbreak of community-acquired pneumonia in Nunavut, October and November, 2000. *Canada Communicable Disease Report*. 2002 Aug 15; 28: 131-138.
4. Beaudoin C, Sloane M, Wood M, Larsen T, Wylie J, Dawood M, **Van Caesele P,** Kinasevych B, Hodge K. The epidemiology of sexually transmitted infections and blood borne pathogens in a random sample of inmates in Manitoba Correctional Centres. *Health Canada Statistical Report*. 2009, 15 pp.
5. **As a participant of Public Health Agency of Canada.** Case definitions for communicable diseases under national surveillance. *Canada Communicable Disease Report*. 2009, November; 35S2: 1-128.
6. Patel SN, Gubbay JB, **Pandemic Influenza Laboratory Preparedness Network (PILPN).** Impact of pandemic influenza A (H1N1) on laboratory services. *Pandemic H1N1 Evidence Reviews*. National Collaborating Centre for Infectious Diseases May 2012. <http://www.nccid.ca/evidence-reviews> .
7. Antonation K, Patel S, Trumble Waddell J, Poliquin G, Alexander D, Hoang L, Farrell D, Garceau R, Haldane D, Jamieson F, Marchand R, MacKeen A, Marcino D, Theriault S, Tyrrell G, Zahariadis G, Zelyas N, **Canadian Public Health Laboratory Network.** Interim laboratory testing guidelines for the detection of non-tuberculous *Mycobacterium* (NTM) infections in post-operative patients exposed to heater-cooler units. *Canada Communicable Disease Report*. 2017 (Jan 5); 43(1): 25-28.
8. **Canadian Public Health Laboratory Network,** Device Testing Working Group. CPHLN device testing recommendations regarding non-tuberculous Mycobacteria (NTM) contamination in heater-cooler units. *Canada Communicable Disease Report*. 2017 (March 2); 43(3/4): 83.
9. Tsang R, Hoang L, Tyrrell G, Horsman G, **Van Caesele P,** Jamieson F, Lefebvre B, Haldane D, Gad R, German G, Zahariadis G. Increase in *Neisseria meningitidis* serogroup W invasive disease in Canada: 2009-2016. *Canada Communicable Disease Report*. 2017 (July 6); 43(7/8): 144-149.
10. Berenger B, Chui L, Reimer A, Allen V, Alexander D, Domingo M, Hoang L, Levett P, MacKeen A, Marcino D, Sheitoyan-Peasant C, Zahariadis G, **Canadian Public Health Laboratory Network.** Canadian Public Health Laboratory Network position statement: non-culture based diagnostics for gastroenteritis and implications for public health investigations. *Canada Communicable Disease Report*. 2017 December 7; 43(12): 279-281.

**11. Respiratory Virus Infections Working Group.** Canadian Public Health Laboratory Network Best Practices for COVID-19. *Canada Communicable Disease Report*. 2020 May 7; 46(5): 112-118.

**12. Respiratory Virus Infections Working Group.** Canadian Public Health Laboratory Network Statement on Point-of-Care Serology Testing in COVID-19. *Canada Communicable Disease Report*. . 2020 May 7; 46(5): 119-120..

**13. Griffiths E, Tanner J, Knox N, Hsiao W, Van Domselaar, Canadian Public Health Laboratory Network, CanCoGen.** CanCOGen Interim Recommendations for Naming, Identifying and Reporting SARS-CoV-2 Variants of Concern. 2021 January 15. Accessed online at: <https://nccid.ca/wp-content/uploads/sites/2/2021/02/CanCOGeN-Interim-Recommendations-for-Naming-Identifying-and-Reporting-SARS-CoV-2-Variants.pdf>

## Published Abstracts, Presentations & Posters

\* invited presentation

1. **Van Caesele P**, Alfa MJ, Harding GKM. Assessment of the FAN Anaerobic Bottle for Culture of Continuous Ambulatory Peritoneal Dialysis Fluid Using the BacT/Alert System. *Abstracts of the 97<sup>th</sup> American Society for Microbiology General Meeting*.1997:136.
2. **Van Caesele P**, Hoban S, Alfa MJ, Harding GKM. Evaluation of Blood Culture Skin Preparation Methods: Impact on Detection of Skin Contaminants. *Abstracts of the 98<sup>th</sup> American Society for Microbiology General Meeting*.1998: 204.
3. **Van Caesele P**, Fiola Y, Alfa M, Harding GKM. Broth culture method for sterile body fluids: Comparison of BacT/Alert Peds and FAN bottles supplemented with Fildes and/or serum. *The Canadian Journal of Infectious Diseases*. 1999: 10, Supplement D; 55D.
4. **Van Caesele P**, Alfa M, Harding GKM. Detection of ESBL producing *Enterobacteriaceae* using ceftazidime/clavulanic acid E-test on isolates flagged by Microscan. *The Canadian Journal of Infectious Diseases*. 1999: 10, Supplement D; 44D.
5. **Van Caesele P**, Alfa M, Harding GKM. Evaluation of the Microscan ESBL flags for *Enterobacteriaceae* using the Ceftazidime/Clavulanic acid confirmatory E-test. *Abstracts of the 100<sup>th</sup> American Society for Microbiology General Meeting*. 2000: 192.
6. Alfa MJ, Swan B, Van Derkerkhove B, Pang P, **Van Caesele P**, Harding GKM. Comparison of Triage C. difficile EIA for tox A/B and cytotoxin assays for the diagnosis of C. difficile-associated diarrhea. *Abstracts of the 100<sup>th</sup> American Society for Microbiology General Meeting*. 2000: 166 (H2).
- \*7. **Van Caesele P**, Martin BD, Orr P, et al. Influenza A epidemic in a remote island Canadian Inuit Community; An epidemiologic review. *Abstracts of the 11<sup>th</sup> International Congress on Circumpolar Health*. 2000: number 301.
8. Martin BD, **Van Caesele P**, Macaulay A, et al. Influenza A epidemic in a remote island Canadian Inuit community: An intervention strategy. *Abstracts of the 11<sup>th</sup> International Congress on Circumpolar Health*. 2000: number 300.
9. Bernard KA, Shuttleworth L, Munro C, Alfa M, **Van Caesele P**, Harding G. Novel *Clostridium* species derived from neonates with necrotising enterocolitis. In *Abstracts of the 1<sup>st</sup> International Congress of the Confederation of Anaerobic Societies* 2000, in print.
10. Milley D, Klisko B, **Van Caesele P**. Comparison of Becton Dickinson's Directigen Flu A+B kit with viral culture for the detection of influenza B. In *Abstracts of the Canadian Association for Clinical Microbiology and Infectious Diseases*, 2001: 3.
11. Boyd D, **Van Caesele P**, Wylie J, Giercke S, Cabral T, Hizon R, Mulvey M. Molecular characterization of the vanE gene region from a vancomycin resistant *Enterococcus faecalis* isolated in Canada. In *Abstracts of the Canadian Association for Clinical Microbiology and Infectious Diseases*, 2001: 28.
12. Melito PL, Harvie S, Bryden L, Giercke S, Woodward DL, **Van Caesele P**, Clark CG. A phenotypic and genotypic study of *Helicobacter pylori* antimicrobial susceptibility. In *Abstracts of the Canadian Association for Clinical Microbiology and Infectious Diseases*, 2002: 45.
13. Li Y, Bastien N, Ward D, Tam T, **Van Caesele P**, Brandt K, Le S, Chan E, McNabb G. Molecular epidemiology of human metapneumovirus in Canada. In press
14. Mubareka S, Alfa M, Booton G, Ekins E, **Van Caesele P**. Acanthamoeba keratitis in a soft contact lens wearer. *Abstracts of the Canadian Infectious Diseases Society*, 2003, in press.
15. Sandhu A, Gross M, Wylie J, **Van Caesele P**, Plourde P. *Pseudomonas aeruginosa* necrotizing chondritis complicating helical ear piercing: Clinical and Public Health perspectives of a case report. Presented at *American Academy of Pediatrics*, 2003. Submitted to *AJPH*, 2003.

16. Tipples GA, **Van Caesele P**, Loparev V, Dawood M, Mar W, Kruk T, Gray M, Wells B, Carriere P, Cistarelli B, McCusker P. A laboratory confirmed reinfection of varicella: a case study. Presented at CACMID, Regina, SK, 2004.
17. Martin I, Sill M, Halperin S, **Van Caesele P**, Jamieson F, Tsang R. Laboratory surveillance of pertussis in Canada: genetic and antigenic analysis of clinical *B. pertussis* isolates. Presented at CACMID, Regina SK, 2004.
18. McCracken M, Mulvey M, Giercke S, **Van Caesele P**, Wylie J. Molecular Characterization of Extended-Spectrum Beta-Lactamase Producing *Escherichia coli* and *Klebsiella* spp. in a Long Term Care Facility in Canada. Presented at CACMID, Regina SK, 2004, poster LB9.
19. Yusuf S, Piedimonte G, Auais A, Demmler G, Krishnan S, **Van Caesele P**, Singleton R, Broor S, Parveen S, Avendano L, Parra J, Chavez-Bueno S, Simoes E, Welliver R Sr. An analysis of the effects of meteorological conditions on the epidemic activity of respiratory syncytial virus. Presented at American Pediatric Society/Society for Pediatric Research, Washington, DC, 2005: number 500.
20. Chen R, **Van Caesele P**, Dawood M. Production of murine monoclonal antibodies (MAbs) with different neutralizing abilities for intracellular mature (IMV) and extracellular enveloped (EEV) vaccinia virus particles. Presented at International Centre for Infectious Diseases Conference, Winnipeg, MB, 2005.
21. Mehta P, Cleven R, Pinto V, Wylie J, **Van Caesele P**, Rubinstein E, Hazelton P. The spectrum and frequency of infectious pathogens associated with acute infectious diarrhea in a remote First Nations community. Presented at American Society for Virology, 2007.
22. Dawood M, Roberecki S, Schellenberg F, Ahmed S, Chochinov D, Smart G, **Van Caesele P**. Trends in West Nile Virus (WNV) infection in Manitoba, Canada. A public health laboratory study. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2007;18(1): 77-78.
23. Tyrell G, Lovgre M, Kellner J, Hoang L, Patrick D, Horsman G, **Van Caesele P**, and the Serotype 5 Invasive Pneumococcal Investigation Team. Outbreak of *Streptococcus pneumoniae* serotype 5 in Western Canada. At Lancefield 2008 (International Streptococcal Surveillance Society D)
24. Lagacé-Wiens PRS, Makowski K, Andonova M, Drebot M, Lindsay R., Dawood M, **Van Caesele P**, Artsob H. The Development and Application of Serological Diagnostics for the Surveillance of California (CAL) Serogroup Viruses in Canada and Manitoba. 2007. Presented at the 107<sup>th</sup> General Meeting of the American Society for Microbiology in Toronto, Canada.
25. Makowski K, Lagacé-Wiens PRS, Andonova M, Drebot M, Lindsay R., Dawood M, **Van Caesele P**, Artsob H. The Development and Application of Serological Diagnostics for the Surveillance of California (CAL) Serogroup Viruses in Canada. *2007 Meeting of the Association of Medical Microbiology and Infectious Diseases of Canada* in Halifax, Canada, 2007.
26. Artsob H, Lagacé-Wiens P, Makowski K, Andonova M, Dawood M, **Van Caesele P**, Dibernardo A, Lindsay R, Drebot M. California serogroup and Powassan virus infections in Canada. 2007 International Conference on Diseases in Nature Communicable to Man, Madison, WI, USA, 2007.
27. Thompson R, **Van Caesele P**, Taback S, Lehotay DC. Screening for CAH by MS/MS as a Primary Screen. 2008 Newborn Screening and Genetic Testing Symposium. San Antonio, TX. Nov 3-6, 2008.
28. MacRae AR, Kavask PA, Palomaki GE, Knight GJ, Minnett J, Davies GA, Toi A, Chitayat D, **Van Caesele P**, Chodirker B. Uptake and overall performance of multiple new Down syndrome screening protocols introduced coincidentally. *Clinical Biochemistry*. 2008; 41:195.
29. Al-Suwaidi A, Alharbi S, **Van Caesele P**, Chernic V, Consunji-Araneta R. Clinical symptoms and outcomes of pediatric adenoviral lower respiratory tract infections in Manitoba: Fifteen year experience. *Canadian Pediatric Society*, Victoria, BC, 2008.
30. MacRae A, Davies G, Kavask P, Palomaki G, Knight G, Minett J, Toi A, Chitayat D, **Van Caesele P**, Chodirker B. Clinical performance of multiple new Down syndrome screening protocols introduced coincidentally. *Journal of Obstetrics and Gynaecology*. 2008; 30: S38.

31. Skowronski DM, Hiebert B, Hottes TS, Roos LL, **Van Caesele P**, De Serres, G. Selection bias in the measure of vaccine protection against serious but non-specific influenza outcomes in seniors: Examination through linked Manitoba databases. Presented at: *Canadian Immunization Conference*, Toronto, ON, 2008 AND 12<sup>th</sup> *Annual Conference on Vaccine Research*, Baltimore, 2009.
32. Tyrrell G, Lovgren M, Kellner J, Grimsrud K, Hoang L, Patrick D, Horsman G, **Van Caesele P**, and the Serotype Invasive Pneumococcal Investigative Team 2008. A large outbreak of invasive *Streptococcus pneumoniae* serotype 5 in Western Canada. Abstract S05-O3, *Abstracts of the 6<sup>th</sup> International Symposium on Pneumococci and Pneumococcal Diseases*, June 2008, Reykjavik, Iceland.
33. Wylie J, Thompson L, Wood M, Giercke S, **Van Caesele P**. Large scale implementation of nucleic acid amplification testing for Chlamydia. *International Society for Sexually Transmitted Diseases and Research*, London, UK, June 2009.
34. Hazelton PR, Chawdury F, Yamamoto J, Fanella S, Bridger NA, Wells B, Wylie JL, **Van Caesele P**, Rubinstein E. Molecular epidemiology of acute infectious diarrhea in pediatric cases attending a pediatric hospital emergency room. Presented at American Society for Virology, 2009.
35. Holloway K, Fearon M, Scalia V, Dawood M, Mamiya H, **Van Caesele P**, Khurana V, Appleyard G, Pabbaraju K, Fox J, Grinev A, Rios M, Barker I, Drebot M. Identification and characterization of West Nile virus genetic variants collected from Canadian samples 2006–2008. Abstract 052, *International Journal of Antimicrobial Agents*. 2009; 34-S2: S18-S19.
36. Tayback SP, Thompson R, **Van Caesele P**, Lehotay D. Newborn screening for congenital adrenal hyperplasia (CAH) using tandem mass spectrometry (MS/MS) as a primary screen. Abstract 550731, *Proceedings of the 8<sup>th</sup> Joint Meeting of the Lawson Wilkins Pediatric Endocrine Society/European Society of Paediatric Endocrinology*, New York, September 2009.
37. Thompson L, Becker M, Mahmud S, Dawood M, Keynan Y, Fowke K, **Van Caesele P**, Slater J, Blanchard J. Serological survey of the novel influenza A H1N1 in inner-city Winnipeg, Manitoba, 2009. *Canadian Public Health Association Centenary Conference*, Toronto, Ontario. 2010.
38. Kavsak PA, MacRae AR, Toi A, Davies GD, Chodirker BN, Minnett J, Palomaki GE, Knight GJ, Chitayat D, **Van Caesele PG**. Factors affecting screen completion in two forms of integrated prenatal screening for Down Syndrome in the SAFER Study. *Conference of the Canadian Society of Clinical Chemists*, Saskatoon, Canada. June 2010.
39. Holloway K, Fearon M, Scalia V, Dawood M, Mamiya H, **Van Caesele P**, Khurana V, Appleyard G, Pabbaraju K, Fox J, Grinev A, Rios M, Baker I, Drebot M. The identification, isolation and characterization of West Nile virus (WNV) deletion mutants. *International Conference on Diseases of Nature Communicable to Man*. Fairbanks, USA, August 2010.
- \*40. DeRiviere L, Stopera S, **Van Caesele P**, Lotocki R. Cost feasibility study of five cervical screening laboratory technology models in Manitoba. Abstract P-748, 26<sup>th</sup> International Papillomavirus Conference, Montreal, Canada. July 2010. In Passos M, Passos F, Steben M. 26<sup>th</sup> International Papillomavirus Conference and Clinical & Public Health Workshops. *DST – J Bras Doenças Sex Trans Dis*. 2010; 22(2): 91.
41. Loeb M, Russell M, Moss L, Fonseca K, Earn D, Aoki F, Horsman G, **Van Caesele P**, Chokani K, Vooght M, Babiuk L, Webby R, Walter S. Efficacy of influenza vaccine for preventing symptomatic illness given infection: results from a cluster randomized trial in Hutterite colonies. Abstract O13 of the 9<sup>th</sup> Canadian Immunization Conference, Quebec City, Dec 2010. In *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2010; 21(4): p. 180.
42. Kadkhoda K, Smart G, **Van Caesele P**. Evaluation of a new Health Canada-approved Lyme Immunoblot assay for confirmation of positive EIA screens. Poster P20 presented at AMMI Canada-CACMID, Montreal Canada, April 2011.
43. Dimitrova K, Andonova M, Makowski K, Holloway K, Levett P, Kadkhoda K, **Van Caesele P**, Drebot M. Preliminary evidence of Cache Valley Virus infections and associated illness in Western Canada in 2009. Presentation H5 at AMMI Canada- CACMID, Montreal, Canada, April 2011.

44. Makowski K, Dimitrova K, Andonova M, Holloway K, Kadkhoda K, **Van Caesele P**, Drobot M. The identification of probable cases of California Serogroup Virus infections in Manitoba in 2010. Presentation H6 at AMMI Canada- CACMID, Montreal, Canada, April 2011.
45. Kanji JN, Lovgren M, Low D, Bourgault A, **Van Caesele P**, Horsman G, Tyrrell G. Epidemiology of invasive Group A streptococci in Canada from 2000-2009. Abstract O034 presented at ECCMID-ICC, Milan, Italy, May 2011. Abstracts of 21<sup>st</sup> ECCMID-ICC, p. S60.
46. Dimitrova K, Andonova M, Makowski K, Holloway K, Levett P, Kadkhoda K, **Van Caesele P**, Drobot M. Preliminary evidence of Cache Valley virus infections and associated human illness in western Canada in 2009. Poster 523 at December 2011 American Society of Tropical Medicine and Hygiene, Philadelphia, PA. Abstracts of 60<sup>th</sup> ASTMH Annual Meeting.
47. Li W, Mamiya H, **Van Caesele P**. Optimization of triplex real-time RT-PCR for the detection of norovirus and rotavirus. University of Manitoba, Faculty of Science Undergraduate Research Symposium, January 2012 (unpublished).
48. Becker M, Thompson L, Bridger N, Pindera C, Keynan Y, Bullard J, **Van Caesele P**, Kasper K. Point of Care HIV testing in a tertiary care emergency department in Winnipeg, Canada. Abstract O018 presented at Canadian Association of HIV Researchers (CAHR), Montreal, QC, April 2012. *Canadian Journal of Infectious Diseases and Medical Microbiology*, 2012; 23 Suppl A; 14A.
49. Rank C, Bangura H, Gilbert M, Zahariadis G, **Van Caesele P**, Halverson J, Kim J, Archibald C, Sandstrom P, Brooks J. Distribution and correlates of recent HIV infection in four Canadian provinces, 2000-2008. Abstract P148 presented at Canadian Association of HIV Researchers (CAHR), Montreal, QC, April 2012. *Canadian Journal of Infectious Diseases and Medical Microbiology*, 2012 (May); 23 Suppl A;86A.
50. Ratnam S, Kruk T, Lau A, Hatchette T, Preiksaitis J, Horsman G, **Van Caesele P**, Timmons B, Tipples G. Continuous monitoring of the performance of rubella IgG and hepatitis B surface antibody assays using reference controls: results of a multi-centre trial. Abstract I1 presented at May 2012 Annual AMMI-CACMID Conference. *Canadian Journal of Infectious Diseases and Medical Microbiology*, 2012 (May); 23 Suppl B.
51. Giercke S, Wylie JL, **Van Caesele P**, Gilmour M, Sitter D, Guttek C. Evaluation of a new chromogenic agar medium for detection of Shiga Toxin-producing *Escherichia coli*. Presented at American Society for Microbiology, San Francisco, CA, May 2012.
52. Demczuk W, Martin I, Griffith A, Lefebvre B, McGeer A, Shane A, Gilmour M, **Canadian Public Health Laboratory Network**. National laboratory surveillance of invasive pneumococcal disease in Canada, 2010. Poster 58 presented at 8<sup>th</sup> International Symposium on Pneumococci and Pneumococcal Diseases, Iguacu Falls, Brazil, March 2012. Abstracts of the same, p. 369.
53. Golding G, Vaid N, Jayaraman G, Mac Donald J, Fang L, Njihia J, Mc Cracken M, Archibald C, Mulvey M, Wong T, Embil J, Conly J, **COMRSA Pilot Group**. Characterization of community onset methicillin-resistant *Staphylococcus aureus* (CO-MRSA) infections through population based surveillance in Canada. Poster C2-1380 in *Abstracts of the 52<sup>nd</sup> ICAAC*, San Francisco USA, Sept 2012, p. 145.
54. Sawatzky P, Martin I, Liu G, Allen V, Hoang L, Lefebvre B, Lovgren M, Haldane D, **Van Caesele P**, Horsman G, Robberts L, Garceau R, Wong T, Gilmour M. Multi-antigen sequence types (NG-MAST) and antimicrobial susceptibilities of *Neisseria gonorrhoeae* isolated in Canada, 2010. Poster P168, XVIIIth International Pathogenic Neisseria Conference, Wurzburg, Germany, Sept 2012, p. 309.
55. Janjua N, Skowronski D, De Serres G, Winter A, Dickinson J, Mahmud S, Gubbay J, Fonseca K, Charest H, **Van Caesele P**, Crowcroft N, Fradet M, Bastien N, Li Y, Kraiden M, Sabaiduc S, Petric M. Component-specific estimates of 2011-12 influenza vaccine effectiveness based on the Canadian Sentinel Surveillance System. 10<sup>th</sup> Canadian Immunization Conference, Vancouver, Canada, Dec 2012.
56. Bernard K, Pacheco A, Burdz T, Wiebe D, Ng B, **Van Caesele P**, Gall R, Hoang L. Characterization of three strains of the recently described Genus *Auritidibacter* referred to the National Microbiology Laboratory (NML). Abstract J4, AMMI Canada – CACMID Annual Conference, Quebec City, Canada, April 2013. Program p. 25.



57. Mataseje L, Boyd D, Hussain Z, Imperial M, Lefebvre B, **Van Caesele P**, Willey B, Mulvey M. *Serratia marcescens* beta-lactamase (SME): The new carbapenemase on the block in Canada. Abstract P17, AMMI Canada – CACMID Annual Conference, Quebec City, Canada, April 2013. Program p. 37.
- \*58. Skowronski D, Janjua N, De Serres G, Sabaiduc S, Winter A, Gubbay J, Dickinson J, Fonseca K, Petric M, Krajden M, Charest H, Mahmud S, **Van Caesele P**, Bastien N, Li Y. Influence of prior immunization on current influenza vaccine protection: observations from Canada's sentinel surveillance system. Presented at Influenza -Monitoring Vaccine Effectiveness (I-MOVE) Annual Meeting. Veyrier du Lac, France. July 2013.
- \*59. Skowronski D, Janjua N, De Serres G, Sabaiduc S, Winter A, Gubbay J, Dickinson J, Fonseca K, Petric M, Krajden M, Charest H, Mahmud S, **Van Caesele P**, Bastien N, Li Y. Influenza vaccine effectiveness (VE): sentinel surveillance monitoring system, Canada, 2012-13 season. Presented at Influenza -Monitoring Vaccine Effectiveness (I-MOVE) Annual Meeting. Veyrier du Lac, France. July 2013.
60. Mataseje L, Boyd D, Hussain Z, Imperial M, Lefebvre B, Kuhn M, **Van Caesele P**, Willey B, Mulvey M. Emergence of *Serratia marcescens* harbouring the class A carbapenemase SME in Canada. Poster C2-085, 52<sup>nd</sup> ICAAC, San Francisco USA, Sept 2013.
61. Rumore J, Tschetter L, **PulseNet Canada Members**, Nadon C. Variability among outbreak and non-outbreak associated MLVA profiles for *Escherichia coli* O157:H7 outbreaks in Canada. 10<sup>th</sup> International Meeting on Microbial Epidemiologic Markers, Paris France, Oct 2013.
62. Liu G, Sawatzky P, Allen V, Hoang L, Fefebvre B, Lovgren M, Haldane D, **Van Caesele P**, Horsman G, Garceau R, Ratnam S, Wong T, Martin I. Antimicrobial susceptibilities of *Neisseria gonorrhoeae* isolated in Canada, 2010-2012. 2013 Health Canada Science Forum, Ottawa, Canada, Dec 2013.
63. Singh R, Demczuk W, Griffith A, Martin I, **Canadian Public Health Laboratory Network (CPHLN)**. Serotype distribution of invasive *Streptococcus pneumoniae* in Canada, 2012. Abstract 0242, 9<sup>th</sup> International Symposium on Pneumococci and Pneumococcal Diseases, Hyderabad, India Mar 2014, in *Pneumonia*. 2014; 3: p. 274.
64. Demczuk W, Martin I, Sawatzky P, Liu G, Allen V, Honag L, Lefebvre B, Lovgren M, Haldane D, **Van Caesele P**, Horsman G, Ratnam S, Garceau R, Wong T, Archibald C, Mulvey M. Antimicrobial susceptibilities and multi-antigen sequence types (NG-MAST) of *Neisseria gonorrhoeae* isolated in Canada, 2008-2012. Abstract P22. AMMI Canada – CACMID Annual Conference. Victoria, Canada, April 2014. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2014 March/April; 25 (2): p. e46.
65. Martin I, Sawatzky P, Allen V, Hoang L, Lefebvre B, Lovgren M, Levett P, **Van Caesele P**, Dillon J. External quality assurance and comparability of antimicrobial susceptibility testing of *Neisseria gonorrhoeae* in Canada. Abstract TP16, 2014 STD Prevention Conference, Atlanta, USA, June 2014. *Sexually Transmitted Diseases*. 2014 June; 41(Supplement 1): p. S43-44.
66. Martin I, Sawatzky P, Liu G, Allen V, Lefebvre B, Hoang L, Lovgren M, Haldane G, **Van Caesele P**, Horsman G, Ratnam S, Garceau R, Wong T, Archibald C, Mulvey M. Multi-antigen sequence types (NG-MAST) and antimicrobial susceptibilities of *Neisseria gonorrhoeae* isolated in Canada, 2010-2012. Abstract TP130, 2014 STD Prevention Conference, Atlanta, USA, June 2014. *Sexually Transmitted Diseases*. 2014 June; 41(Supplement 1): p. S74.
67. Sawatzky P, Martin I, Yue A, Allen V, Hoang L, Lefebvre B, Lovgren M, Horsman G, **Van Caesele P**, Garceau R, Wong T, Archibald C, Mulvey M. Assessment of gentamicin and ertapenem susceptibilities of Canadian *Neisseria gonorrhoeae* isolates. Abstract WP148, 2014 STD Prevention Conference, Atlanta, USA, June 2014. *Sexually Transmitted Diseases*. 2014 June; 41(Supplement 1): p. S135.
68. Demczuk W, Bharat A, Lynch T, Martin I, Allen V, Hoang L, Fefebvre B, Lovgren M, Horsman G, **Van Caesele P**, Haldane D, Garceau R, Wong T, Archibald C, Van Domeselaar G, Graham M, Mulvey M. Whole genome sequencing of *Neisseria gonorrhoeae* isolates with reduced cephalosporin susceptibility collected in Canada from 1989 to 2012. Poster O31, XIX<sup>th</sup> International Pathogenic Neisseria Conference, Asheville, USA,, Oct 2014, p. 216.
69. Demczuk W, Singh R, Hoang L, Kellner J, Horsman G, **Van Caesele P**, Gubbay J, Lefebvre B, Haldane D, Garceau R, Ratnam S, German G, Martin I. Multi-locus sequence typing for the differentiation of prevalent and

emerging *Streptococcus pneumoniae* serotypes. Abstract 247 at XIXth Lancefield International Symposium on Streptococci and Streptococcal Diseases, Buenos Aires, Argentina, Nov 2014.

- 70.** Sabaiduc S, Skowronski D, Chambers C, Gubbay J, Fonseca K, Charest H, Petric M, Bastien N, **Van Caesele P**, Eshaghi A, De Serres G, Dickinson J, Winter A, Mahmud S, Kwindt T, Li Y. Genotypic and phenotypic characterisation of influenza A (H1N1)pdm09 viruses circulating during the 2013/14 season of epidemic resurgence: Findings from the Canadian Physician Sentinel Surveillance Network (SPSN). *11<sup>th</sup> Canadian Immunization Conference*. Ottawa, Canada, Dec 2014.
- 71.** Sabaiduc S, Skowronski D, Chambers C, Gubbay J, Fonseca K, Charest H, Krajdén M, Petric M, Bastien N, **Van Caesele P**, Eshaghi A, De Serres G, Dickinson J, Winter A, Mahmud S, Kwindt T, Li Y. Clade-level mismatched influenza B/Yamagata-lineage viruses circulated during the 2013/14 influenza season: Findings from the Canadian Physician Sentinel Surveillance Network (SPSN). *11<sup>th</sup> Canadian Immunization Conference*, Ottawa, Canada, Dec 2014.
- 72.** Chambers C, Skowronski D, Sabaiduc S, Gubbay J, Fonseca K, Charest H, Petric M, Bastien N, **Van Caesele P**, Eshaghi A, De Serres G, Dickinson J, Winter A, Mahmud S, Kwindt T, Li Y. Effect of prior season's immunization and potential for negative interference on vaccine protection during the 2013/14 influenza season. *11<sup>th</sup> Canadian Immunization Conference*, Ottawa, Canada, Dec 2014.
- 73.** Chambers C, Skowronski D, Sabaiduc S, Gubbay J, Fonseca K, Charest H, Petric M, Bastien N, **Van Caesele P**, Eshaghi A, De Serres G, Dickinson J, Winter A, Mahmud S, Kwindt T, Li Y. Residual protection from prior 2009 monovalent AS03-adjuvanted pandemic vaccine no longer evident during 2013/14 influenza season of A(H1N1)pdm09 resurgence. *11<sup>th</sup> Canadian Immunization Conference*, Ottawa, Canada, Dec 2014.
- 74.** Skowronski D, Chambers C, Sabaiduc S, De Serres G, Winter A, Dickinson J, Mahmud S, Gubbay J, Fonseca K, Charest H, Krajdén M, Petric M, Bastien N, **Van Caesele P**, Kwindt T, Li Y. End of season estimates of 2013/14 influenza vaccine effectiveness from the Canadian Sentinel Physician Surveillance Network (SPSN). *11<sup>th</sup> Canadian Immunization Conference*, Ottawa, Canada, Dec 2014.
- 75.** Shaw S, Becker M, Ireland L, Ens C, McClarty L, Yu B, Keynan Y, Bullard J, Wylie J, **Van Caesele P**, Kasper K. A population-based examination of bacterial sexually transmitted infections testing and history prior to HIV diagnosis among HIV cases and HIV-negative controls: The Missed Opportunity for Diagnoses Epidemiological Study (MODES). Abstract O014. Canadian Association of HIV Researchers 2015. *Canadian Journal of Infectious Diseases and Medical Microbiology*. 2015 March/April; 26(Suppl B): p. 12B.
- \*76.** Rockman-Greenberg C, Schroeder M, Dick A, Kwan L, Zacharias R, Thompson JR, **Van Caesele P**. Newborn screening for severe combined immunodeficiency disease (SCID). Canadian Newborn and Child Screening Symposium, Ottawa, Canada, April/May 2015.
- 77.** Shaw S, Reimer J, Ross C, Wylie J, Cole R, Bailey K, Stephen S, Marshall S, **Van Caesele P**, Plourde P. Using digital media to respond to an outbreak of syphilis in the Winnipeg Health Region. Session HI-3, Canadian Public Health Association Conference, Vancouver, Canada, May 2015.
- 78.** Teatero S, Athey T, **Van Caesele P**, Horsman G, Alexander D, Melano R, Li A, Flores A, Sherburne S, McGeer A, Demczuk W, Martin I, Fittipaldi N. An emerging clone of sequence type 459 predominates among adult invasive infections due to Serotype IV Group B *Streptococcus* in Manitoba and Saskatchewan, Canada. Abstract 2288, *Abstracts of the 115<sup>th</sup> American Society for Microbiology General Meeting*, New Orleans USA, May/June 2015, p. 193.
- 79.** Martin I, Sawatzky P, Allen V, Hoang L, Lefebvre B, Naidu P, Haldane D, **Van Caesele P**, Archibald C, Mulvey M. Antimicrobial susceptibilities and multi-antigen sequence types (NG-MAST) of *Neisseria gonorrhoeae* isolated in Canada, 2011-2014. Abstract P133 in *Book of Abstracts 29<sup>th</sup> European Conference on Sexually Transmitted Infection*, Catalonia, Spain, Sept 2015. *International Journal of STD & AIDS*. 2015; 26(11) Supplement I: p. 91.
- 80.** Mulvey M, Fuller J, German G, Girouard G, Haldane D, Hoang L, Lefebvre B, Levett P, Melano R, Needle R, **Van Caesele P**, Mataseje L. Carbapenemase-producing *Enterobacteriaceae* identified in Canada: 2008-2014. Abstract C-1111, *54<sup>th</sup> ICAAC*, San Diego USA, Sept 2015.

81. Rockman-Greenberg C, Schroeder M, Thompson JR, **Van Caesele P**. Newborn screening for severe combined immunodeficiency disease (SCID). *The 3<sup>rd</sup> Annual MFN CAHR Indigenous Health Research Symposium*, Winnipeg, Canada, Nov 2015.
82. Bullard J, Dust K, Cole R, **Van Caesele P**. Morbilliform rash associated with coronavirus detection during an outbreak of measles in Manitoba. Abstract N01. AMMI Canada – CACMID Annual Conference. Vancouver, Canada, April 2016. *Journal of the Association of Medical Microbiology and Infectious Diseases Canada*. 2016 March/April; 1 (1): p. e32.
83. Dust K, Hedley A, **Van Caesele P**. Effects of time and temperature on the ability of Hologic's Aptima HPV Assay to detect HPV in cervical samples collected in Surepath preservative. Abstract P19. AMMI Canada – CACMID Annual Conference. Vancouver, Canada, April 2016. *Journal of the Association of Medical Microbiology and Infectious Diseases Canada*. 2016 March/April; 1 (1): p. e56.
84. Wylie J, Alexander D, **Van Caesele P**. The correlation between practitioner numbers and screening program uptake: a population-based analysis of chlamydia and gonorrhoea screening. Poster THP 97. *Proceedings of the 2016 STD Prevention Conference*. Atlanta, Georgia, USA, September 2016. Page 134.
85. Sawatzky P, Martin I, Demczuk W, Liu G, Allen V, Hoang L, Lefebvre B, Naidu P, Haldane H, **Van Caesele P**, Horsman G, Ratnam R, Garceau R, Archibald C, Mulvey M. Clonal spread of high level tetracycline resistant *Neisseria gonorrhoeae* in Canada, 2012 to 2015. Abstract/Poster 17. *20<sup>th</sup> International Pathogenic Neisseria Conference*. Manchester, United Kingdom, September 2016. Page 107.
86. Chernesky M, Jang D, Gilchrist J, Hoang L, Naidu P, Levett P, Wylie J, Rebbapragada A, Hatchette T, Singh A, Read R, Smychek P, Ratnam S, **Van Caesele P**, Labbe A, Getman D, Smieja M, Martin I. *Mycoplasma genitalium* infections in Canadian women with *Chlamydia trachomatis* and/or *Neisseriae gonorrhoeae*. Presentation 4A1. *Proceedings of the 2016 STD Prevention Conference*. Atlanta, Georgia, USA, September 2016. Page 80.
87. Griffith A, Demczuk W, Martin I, Lefebvre B, McGeer A, Tyrell G, Zhanel G, Mulvey M, **The Canadian Public Health Laboratory Network**. Shifts in distribution of invasive pneumococcal PCV13 serotypes and antimicrobial susceptibilities in Canada: 2011-2014. Poster 36, *CIC Canadian Immunization Conference, 2016 Final Program*. Ottawa, Canada, December 2016. Page 42.
88. Wang B, Russell M, Fonseca K, Earn D, Horsman G, **Van Caesele P**, Chokani K, Vooght M, Babiuk L, Walter S, Loeb M. Vaccinating children against influenza in Hutterite colonies: Follow up of a randomized trial. Poster 7, *CIC Canadian Immunization Conference, 2016 Final Program*. Ottawa, Canada, December 2016. Page 69.
89. Golden A, Adam H, Martin I, Demczuk W, Nichol K, Gilmour M, **Van Caesele P**, German G, Lefebvre B, Zahariadis G, Gubbay J, Haldane D, Horsman G, Mulvey M, Zhanel G, Canadian Antimicrobial Resistance Alliance (CARA). Characterization by Whole-Genome Sequencing (WGS) of *Streptococcus pneumoniae* (SPN) Causing Invasive Infections in Canada, 2011-2015. *2017 Antimicrobial Resistance Symposium*. Winnipeg, Canada. May 2017.
90. Singh D, Jiang D, **Van Caesele P**, Loeppky C. The effect of timing of oseltamivir chemoprophylaxis in controlling influenza A H3N2 and influenza B outbreaks in long term care facilities in Manitoba, Canada, 2014-15: A retrospective approach. Poster 29. *2017 Canadian Student Health Research Forum*. University of Manitoba. Winnipeg, Canada, June 2017.
91. Mataseje L, Boyd D, Fuller J, Haldane D, Hoang L, Lefebvre B, McGeer A, Melano R, Poutanen S, Willey B, **Van Caesele P**, Mulvey M. Characterization OXA-48-like carbapenemase producers in Canada, 2011-2014. Poster II 055. *2017 Canadian Society of Microbiology Conference*. Waterloo, Canada, June 2017.
92. Golden A, Adam H, Martin I, Demczuk W, Nichol K, Gilmour M, **Van Caesele P**, German G, Lefebvre B, Zahariadis G, Gubbay J, Haldane D, Horsman G, Karlowsky J, Mulvey M, Zhanel G, Canadian Antimicrobial Resistance Alliance (CARA). Characterization by Whole-Genome Sequencing (WGS) of *Streptococcus pneumoniae* (SPN) causing invasive infections in Canada, 2011-2014. *ASM Microbe 2017*. New Orleans USA. June 2017.
93. El-Matary W, Stefanovici C, **Van Caesele P**, Deora V, McCurdy J. Cytomegalovirus complicating pediatric inflammatory bowel disease. Presentation 98. *4<sup>th</sup> International Symposium on Pediatric Inflammatory Bowel Disease*. Barcelona, Spain, September 2017.

94. Tam H, Rockman-Greenberg C, Thompson JR, **Van Caesele P**, Schroeder M, Rubin T. Presymptomatic Newborn Detection of IKBKB Severe Combined Immune Deficiency Mutations in Manitoba: a Pilot Project. *2017 Child Health Research Day*. Winnipeg, Canada. October 2017.
95. Demczuk W, Martin I, Gubbay J, Zhanel G, **Van Caesele P**, Lefebvre B, Levett P. Phylogenetic diversity of the *Streptococcus pneumoniae* serotype 3 causing invasive pneumococcal disease in Canada. Poster 134. 11<sup>th</sup> *International Symposium on Pneumococci and Pneumococcal Diseases (ISPPD 11)*. Melbourne Australia April 2018.
96. Tran V, Wei J, Hilderman T, Tsang R, **Van Caesele P**, Alexander D. The genomic epidemiology of invasive meningococcal disease caused by *Neisseria meningitidis* ST-154 in Canada. Poster P0993. *European Congress of Clinical Microbiology and Infectious Diseases*. Madrid Spain April 2018.
97. Orbien L, Wylie J, Christianson S, Reimer A, Walker M, **Van Caesele P**, Alexander D. Stool consistency impacts performance of the BD MAX Enteric Bacterial Panel. Presentation I01. *13<sup>th</sup> Annual Conjoint AMMI-CACMID Conference*. Vancouver Canada May 2018.
98. Chapman S, Bullard J, Kassim S, Edagiz S, **Van Caesele P**, Embree J. Evaluation of adherence to clinical guidelines for the prevention of mother to child transmission of hepatitis B and C in Manitoba Canada. Presentation J03. *13<sup>th</sup> Annual Conjoint AMMI-CACMID Conference*. Vancouver Canada May 2018.
99. Tran V, Wei J, Hilderman T, Tsang R, **Van Caesele P**, Alexander D. The genomic epidemiology of invasive meningococcal disease caused by *Neisseria meningitidis* ST-154 in Canada. Poster SP27. *13<sup>th</sup> Annual Conjoint AMMI-CACMID Conference*. Vancouver Canada May 2018.
100. Singh D, Jiang D, **Van Caesele P**, Loepky C. The effect of timing of oseltamivir chemoprophylaxis in controlling influenza A H3N2 and influenza B outbreaks in long term care facilities in Manitoba, Canada, 2014-2015: a retrospective cohort study. Poster SP64. *13<sup>th</sup> Annual Conjoint AMMI-CACMID Conference*. Vancouver Canada May 2018.
101. Griffith A, Demczuk W, Martin I, Lefebvre B, McGeer A, Tyrrell G, Mulvey M, **The Canadian Public Health Laboratory Network**. Shifting epidemiology of pneumococcal serotypes among various age groups in Canada from 2011 to 2017. Poster 93. *Canadian Immunization Conference 2018*. Ottawa Canada December 2018.
102. Alexander D, Martin I, Demczuk W, Cole R, **Van Caesele P**. Disseminated gonorrhoea infections in Manitoba, Canada: 2013-2018. Poster P05. *14<sup>th</sup> Annual AMMI-CACMID Conference*. Ottawa Canada April 2019.
103. Hink R, Golden A, Adam H, Martin I, Demczuk W, Peterson S, Nichol K, **Van Caesele P**, German G, Lefebvre B, Zahariadis G, Gubbay J, Haldane D, Minion J, Gad R, Mulvey M, Karlowsky J, Zhanel G, and the Canadian Antimicrobial Resistance Alliance. Whole genome sequencing analysis of penicillin-susceptible, -intermediate and -resistant *Streptococcus pneumoniae* isolated in Canada, 2011-2016. Poster AAR-536. *ASM Microbe*. San Francisco USA June 2019.
104. Golden A, Adam H, Martin I, Demczuk W, Nichol K, **Van Caesele P**, Minion J, Gubbay J, Mulvey M, Karlowsky J, Zhanel G, and the Canadian Antimicrobial resistance Alliance. Canadian Multidrug-resistant *Streptococcus pneumoniae* serotype 19A-ST320 isolates with unusually low macrolide MICs possess Tn2010 with altered *ermB*. Poster AAR-621. *ASM Microbe*. San Francisco USA June 2019.
105. Sawatzky P, Martin I, Allen V, Hoang L, **Van Caesele P**, Naidu P, Mulvey M. Cases of gonorrhoea with multiple anatomic sites of infection in Canada, 2016 to 2017. Poster P631. *STI&HIV 2019 World Congress: Joint Meeting of the 23<sup>rd</sup> ISSTD and 20<sup>th</sup> IUSTI*. Vancouver Canada July 2019.
106. Anderson A, Lix L, Loepky C, **Van Caesele P**, Mahar A. Identifying potential cancer disparities for individuals living with HIV using population-based data in Manitoba and Ontario. Canadian Cancer Research Conference (CRCC) 2019. Ottawa Canada, November 2019.
107. Phipps B, Poliquin G, **Van Caesele P**. The effect of varicella vaccination on the incidence of herpes zoster. Abstract 002. *2020 Annual AMMI-CACMID Conference*. Vancouver Canada April 2020.
108. Griffith A, Demczuk W, Martin I, Lefebvre B, McGeer A, Tyrrell G, Hoang L, Minion J, **Van Caesele P**, Kus J, Haldane D, Gad R, German G, Zahariadis G, Mulvey M. Shifting epidemiology of pneumococcal

serotypes among various age groups in Canada from 2010-2018. *International Symposium on Pneumococci and Pneumococcal Diseases*. Toronto Canada June 2020.

**109.** Drews S, **Van Caesele P**, Bullard J, Lindsay R, Gaziano T, Zeller M, Lane D, Ndao M, Allen V, Boggild A, O'Brien S, Marko D, Musuka C, Almiski M, Bigham M. Identification of a *Babesia microti* in a Canadian blood donor and lookback in a red blood cell recipient. *36th International Society of Blood Transfusion (ISBT) Congress*. Virtual meeting December 2020.

---

## REGISTERED ISOLATES OR SEQUENCES

### Sequences

1. GenBank – AF473567. Human calicivirus NLV/Steinbach/EG/2001/CA RNA-dependent RNA polymerase (pol) gene (orf1), partial cds.

2. GenBank – AF430807. Enterococcus faecalis strain N00-410 vancomycin-resistance vanE gene cluster, partial sequence.

---

End

This is Exhibit " C " referred to  
in the Affidavit of Jared Manley  
Peter Bullard Affirmed before  
me this 5 day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

1 **Principles and practice of molecular testing for Severe Acute Respiratory Syndrome**  
2 **Coronavirus 2 (SARS-CoV-2) during the Coronavirus Disease 2019 (COVID-19) pandemic in**  
3 **Manitoba, Canada**

4

5 **Jared Bullard MD FRCPC\* and Paul Van Caesele MD FRCPC\*\***

6 **February 24, 2021**

7

8

9

10

11

12

13

14 \*Associate Professor and Section Head, Pediatric Infectious Diseases, Departments of Pediatrics  
15 & Child Health and Medical Microbiology, University of Manitoba; Associate Medical Director,  
16 Cadham Provincial Laboratory.

17

18 \*\*Professor, Departments of Medical Microbiology & Infectious Diseases, and Pediatrics &  
19 Child Health, University of Manitoba; Medical Director, Cadham Provincial Laboratory; Co-Chair,  
20 Canadian Public Health Laboratory Network.

21

22

## 23 **Overview of SARS-CoV-2 molecular testing in Manitoba**

24

### 25 **What is SARS-CoV-2?**

26           Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is the virus causing  
27 coronavirus disease 2019 (COVID-19). As a member of the coronavirus family, it has certain  
28 characteristics including use of RNA (instead of DNA) to encode and produce its various  
29 components. Viral detection from clinical samples targets these genes in almost all  
30 circumstances. Examples of some specific genes of SARS-CoV-2 include envelope (E), spike (S)  
31 and nucleocapsid (N) genes that are found on the outer surface of SARS-CoV-2. These same  
32 proteins are targeted by the human immune system to eliminate the virus or produce an  
33 immune response to vaccine.

34

### 35 **What is the diagnostic process used on a sample from a suspect case to detect SARS-CoV-2?**

36           Samples from people are taken from the back of the nose, throat and occasionally from  
37 deeper sites such as the trachea or lungs. Usually these people have disease that is compatible  
38 with COVID-19 (fever, headache, cough, muscles aches) or they have been recently exposed to  
39 someone with confirmed or suspected COVID-19. Specimens such as swabs from any of the  
40 various anatomic sites are placed in viral transport medium (VTM) to ensure that the specimen  
41 (the viral RNA and viral particles) retain their integrity. All specimens are labelled and have a  
42 laboratory requisition that link the patient, the sample and the ordering practitioner. This  
43 ensures that the final result is on the correct person, and goes to the correct practitioner who  
44 can then respond to the result accordingly.



45 Laboratory specimens are received at Cadham Provincial Laboratory (CPL) (specimens  
46 are also received at DynaCare Laboratories and at Shared Health Microbiology) by staff  
47 throughout the day and directed into appropriate SARS-CoV-2/COVID-19 testing streams  
48 dependent on the priority that a result is required. Staff confirm that specimens and  
49 requisitions match prior to further testing. Once directed into the laboratory testing stream,  
50 medical laboratory technologists (MLTs) further process the specimen in preparation for  
51 testing.

52 All definitive testing for COVID-19 in Manitoba is performed using molecular techniques,  
53 which is another way of saying that genetic elements of the virus are sought. Reverse  
54 transcription polymerase chain reaction (RT-PCR) is one very common example of a molecular  
55 technique. Once molecular testing is completed, a result is reported back to the ordering  
56 practitioner. Results can be either negative (no SARS-CoV-2 detected in the submitted sample)  
57 or positive (SARS-CoV-2 detected in the submitted sample). In rare cases a specimen is  
58 unsuitable and is deemed incapable of being tested (cancelled) or does not provide a result if  
59 tested (invalid). If positive, the result will also be shared with public health so that appropriate  
60 case contact and investigation can occur to limit the spread of COVID-19 in the community.

61

## 62 **What is PCR and how is it used in the diagnosis of COVID-19?**

63 SARS-CoV-2 testing of respiratory samples is conducted on several different platforms  
64 (instruments capable of performing molecular testing) at CPL and other laboratories in  
65 Manitoba. The premise of almost all molecular techniques is to amplify an initial small amount  
66 of genetic target (genes unique to SARS-CoV-2) in a sample a predetermined number of times.

67 If sufficient genetic material is present in a sample to be detected, that sample is considered  
68 positive for the SARS-CoV-2 virus. If no target genetic material is detected after all amplification  
69 cycles are complete, then the sample is considered negative for SARS-CoV-2. The chemistry,  
70 genetic targets and rounds of amplification differ from platform to platform. Health Canada  
71 authorizes commercial platforms and accredited laboratories such as CPL must follow Health  
72 Canada authorized instructions from the manufacturer. In addition, reference laboratories  
73 regularly develop in-house methods of molecular detection known as laboratory developed  
74 tests (LDTs). Development of LDTs must have detailed experimental proof of performance and  
75 maintain strict adherence to documented test procedures to ensure testing accuracy. CPL is  
76 part of the Canadian Public Health Laboratory Network (CPHLN). This national group of experts  
77 regularly discuss methods of detection of SARS-CoV-2 and employ very similar techniques  
78 across their LDTs. Their collective experience and expertise is essential to maintain quality  
79 diagnostic performance that meets national standards. CPL currently utilizes an internationally  
80 recognized protocol for the molecular detection of SARS-CoV-2 in respiratory specimens<sup>1</sup>.

81 The most common method of molecular amplification used to detect SARS-CoV-2 in  
82 samples is RT-PCR. Like other molecular techniques, RT-PCR first takes SARS-CoV-2 RNA found  
83 in respiratory samples and converts it to DNA. A targeted portion of the DNA is subsequently  
84 doubled for typically 40 cycles. Commercial platforms may use a different number of  
85 amplification cycles. The current SARS-CoV-2 RT-PCR methodology at CPL uses a total of 40  
86 cycles of amplification. The cycle in which detection of SARS-CoV-2 genetic material first  
87 becomes evident is called the cycle threshold (Ct). The Ct value is a semi-quantitative (an  
88 imprecise but approximate) measure of how much genetic material is present in the initial

89 sample. If more cycles are required (higher Ct) to detect SARS-CoV-2, then less viral RNA was  
90 present to start. In comparison, samples with more RNA will typically, but not always, require  
91 fewer cycles (with a lower Ct) to detect the virus. There can be differences in Ct values for many  
92 reasons including between a sample tested on different platforms, between two different  
93 anatomic samples from the same individual, or samples from the same individual obtained at  
94 different times. A study performed at CPL demonstrated that the various platforms used for  
95 testing of samples for SARS-CoV-2 have very similar, but not identical, Ct values<sup>2</sup>. This is  
96 important as samples tested for SARS-Cov-2 on any RT-PCR platform at CPL will have consistent  
97 Ct results within an acceptably narrow range.

98

#### 99 **Why is culture not used for the diagnosis of SARS-CoV-2?**

100 Like other viruses, cell culture can be used to detect SARS-CoV-2. A cell culture is when a  
101 sample with suspected SARS-CoV-2 is put into a test tube of media with a layer of cells that can  
102 be infected with this virus. Over time, usually 3 to 5 days, infected cells will change in  
103 appearance indicating they have been infected with SARS-CoV-2. Cell culture has certain  
104 advantages over molecular detection. The primary advantage is that cell culture is better able  
105 to determine if viruses are still viable, that is, if the virus in a sample can enter a cell, reproduce  
106 itself and then release viral progeny to infect more cells. Molecular methods such as RT-PCR do  
107 not distinguish between virus that is viable (can cause infection in cell culture) or non-viable  
108 virus. Cell culture has important limitations. It can take several days before a cell culture can be  
109 called positive whereas molecular tests take hours. This is important in conducting a timely  
110 public health response. Specialized laboratory facilities are required to safely handle and

111 propagate live infectious virus. These facilities are called containment level 3 (CL3) and are  
112 relatively limited compared to the containment level 2 (CL2) space needed for molecular work.  
113 The only operational CL3 laboratory space in Manitoba at this time is at the National  
114 Microbiology Laboratory, and most jurisdictions are highly limited in the amount of CL3 lab  
115 space that they have access to. The number of samples that can be processed by cell culture is  
116 significantly less than what can be processed by molecular methods and automated platforms.  
117 Finally, the diagnostic accuracy of cell culture is not as robust as molecular methods; SARS-CoV-  
118 2 is less likely to grow successfully in cell culture than have genetic material detected (i.e. more  
119 samples would appear as false negatives by cell culture). This is very commonly due to delayed  
120 or non-standard transport conditions, improper collection technique, or simply technical  
121 limitations of the method. As an example, some common viruses will only grow 50-90% of the  
122 time where PCR methods more reliably do not fail. For those reasons, cell culture is not  
123 routinely performed on specimens in the diagnosis of COVID-19 and RT-PCR is the current gold  
124 standard for accurately detecting the presence of SARS-CoV-2.

125

### 126 **What is the diagnostic accuracy of SARS-CoV-2 RT-PCR?**

127 Any diagnostic test is in part defined by what are called performance characteristics.  
128 Performance characteristics describe different ways in which a test is accurate, and can be  
129 broken down into sensitivity and specificity, among others. Sensitivity is the proportion of  
130 people with COVID that the test will call positive. Poor sensitivity results in false negatives.  
131 Specificity is the proportion of people who do not have COVID that the test will call negative.  
132 Poor specificity results in false positives. The sensitivity of SARS-CoV-2 RT-PCR is estimated to

133 be greater than 95% (5 times out of 100, the test will be negative when the person truly has  
134 COVID-19 and usually occurs if testing is performed late in the incubation period before  
135 symptoms develop). It has a specificity of greater than 99.9% (less than 1 in 1000 will have a  
136 false positive result). These performance characteristics are typical of RT-PCR tests for other  
137 respiratory viruses.

138

### 139 **Can SARS-CoV-2 RT-PCR Ct values be used to determine if someone is infectious?**

140       There have been some studies that evaluated samples from people with COVID-19 to  
141 determine the relationship between SARS-CoV-2 RT-PCR Ct values, symptom duration and cell  
142 culture positivity<sup>3, 4</sup>. In our study of 90 samples, which was the first published study of its kind,  
143 we found that samples taken from people with COVID-19 at day 8-10 of illness (from symptom  
144 onset) had a reduced risk of successfully growing SARS-CoV-2 in cell culture. The implication is  
145 that people beyond day 8-10 of illness with COVID-19 may be at lower risk for being infectious,  
146 simply because it becomes difficult to demonstrate viable virus at that point. Notably, the  
147 study did not conclude that persons were not infectious after 8-10 days, but rather that further  
148 study of larger size would be required<sup>4</sup>. This is important as the average duration that SARS-  
149 CoV-2 is detectable by RT-PCR is 17 days, though can range up to as long as 3 months<sup>5</sup>. Many  
150 viruses are shed for prolonged periods and are generally considered less or perhaps non-  
151 infectious within 1-2 weeks of symptom onset.

152       It is important to note that the cell culture model of infectivity is the best laboratory-  
153 based system to reproduce infectiousness in humans but it remains a surrogate. Numerous  
154 factors including the host immune response, pre-existing medical conditions and treatments,

155 amount of and strain of virus and the interplay between the host and SARS-CoV-2 must be  
156 considered in assessing whether an individual is infectious.

157 In our study referred to above, samples with a Ct value of 25 or greater did not grow  
158 SARS-CoV-2 in cell culture. Further unpublished work in Manitoba has confirmed that a Ct  
159 value of under 24 has the highest probability of growing SARS-CoV-2 in cell culture. Other  
160 studies have found infectious virus at Ct values between 30 - 40<sup>6</sup>. An excellent study evaluating  
161 3790 positive samples (using similar chemistry to that utilized in Manitoba) for SARS-CoV-2 in  
162 cell culture demonstrated that at a Ct of 25 had up to 70% culture positivity with a culture  
163 positivity drop to 20% at a Ct of 30 and a further reduction to <3% at Ct 35<sup>7</sup>. The implication of  
164 these studies is that higher Ct values are associated with a lower likelihood of growing SARS-  
165 CoV-2 in cell culture, but this cannot rule that the person was or was not infectious at the time  
166 of sample collection. Finding the laboratory correlates of those infectious endpoints has been  
167 of intense interest to practitioners, but studies have yet to yield a reliably dichotomous  
168 endpoint – some small probability of transmissibility may still remain beyond even  
169 conservatively set Ct endpoints. No single SARS-CoV-2 RT-PCR Ct value in isolation can be used  
170 to determine infectiousness of a case and must be interpreted in the overall clinical context<sup>8,9</sup>.

171

## 172 **What is the role of the SARS-CoV-2 RT-PCR testing in public health?**

173 Public health will use the positive SARS-CoV-2 test and diagnosis of COVID-19 both to  
174 direct the individual case to isolate and also to perform contact tracing to determine if other  
175 individuals are at risk of developing COVID-19. Those contacts considered at high risk will be  
176 instructed to remain in quarantine for 14 days (the incubation period of SARS-CoV-2, or the

177 longest time from exposure to developing disease). It is essential that cases be found before  
178 they become symptomatic, which is when they are most infectious, to minimize forward  
179 community transmission. Testing information is collected by Manitoba Health to monitor  
180 COVID-19 disease activity in the population (determine the overall burden of disease in  
181 Manitoba), take appropriate public health measures and direct resources accordingly.

182         The Ct value is not reported by the laboratory and not doing so is supported by national  
183 and international practice and guidelines<sup>8</sup>. In consultation with an experienced public health  
184 virologist (CPL physicians), other physicians and healthcare workers may request the Ct value  
185 on a given sample. Infection control practitioners in acute care or long term care facilities may  
186 utilize this information to perform a risk assessment to remove cases with COVID-19 from  
187 isolation and reduce unnecessary PPE usage. Medical officers of health (MOHs) may also  
188 consult with CPL physicians and use Ct values to assist in determining if an individual with  
189 COVID-19 is more likely to have remote SARS-CoV-2 infection or a more recent infection. This  
190 distinction is important as contact tracing can be more precisely directed, and identifying an  
191 acute infection is essential to minimize risk of community spread. The risk to an institution of an  
192 individual with a remote infection is also significantly less than an acute infection.

193         In December 2020, 5825 Manitoba SARS-CoV-2 positive results were analyzed and  
194 categorized by Ct value. Almost 60% had a Ct value less than 25 (~35% <20 and ~23% 20-25)  
195 and of the remaining samples, 18% had Ct 25-30, 18% had Ct 30-36 and 7% had Ct 36-40. The  
196 large majority (~68%) of these patients would be considered as higher level risk of  
197 infectiousness, just based on Ct value alone. The remaining smaller percent with high Ct values

198 would require in depth investigation to make a judgement call on their relative degree of  
199 infectiousness.

200 It is essential to state that high Ct values can be found in two distinct, yet equally  
201 important scenarios. First, a high Ct may be found in those who have just developed symptoms  
202 of COVID-19, usually within the first 24 hours<sup>4</sup>. These individuals have less virus at this early  
203 stage but will go on to have significantly more virus in the next few days. As they produce more  
204 virus, they will become increasingly infectious with significant risk of community transmission,  
205 and if re-tested we would expect to see a dramatic drop in the Ct value from their specimens.  
206 The second scenario is in those with infection that is resolving. They will have been infectious  
207 earlier in their disease. Public health must still investigate their contacts to determine if these  
208 contacts have developed COVID-19, even though the person with the high Ct test is less likely to  
209 be infectious at the point that the sample was taken. It is challenging to know where in their  
210 disease trajectory an individual with a high Ct is, thus it remains essential to identify them as a  
211 case, at a minimum to identify and investigate contacts in order to minimize secondary SARS-  
212 CoV-2 spread.

213 A Ct value of 25 or greater representing a false positive is a common misconception  
214 amongst the lay-public and even some healthcare professionals. As explained above, it is  
215 inaccurate to state that a COVID-19 case with a SARS-CoV-2 RT-PCR Ct value of over 25 is not  
216 infectious (based on cell culture data) and is even more inaccurate to suggest that the positive  
217 test represents a false positive. If the individual tests positive, they have the SARS-CoV-2  
218 pathogen detectable and have been diagnosed with COVID-19. The term “functional false  
219 positive” is not recognized in the conventional medical literature. Concluding that a particular



220 individual is not infectious based on population level probability is flawed logic and should be  
221 avoided. In public health and population studies this phenomenon is called “ecological fallacy”  
222 – population level rules cannot reliably be applied at the individual level. In any event, the  
223 individual with a positive COVID-19 RT-PCR test is a true positive case ~99.9% of the time and,  
224 even if no longer infectious, may have recently transmitted the virus to close contacts or the  
225 individual may yet become infectious (if at the start of disease).

226 **References:**

227

228 1. Corman VM, Landt O, Kaiser M, et al. Detection of 2019 novel coronavirus (2019-nCoV)  
229 by real-time RT-PCR. *Euro. Surveill.* 2020 Jan; 25(3). doi: 10.2807/1560-  
230 7917.ES.2020.25.3.2000045.

231 2. Dust K, Hedley A, Nichol K, et al. "Comparison of Commercial Assays and Laboratory  
232 Developed Tests for Detection of SARS-CoV-2". *J Virol Methods.* Sept 10, 2020. DOI:  
233 <https://doi.org/10.1016/j.jviromet.2020.113970>.

234 3. Wolfel R, Corman VM, Guggemos W, et al. Virological assessment of hospitalized  
235 patients with COVID-2019. *Nature.* 2020;581(7809):465-469.

236 4. Bullard J, Dust K, Funk D, et al. Predicting infectious SARS-CoV-2 from diagnostic  
237 samples. *Clin Infect Dis.* 2020.

238 5. Cevik M, Tate M, Lloyd O, et al. SARS-CoV-2, SARS-CoV, and MERS-CoV viral load  
239 dynamics, duration of viral shedding, and infectiousness: as systematic review and  
240 meta-analysis. *Lancet Microbe.* November 19, 2020. DOI:

241 [https://doi.org/10.1016/S2666-5247\(20\)30172-5](https://doi.org/10.1016/S2666-5247(20)30172-5).

242 6. Sarkar B, Sinha RN and Sarkar K. *Indian J Community Med.* 2020 Jul-Sep: 45(3):278-282.

243 7. Jaafar R, Aherfi S, Wurtz N, et al. Correlation Between 3790 Quantitative Polymerase  
244 Chain Reaction – Positives Samples and Positive Cell Cultures, Including 1941 Severe  
245 Acute Respiratory Syndrome Coronavirus 2 Isolates. *Clin Infect Dis.* 28 September 2020.  
246 <https://doi.org/10.1093/cid/ciaa1491>.

247 8. Association of Public Health Laboratories. "Ct Values: What They Are and How They  
248 Can be Used", Version 1, November 9, 2020

249 <https://www.nj.gov/health/cd/documents/topics/NCOV/APHL-COVID19-Ct-Values.pdf>

250 9. Centers for Disease Control and Prevention. "Frequently Asked Questions about  
251 Coronavirus (COVID-19) for Laboratories", Updated January 26, 2021.

252 <https://www.cdc.gov/coronavirus/2019-ncov/lab/faqs.html#print>

253

254

**THE QUEEN'S BENCH**  
**Winnipeg Centre**

**APPLICATION UNDER:** *The Constitutional Questions Act, C.C.S.M., c. 180*

**AND UNDER:** The Court of Queen's Bench Rules, M.R. 553/88

**IN THE MATTER OF:** *The Public Health Act, C.C.S.M. c. P210*

**B E T W E E N:**

**GATEWAY BIBLE BAPTIST CHURCH, PEMBINA VALLEY BAPTIST CHURCH,  
REDEEMING GRACE BIBLE CHURCH, THOMAS REMPEL, GRACE COVENANT  
CHURCH, SLAVIC BAPTIST CHURCH, CHRISTIAN CHURCH OF MORDEN, BIBLE  
BAPTIST CHURCH, TOBIAS TISSEN, ROSS MACKAY**

Applicants,

- and -

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF MANITOBA,  
DR. BRENT ROUSSIN in his capacity as CHIEF PUBLIC HEALTH OFFICER OF  
MANITOBA, and DR. JAZZ ATWAL in his capacity as ACTING DEPUTY CHIEF  
OFFICER OF HEALTH MANITOBA**

Respondents.

---

**AFFIDAVIT OF LANETTE SIRAGUSA**

**AFFIRMED:** *March 5, 2021*

---

**DEPARTMENT OF JUSTICE**

[REDACTED]

[REDACTED]

[REDACTED]

File No. CI 20-01-29284

**THE QUEEN'S BENCH**  
**Winnipeg Centre**

**APPLICATION UNDER:**     *The Constitutional Questions Act, C.C.S.M., c. 180*

**AND UNDER:**             The Court of Queen's Bench Rules, M.R. 553/88

**IN THE MATTER OF:**     *The Public Health Act, C.C.S.M. c. P210*

**B E T W E E N:**

**GATEWAY BIBLE BAPTIST CHURCH, PEMBINA VALLEY BAPTIST CHURCH,  
REDEEMING GRACE BIBLE CHURCH, THOMAS REMPEL, GRACE COVENANT  
CHURCH, SLAVIC BAPTIST CHURCH, CHRISTIAN CHURCH OF MORDEN, BIBLE  
BAPTIST CHURCH, TOBIAS TISSEN, ROSS MACKAY**

Applicants,

- and -

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF MANITOBA, DR.  
BRENT ROUSSIN in his capacity as CHIEF PUBLIC HEALTH OFFICER OF  
MANITOBA, and DR. JAZZ ATWAL in his capacity as ACTING DEPUTY CHIEF  
OFFICER OF HEALTH OF MANITOBA**

Respondents.

**AFFIDAVIT OF LANETTE SIRAGUSA**

I, LANETTE SIRAGUSA, of the City of Winnipeg, in the Province of Manitoba,  
**AFFIRM AND SAY AS FOLLOWS:**

1. I have personal knowledge of the facts and matters hereinafter deposed to by me, except where same are stated to be based upon information and belief, and in those I do verily believe to be true.

2. I have a Bachelors of Nursing degree obtained in 1995 and a Masters of Nursing (Administration) obtained in 2007 from the University of Manitoba. I am a registered nurse and worked in direct patient care from 1995-2006. I served as the Victoria General Hospital Director of Surgery, Anesthesia and Women's Health from 2007-2012 and as the Winnipeg Regional Health Authority Program Director of Surgery from 2012-2017. My current position is with Shared Health Manitoba as Provincial Lead Health Service Integration and Quality and Chief Nursing Officer. I am also an Assistant Professor with the College of Nursing, University of Manitoba. A copy of my curriculum vitae is attached as Exhibit A.
3. As part of the province's response to the COVID-19 pandemic I am now serving as Co-Incident Commander COVID – 19 Health Incident Command. My counterpart, with responsibility for Public Health is Dr. Bent Roussin. My responsibility is to oversee the provincial health system's pandemic response, ensuring that capacity (i.e. space, supplies, equipment, human resources) is sufficient and processes are in place so that access to priority clinical services are available for all patients requiring care.
4. Early in the pandemic there was little information to rely on in order to predict the impact the COVID-19 virus would have in Manitoba. We saw the effects of the pandemic in Wuhan, China and Italy and understood that there was potential for Manitoba's healthcare system to become overwhelmed, depending on the severity of viral spread and volume of active cases.
5. In the spring of 2020 the first public health orders (PHO) were put in place in an attempt to limit the transmission of COVID-19 in Manitoba. The orders at that time, and at all times, have specifically excluded healthcare professionals, permitting them to "practice their profession without restriction" following the guidance set by their regulatory bodies and system leaders. The orders have also exempted all health professionals for the delivery of government health care operations.
6. The Manitoba Incident Command team knew from consultations with colleagues in Wuhan, China that isolating patients with COVID-19 was essential to controlling the virus. As such, on April 1 2020, the government opened its first voluntary isolation centre where active COVID-19 cases and close contacts could self-isolate in safe, appropriate accommodations, free of charge.

Today, there are now 21 isolation facilities in operation across the province including several that are dedicated to the homeless population, with additional wrap around support services available for those suffering with mental health or addiction challenges.

7. The PHOs have had no impact on medical procedures such as childhood vaccinations, cancer screening and other diagnostic tests. As well, none of the PHOs have had direct effect on how healthcare providers managed their patients. Individual providers, health system leaders and/or patients have made their own decisions on how best to provide and receive care during the pandemic based on risk of transmission and ability to comply with clinical guidelines. These clinical guidelines relate to personal protective equipment (PPE), physical distancing and environmental cleaning which were established by specialists in occupational health and infection prevention and control. Decisions were based on available evidence and leading practices. To the extent that any clinical services have been delayed, medical leadership or individual providers have determined that this is appropriate based on the nature of the service, individual circumstances and the pandemic situation.

8. Through testing and contact tracing, the pandemic was well controlled at the onset and the virus was contained. This provided the necessary time for system leaders to proactively create expansion plans and standardized procedures for the provincial pandemic response. We recognized the need for adequate supplies and equipment (i.e. PPE and ventilators) and aggressively procured the necessary inventory. We also met with the 23 professional regulatory bodies to discuss how we could safely redeploy healthcare providers to different parts of the health care system, if necessary, maximizing full scope of practice while ensuring safe patient care based on skill sets, experience and education.

9. Early in 2020, a human resource strategy was underway as part of the plan to increase capacity should a significant surge in COVID-19 cases occur that would result in hospitalizations. This plan included expanding medicine and critical care beds into non-traditional spaces and creating innovative staffing models to care for additional patients. One particular challenge was expanding critical care capacity where nurses typically receive six months of specialized training to prepare for work in the Intensive Care Units, providing one to one care for the sickest patients. In a crisis situation, these specialized skills and nursing ratios

would not be possible. Our solution was to implement a team based model of care. Under this model, a team of qualified healthcare professionals would partner to provide patient care with the oversight of an experienced critical care nurse. This team based model of care would allow the intensive care nurses to oversee the specialized care needs for more than one patient while other providers could act as extenders to support more general patient care needs based on their skills and expertise. For example, Respiratory Therapists have expertise in airway management and pulmonary assessments; General duty nurses are capable of providing wound care, vital signs, hygiene; Physiotherapists are skilled in range of motion exercises, position changes and pulmonary rehabilitation; Health Care Aides were trained to take vital signs and glucose tests. There were also focused teams created to benefit overall staff safety and patient requirements, including Patient Turning Teams, PPE Checkpoint Teams and Mental Health Support Teams.

10. Urgent and emergency surgeries continued throughout the pandemic. However, COVID-19 did have an impact on planned, elective surgeries both in the spring and again in late fall of 2020. The recommendation to reduce surgical procedures was made through the Incident Command Planning Team, led by medical specialists in partnership with other clinical leaders with the goal to ensure staff safety, free up space requirements and provide human resource capacity. As community spread of the virus escalated and clusters of hospital outbreaks occurred, various staff were exposed to the virus. For example, during the week of October 26, 2020 several staff at St. Boniface Hospital were off work, isolating, following viral exposure. From a space perspective, medicine beds began encroaching into surgery spaces and there was a need to redeploy surgery staff to other priority areas including critical care, medicine, as well as personal care homes. Surgeons determined which patients and procedures could be safely deferred in order to support overall COVID-19 priorities and system needs. As a result, the recommendation to decrease elective and non-urgent surgical procedures throughout the province was approved through Incident Command on November 18 2020 with a complementary strategy to deploy staffing resources.

11. Misericordia Health Centre suspended dental surgeries the week of November 9, 2020 in order to reassign nurses and health care assistants to care for personal care home patients during a COVID outbreak. Misericordia also suspended some elective ophthalmology procedures to send surgery nurses to the Grace Hospital Intensive Care Unit. Elective orthopaedic procedures



were delayed at Concordia Hospital the week of November 11, 2020 so staff could be redeployed to other areas of high demand including medicine and Concordia Place Personal Care Home which was experiencing a COVID outbreak.

12. The Canadian Institute for Health Information (CIHI) annually reports wait times for priority procedures such as cataracts and lower extremity arthroplasty (hips and knees). While these surgeries are not classified as urgent or lifesaving, it is acknowledged that they do significantly impact quality of life. Thus, the decision to delay surgeries to meet COVID demands was not taken lightly and was given careful consideration. Manitoba has traditionally performed poorly in these metrics compared to other provinces. Government made a concerted effort in the spring and summer of 2020 to manage the backlog of surgical cases within the system. A recent CIHI report measuring COVID impact March – June 2020, identified that Manitoba's COVID response, as it related to cardiac, cancer and elective surgeries was mostly aligned with other provinces, and in many cases Manitoba decreased surgery less than other provinces. It is difficult to determine at this time what the effects of the delay of elective surgeries will have as wait times are only measured after the procedure has been performed.

13. Metrics respecting cataract procedures show that in December 2019, 63% of cataract patients were completed within the benchmark (12 weeks) with an average wait time of 18 weeks. By comparison, in December 2020, 79% of cataract surgeries were completed within benchmark (12 weeks) with an average wait time of 14 weeks. With regards to hip and knee procedures, in November 2019, 66% of cases were completed within benchmark (26 weeks) with an average wait time of 22 weeks. In November 2020, 88% of cases were completed within benchmark (26 weeks) with an average wait time of 13 weeks. While these numbers appear to be improved during the COVID pandemic, this is likely because urgent cases were prioritized and less cases were performed. We will be able to better assess wait times trends once surgical slates are fully reinstated and patients are processed through the system.

14. The Incident Command's highest priority is to ensure that all patients requiring urgent or life-saving hospital care receive safe and timely treatment. Through the Incident Command structure, it is my responsibility to work with clinical leaders throughout the province to balance these highest priorities with the scarcity of human resources in order to meet the COVID demands and

other necessary services. This prioritizing and balancing is an on-going, iterative process and constantly re-evaluated. Typically, as COVID hospitalization demand goes up, non-essential services (i.e. elective surgeries) go down. As COVID hospitalization demand decreases, more staff can be assigned to participate in elective services such as surgery or ambulatory clinics.

15. I receive daily information from the Provincial Information Management & Analytics (PIMA) Team, as well as periodic modelling projections. Current evidence and past trends indicate that when the volumes of active COVID cases begin to surge, the system can expect hospitalizations to rise approximately 10 days later. Manitoba saw an escalation in active cases in the weeks following Thanksgiving (October 12 2020) with a significant spike on October 30 2020 with 480 new cases. The COVID response team had hoped that this was just a temporary problem and that the case numbers would decrease on their own. However, this did not happen. Community spread appeared to be increasing. Dr Roussin put in place a Code Red on October 30, 2020 for the Winnipeg region and issued new restrictions with the goal of stopping the growth in COVID-19 case numbers and preserving hospital capacity.

16. On November 10 2020, the provincial modelling projected that, with the current trend, if we did not slow the growth in cases, our intensive care units could reach maximum capacity by November 23, 2020 and our medicine beds could be filled to capacity by December 13 2020.

17. Beginning on November 17 2020, some provincial officials, clinical leaders and members of the public suggested a provincial triage policy needed to be developed to determine who would receive treatment and who would not, in the event that critical care resources were depleted. Incident Command declined to establish such a protocol and instead chose to focus the team on a solution orientated approach.

18. We transitioned surgical wards into COVID-19 Medicine Units and opened extra units to create additional ICU capacity. Union negotiations occurred to redeploy staff across sites and between units. Implementation plans were underway to open lower acuity sites should hospital capacity be exceeded. This was a difficult time for staff who were redeployed to different work environments with new team members and disrupted work schedules but they rose to the

occasion with ongoing support and with the goal to continuously improve the process. Manitoba's pre-COVID ICU capacity was 72 beds.

19. On December 10<sup>th</sup> and 11<sup>th</sup>, Manitoba hit its peak to-date of hospitalizations with 129 total patients in intensive care and 388 hospitalizations due to COVID (active and post infection). Our intensive care numbers exceeded our capacity but was addressed through additional resources.

20. In mid-December, Incident Command was also very concerned that our rise in case numbers would coincide with the Christmas holiday season when vacation times were pre-scheduled as per the Collective Agreement. Staff were offered financial pay-outs if they would voluntarily pick up extra shifts to cover gaps in schedules. Due to the stress and exhaustion, we were not surprised when there was minimal uptake of this offer. Health system leaders huddled daily to make decisions about patient flow according to resource availability and, through their extraordinary efforts and collaboration, we were able to manage the demand through this period as hospital admissions began to stabilize.

21. Healthcare leaders were aware that the success of the Code Red measures would depend on the public's willingness to cooperate. Only the public had the power to control the outcome of the pandemic while the healthcare system can only respond to the rising number of patients. Should the numbers have escalated as early projections indicated, the healthcare system would not have been able to meet the demand. As the number of cases began to decrease in January we recognized, that through public cooperation and compliance with the PHOs, Manitobans had avoided a disastrous situation.

22. The most vulnerable populations impacted by COVID-19 are seniors and those with chronic diseases, especially those living in congregate settings such as personal care homes and many First Nation communities. Since the spring, efforts were made to connect with partners and providers to mitigate spread and contain the virus through various protocols such as restricting staff travel, restricting visits to personal care homes and hospitals, limiting personal care home staff to working in only one venue, establishing personal protective equipment protocols and environmental cleaning protocols, providing enhanced testing, doing contact tracing and

isolating those who may have come in contact with the virus. These measures worked well throughout the spring and summer as COVID infections remained quite low. Unfortunately, even with pandemic precautions, outbreaks did occur in these high risk settings.

23. The process of managing the healthcare system in the face of the pandemic continues. So long as the virus is circulating within the community there remains the potential for hospital and critical care resources to be overwhelmed. Thus, the Incident Command team continues to assess and re-assess how best to manage health resources for the benefit of all Manitobans.

24. I make this affidavit bona fide.


AFFIRMED before me in the City )  
of Winnipeg, in the Province )  
of Manitoba, this 5th day of )  
March, 2021. )



\_\_\_\_\_)  
A Barrister-at-law entitled to practice )  
in and for the Province of Manitoba )

  
LANETTE SIRAGUSA

This is Exhibit " A " referred to  
in the Affidavit of Lanette Siragusa  
Affirmed before me this 5<sup>th</sup>  
day of March A.D. 2021

  
A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

---

*Versatile, resourceful senior leader with a background in transforming complex structures and streamlining processes through empowering teams to innovative. Past experiences include leading large scale change including the provincial pandemic response and developing Manitoba's first Clinical and Preventive Services Plan - requiring leveraging talent and resources from across the province, championing best practices, delivering financial savings and public relations. Excellent leadership, communication and liaison skills, thrives under pressure and works well both individually and within a team.*

## WORK EXPERIENCE

---

### **Shared Health, Manitoba (Jul 2017 – Present)**

*Provincial Lead, Health Services Integration and Quality  
Chief Nursing Officer*

- Reporting to the CEO, responsibilities include executive oversight to lead and coordinate the development of Manitoba's first Clinical and Preventive Services Plan and Quality and Learning Framework, through developing a provincial clinical governance structure. As a member of the Transformation Leadership Team, successfully integrated 300+ clinical leaders from different specialties, professions and geographic locations to identify challenges, analyze data, consider evidence and apply leading practices to optimize service delivery. Engagement strategy included 3,000+ senior leaders, local providers and community members from across the province. Accountable for building a shared vision, identifying priority investments and strategic shifts among provincial resources to support delivery of performance targets among multiple different service delivery organizations. Quality priorities include building partnerships through Choosing Wisely Manitoba, Accreditation Canada, Manitoba Centre for Health Policy and Manitoba Institute of Patient Safety. Ongoing efforts include refining the clinical decision making model and implementation roadmap, along with involvement of local stakeholders and collaboration with provincial enabling partners to align Diagnostics, Emergency Response Services, Capital Planning, Digital Health and Health Human Workforce strategies.
- Liaising and coordinating with the Manitoba Nurses Union, the Association of Registered Nurses of Manitoba, multiple educational institutions, three regulatory colleges and nursing leaders within Manitoba's Service Delivery Organizations to advance nursing practice, mitigate risks, resolve operational challenges and develop a long term strategy for the future state, including enhancing scope of practice, standardizing education, building sustainable workforce models and strengthening leadership opportunities. Close collaboration with Human Resources Team in preparing for bargaining process.
- Under the direction of MHSAL and in partnership with Public Health, acted as COVID-19 Incident Co-Commander overseeing health system response. Accountable to align resources, coordinate services, meet fluctuating demands, mitigate high-risk situations, support standards of practice, streamline processes, maximize virtual solutions and evaluate responses, while ensuring service providers were engaged, stakeholders were consulted, and public was informed through multiple communication channels.

**University of Manitoba, Winnipeg, MB***Assistant Professor – College of Nursing, Faculty of Health Sciences (2019-present)**Adjunct Professor – College of Nursing, Faculty of Health Sciences (2010-2018)*

- Responsibilities include guest lecturing in the undergraduate and graduate programs, co-chairing the Nursing Advisory Sub-Committee reporting to the University of Manitoba/Shared Health Joint Council, collaborating on local and national research projects, and participating in various Faculty of Health Sciences committees, including the Pharmacy's Experiential Education Advisory Committee, Rehabilitation Sciences's Strategic Planning and academic searches within the College of Medicine.

**Winnipeg Regional Health Authority, Winnipeg, MB (Sept 2012 – Oct 2017)***Regional Program Director – Surgery & Anaesthesia*

- Reporting to the Senior VP Medical, accountable for overseeing surgical activity among eight large urban facilities, ensuring quality processes were established for optimal outcomes while addressing efficiency, effectiveness, patient safety and staff satisfaction. Within a \$200M budget, ~2,000 surgical staff and ~200 surgeons throughout the city, coordinated capital purchases and developed operational standards such as models of service delivery, policies for patient safety, inaugural online nursing education platform and implemented a digital platform for standardized online surgical scheduling. Led the development of the WRHA Role of Hospitals Surgery & Anaesthesia Plan. Invited to participate in steering the provincial clinical service planning (Peachey Report) and advising on KPMG's Health Sustainability & Innovation Review, resulting in leading the creation of the regional consolidation design approved by government and cited as "*the most significant change in healthcare in a generation*".

**Victoria General Hospital, Winnipeg, MB (Apr 2007 – Nov 2012)***Director of Programs & Patient Services - Surgery, Anaesthesia & Women's Health***Health Sciences Centre, Winnipeg, MB (Jul 2006 – Mar 2007)***Nursing Supervisor – Children's Hospital and Women's Hospital***University of Manitoba, College of Nursing, Winnipeg, MB (Feb 2000 - Aug 2001)***Clinical Facilitator & Academic Advisor***Victorian Order of Nurses, Winnipeg, MB (Jun 1996 – Apr 2000)***Community Health Nurse and Weekend Supervisor***Winnipeg Health Authority, Winnipeg, MB (Mar 1996 – Apr 2001)***Prenatal Course Instructor – Public Health Program***St. Boniface Hospital, Winnipeg, MB (Apr 1995 – Jul 2006)***General Duty Registered Nurse, Labour & Delivery*

---

**EDUCATION**


---

Queen Margaret University, Edinburgh, Scotland, United Kingdom (Sep 2016 – June 2019)  
*Doctorate of Health and Social Sciences Degree (withdrew due to competing priorities)*

National Health System (NHS England): United Kingdom (Oct 2016)  
*Certification – Centre for Health and Social Care Change Agents*

University of Manitoba, Faculty of Health Sciences, College of Nursing (2008)  
*Master of Nursing Degree – Major: Administration (GPA: 3.9)*

University of Manitoba, Faculty of Health Sciences, College of Nursing (1995)  
*Bachelor of Nursing Degree (Dean's Honour List)*

---

**RESEARCH EXPERIENCE**


---

**CIHR Operating Grant 2020 (Knowledge User)**

*COVID-19 Mental Health & Substance Use Service Needs and Delivery.* Principle Investigator: Dr. Else Duff, University of Manitoba.

**CIHR Project Grant 2020 (Co-Applicant)**

*Advancing a Crisis Model for Leadership and Organizational Resilience for the COVID-19 Pandemic and Future Health Care Crises.* Principle Investigator: Dr. Sonia Udod, University of Manitoba.

**CIHR Project Grant 2020 (Collaborator)**

*Working together to implement novel, culturally informed early childhood oral health interventions for young First Nations and Metis children in Manitoba.* Principle Investigator: Dr. Robert Schroth, University of Manitoba.

**CIHR Operating Grant: 2019 (Collaborator)**

*Evaluating Sub-acute Care Hospital Transitions for Older Adults: Understanding How, Why, and for Whom a Planned Intervention Works.* Principle Investigator: Dr. Malcolm Doupe, Manitoba Centre for Health Policy.

**Research Nurse Coordinator: 2003-2007**

INTAPP Study (International Trial of Antioxidants in Preventing Preeclampsia). Principal Investigator: Dr. Michael Helewa, Medical Director Women's Health, St. Boniface Hospital and President of Society of Obstetricians and Gynaecologists of Canada (SOGC).

**Research Assistant, Faculty of Nursing, University of Manitoba: 1993-1995**

Under the direction of biostatistician, Dr. Jeff Sloan, responsibilities included completing data entry, research and correspondence, assisting with submission of grant applications, summarizing research results for publication and teaching SAS statistical computer program to new research assistants.



MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

---

College of Registered Nurses of Manitoba (Registration #136172)  
 Association of Registered Nurses of Manitoba  
 Professional Affiliate - Manitoba Centre for Nursing & Health Research  
 Previous member: Association of Women's Health, Obstetrics & Neonatal Nursing (AWHONN) and  
 Sigma Theta Tau – Xi Lambda (International Nursing Honour Society)

PUBLICATIONS

---

Kreindler, S., Siragusa, L., Bohm, E., Rudnick, W., Metge, C. (2017). Regional consolidation of orthopaedic surgery: impacts and outcomes. *Canadian Journal of Surgery*, 60(5), 349-354. DOI: [10.1503/cjs.000517](https://doi.org/10.1503/cjs.000517)

Thiessen, L., Grabowski, D., Siragusa, L., Young, R.S. (2014). Bridging protocol for surgical patients: One clinic's experience facilitating an anticoagulation intervention. *Journal of PeriAnesthesia Nursing*, 30(1), DOI: <http://dx.doi.org/10.1016/j.jopan.2014.02.006>.

★ Referenced in the National Association of PeriAnesthesia Nurses (NAPAN) Standards of Practice 2016 Manual.

Siragusa, L., Litwack, K., Moos, D.D. (2012). Writing for publication - the expert and the novice: a tale of two authors. *Journal of PeriAnesthesia Nursing*, 27 (3), p. 217-219.

Siragusa, L., Thiessen, L., Grabowski, D., Young, R.S. (2011). Building a better preoperative assessment clinic. *Journal of PeriAnesthesia Nursing*, 26 (4), p. 252-261.

★ Winner of the Mary Hanna Memorial Journalism Award 2012

Siragusa, L. (1996). From student to professional nurse. *The Canadian Nurse*, 92, 5, p.55-56.

SCOLARSHIPS, BURSARIES & AWARDS

---

Nominated: Nursing The Future Excellence Award Strength in the Storm 2021

Top 100 Most Fascinating Manitobans 2020

Canadian Nursing Foundation Nightengale Award 2020

Foundation of Registered Nurses Award 2006, 2007, 2011, 2016

Jane A. Malcolm Bursary 2006, 2011, 2017

Manitoba Health Innovation Award 2015

Mary Hanna Memorial Journalism Award 2012

Queen Margaret University Scholarship 2011

Dr. Victor & Lynn Rosenfield Endowment Scholarship 2011

Frank R.J. Dill Endowment Scholarship 2011

Victor & Cheryl Reynolds Endowment Scholarship 2011

Nominated for University of Manitoba Student/Teacher Award 1995

---

**RECENT CONFERENCES, WORKSHOPS & PROFESSIONAL DEVELOPMENT**


---

- **Presenter:** COVID-19 in Manitoba – Talk Tuesdays. Association of Registered Nurses of Manitoba (Aug18, 2020)
- **Panel Member:** Universal Health Accord Tri-Partate Discussion. Association of Manitoba Chiefs. Winnipeg, MB (Nov12, 2019)
- **Presenter:** Manitoba Nursing Leadership Forum. Winnipeg, MB (Oct25 2019)
- **Keynote Speaker:** Manitoba Medical Device Reprocessing Annual Conference. Winnipeg, MB (Oct19, 2019)
- **Keynote Speaker:** Manitoba Association of Seniors Support Coordinators Annual Conference. Winnipeg, MB (Sept 2019)
- **Panel Member** (with Minister of Health and Shared Health CEO): Association of Manitoba Municipalities Annual Meeting, Winnipeg, MB (Mar20, 2019)
- **Keynote Speaker & Panelist** (with AHS CEO): University of Manitoba Department of Pediatric & Child Health Annual Retreat, Winnipeg, MB (Mar2, 2019)
- **Keynote Speaker** Ongomiizwin Health Services Annual Retreat Winnipeg, MB (Jan19, 2019)
- **Panel Discussion** (with Minister of Health): Modernizing Manitoba's Healthcare System. Manitoba Chamber of Commerce. Winnipeg, MB (Nov1, 2018).
- **Keynote Speaker:** Manitoba Association of Perianesthesia Nursing, Winnipeg, MB (Sep19, 2017)

**Participant:**

- The Imperatives of Anti-Racism in Leadership. Zoom Conference (Sep23, 2020)
- CAN Health Network – Western Edge. Vancouver, BC (Feb4-7, 2020)
- Western Strategic Advisory Collaborative Meeting. CIHI. Vancouver, BC (Nov6-7, 2019)
- Transnational Conference on Integrated Community Care. TransForm. Vancouver, BC (Oct2-4, 2019)
- Choosing Wisely Canada. Montreal, QC (May26-27 2019)
- Canadian Medical Association Health Summit. Winnipeg MB (Aug20 & 21, 2018)
- Transforming Primary Healthcare Symposium. Indigenous Health Partners, Winnipeg MB (Feb21 & 22, 2018)
- Enhanced Recovery After Surgery, Canadian Institute of Patient Safety. Calgary, AB (Jan28, 2017)
- Manitoba Indigenous Cultural Safety Training Workshop. (Apr 2016)
- Regional Truth & Reconciliation Action Planning Session. Indian & Metis Friendship Centre (April13, 2016)
- Summit on Rural Surgery & Operative Delivery: Society of Rural Physicians of Canada. Banff, AB (Jan23, 2016)
- Canadian Institute for Health Information: Manitoba Health System Performance Workshop, Winnipeg MB (Feb10-12, 2015)
- Think Tank: Creating a Meaningful Physician Engagement Model to Enable Health System Transformation in Manitoba. Winnipeg, MB (Jan26 2015)
- Canadian Nurses Association Biennial Conference. Winnipeg, MB (Jun17-19, 2014)
- National Wait Times Alliance: Taming of the Queue, Ottawa, ON (Mar21, 2013).

**VOLUNTEER EXPERIENCES**

---

**Guest Speaker:**

True North Foundation's Project 11

Winnipeg Humane Society's See Spot Read Program

Manitoba Government 's Kids and COVID with VIRGIN 103 radio's Ace Burpee

Board of Directors: Ronald McDonald House Manitoba (2014–18)

Class Representative: Professional Doctorate Programme of Health & Social Sciences, Queen Margaret University, Edinburgh, Scotland (2011–12)

Graduate Student Representative: Distinguished Visitor Committee, College of Nursing, Faculty of Health Sciences, University of Manitoba (2003-05)

Executive Student Council Member: Treasurer (1993-94); Senator (1994-95), College of Nursing, Faculty of Health Sciences, University of Manitoba

File No. CI 20-01-29284

**THE QUEEN'S BENCH**  
**Winnipeg Centre**

**APPLICATION UNDER:** *The Constitutional Questions Act, C.C.S.M., c. 180*

**AND UNDER:** The Court of Queen's Bench Rules, M.R. 553/88

**IN THE MATTER OF:** *The Public Health Act, C.C.S.M. c. P210*

**B E T W E E N:**

**GATEWAY BIBLE BAPTIST CHURCH, PEMBINA VALLEY BAPTIST CHURCH,  
REDEEMING GRACE BIBLE CHURCH, THOMAS REMPEL, GRACE COVENANT  
CHURCH, SLAVIC BAPTIST CHURCH, CHRISTIAN CHURCH OF MORDEN, BIBLE  
BAPTIST CHURCH, TOBIAS TISSEN, ~~DJ'S FAMILY RESTAURANT, LYLE  
NEUFELD, HELEN NEUFELD, ROSS MACKAY~~**

Applicants,

- and -

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF MANITOBA,  
DR. BRENT ROUSSIN in his capacity as CHIEF PUBLIC HEALTH OFFICER OF  
MANITOBA, and DR. JAZZ ATWAL in his capacity as ACTING DEPUTY CHIEF  
OFFICER OF HEALTH MANITOBA**

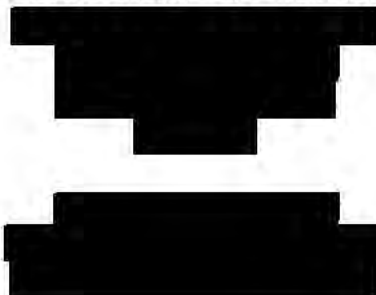
Respondents.

---

**AFFIDAVIT OF SZILVESZTER JOZSEF KOMLODI**  
**AFFIRMED: MARCH 5, 2021**

---

**DEPARTMENT OF JUSTICE**



**THE QUEEN'S BENCH**  
**Winnipeg Centre**

**APPLICATION UNDER:** *The Constitutional Questions Act, C.C.S.M., c. 180*

**AND UNDER:** The Court of Queen's Bench Rules, M.R. 553/88

**IN THE MATTER OF:** *The Public Health Act, C.C.S.M. c. P210*

**B E T W E E N:**

**GATEWAY BIBLE BAPTIST CHURCH, PEMBINA VALLEY BAPTIST CHURCH,  
REDEEMING GRACE BIBLE CHURCH, THOMAS REMPEL, GRACE COVENANT  
CHURCH, SLAVIC BAPTIST CHURCH, CHRISTIAN CHURCH OF MORDEN, BIBLE  
BAPTIST CHURCH, TOBIAS TISSEN, ~~DJ'S FAMILY RESTAURANT, LYLE  
NEUFELD, HELEN NEUFELD, ROSS MACKAY~~**

Applicants,

- and -

**HER MAJESTY THE QUEEN IN RIGHT OF THE PROVINCE OF MANITOBA, DR.  
BRENT ROUSSIN in his capacity as CHIEF PUBLIC HEALTH OFFICER OF  
MANITOBA, and DR. JAZZ ATWAL in his capacity as ACTING DEPUTY CHIEF  
OFFICER OF HEALTH OF MANITOBA**

Respondents.

**AFFIDAVIT OF SZILVESZTER JOZSEF KOMLODI**

I, SZILVESZTER JOZSEF KOMLODI, of the City of Winnipeg, in the  
Province of Manitoba, **AFFIRM AS FOLLOWS:**

1. I have personal knowledge of the facts and matters hereinafter deposed to by me, except where stated to be based upon information and belief, in which case I believe them to be true.
2. I am Assistant Deputy Minister of Fiscal Management and Capital Planning with the Treasury Board Secretariat of the Government of Manitoba. I have been in that position since February 10, 2020. Prior to that, I was the Assistant Deputy Minister for the Finance Research Division of Manitoba Finance. In my current role, I am responsible for keeping track of overall government expenditures, revenues and capital investments, including those related to the COVID-19 pandemic. This includes expenditures on various support programs made available to individuals, businesses and other sectors in response to some of the impacts of the pandemic.
3. The Government of Manitoba is aware that the COVID-19 pandemic has been exceptionally difficult and challenging for many people, both financially and in terms of mental health, among other impacts. The Governments of Manitoba and Canada have made many support programs available to alleviate economic hardship as well as the strain on mental health, including those that may result from the public health restrictions.
4. I have attached the following exhibits to my affidavit, which describe various economic and other support programs related to the pandemic, provided by the Government of Manitoba:

**Exhibit "A"** - A list of resources and support programs available for individuals and businesses, from the Government's website.

**Exhibit “B” – Manitoba Bridge Grant** provides up to a \$15,000 grant to eligible Manitoba businesses and organizations (including home-based businesses) that are required to close their premises as a result of COVID-19 Prevention Orders in effect as of November 12, 2020 or any revisions. On March 2, 2021, the government announced a third round of Bridge Grants bringing the total investment to \$215 million.

**Exhibit “C” – Caregiver Wage Support Program.** This \$35.6 million program provides a \$5 per hour wage supplement to eligible front line workers that provide direct patient or residential care to vulnerable Manitobans between November 1, 2020 and January 10, 2021.

**Exhibit “D” – Dine-in Restaurant Relief Program.** A \$5 million emergency relief fund for businesses announced on December 22, 2020. The funds were provided to the Manitoba Chambers of Commerce to provide financial relief to dine-in restaurants affected by the public health orders made under the level red (critical) response to the pandemic.

**Exhibit “E” - Back to Work in Manitoba Wage Subsidy Programs.** A hiring program designed to support Manitoba’s economic recovery by encouraging employers to bring back their employees or hire new employees. The program covered 50% of wage costs for up to 20 employees, to a maximum of \$5,000 per worker, between July 16 and December 31, 2020. The Summer Student Recovery Jobs Program promoted the hiring of high school and post-secondary students who have been impacted by the COVID-19 pandemic. The program provided wage subsidies to employers from the private and not-for-profit sectors to employ students aged 15 to 29. The total commitment was \$66 million.

**Exhibit “F” - Tax and Fee Deferrals.** A six month deferral of various fees, penalties and interest charges applicable to Manitoba Hydro, Centra Gas, Manitoba Public Insurance, Manitoba Liquor and Lotteries, Workers Compensation Board and municipal partners. The Government of Manitoba also deferred provincial income tax and corporate income tax filing and payment deadlines. The government provided sales tax and payroll tax deferrals. It also directed Manitoba Hydro and Centra Gas not to disconnect customers during these times.

**Exhibit “G” – Manitoba Gap Protection Program.** The program provided a one-time \$6,000 grant to eligible small and medium sized businesses. On November 10, 2020, the program was converted from a forgivable loan to a grant. The government committed \$68 million to this program.

**Exhibit “H” – Manitoba Job Restart Program.** The program provides a taxable financial benefit to a maximum of \$2,000 to Manitobans who return to work for a cumulative 30 hours/week with eligible employers, if they voluntarily stop collecting the Canada Emergency Response Benefit or Canada Emergency Student Benefit. The government committed \$9 million to this program, through the Gap Protection Program.

**Exhibit “I” – Canada-Manitoba Job Grant.** An employer-driven training support program to help Manitobans gain the skills they need to fill available jobs and to help employers develop the skills of their existing workers to meet the requirements of their present job, or to move into a better job. Eligible employers could apply for up to \$10,000 for each individual worker to assist with training costs. Employers that receive funding under the



Canada-Manitoba Job Grant must contribute a minimum of one-third of the eligible training costs. With the maximum government contribution of \$10,000, this means that up to \$15,000 is available, per person, for eligible training costs. The Government of Manitoba committed \$5.7 million to this program.

5. The Government of Manitoba also provided the following economic support programs:

- a) **Pandemic Staffing Support Benefit** - Provides monthly funding to eligible non-profit organizations in the child welfare, adult disability services, and child care sectors, as well as licensed home-based child care providers. The benefit assists with the additional costs of maintaining staffing during the pandemic. Eligible expenses include overtime, sick time and replacement costs due to illness or the need to isolate. As well, Early Learning and Child Care (ELCC) facilities may use the Pandemic Staffing Support Benefit to assist with ongoing staffing costs that continue when public health directs facilities or cohorts to close for a short isolation period. ELCC facilities applying for funding for this reason must not charge parent fees during the designated closure period. The commitment is for \$10 million.
- b) **Support to child care centres** - To ensure dedicated child care spaces are available and prioritized for health-care and other essential front-line workers, while also following public health recommendations for physical distancing, the government established a new \$18-million grant program to help early childhood educators affected by the suspension of child care services. Government also invested \$2 million to create a trust

to provide capital grants to child care providers to ensure safe, quality care.

- c) **Disability Economic Support Program** – This provided a lump-sum \$200 payment to low-income individuals with disabilities who were on Employment and Income Assistance. The cost of this program was \$4.6 million
- d) **Investments to address food insecurity** – The governments of Canada and Manitoba invested up to \$240,000 through the Canadian Agricultural Partnership (CAP) and \$370,000 in provincial funding through Manitoba’s Northern Healthy Foods Initiative to support northern food security projects, recognizing the financial stress caused by the pandemic.
- e) **Manitoba Seniors Economic Recovery** – This \$45 million program provided a one-time \$200 payment to every senior in order to help with the impact of COVID-19.
- f) **Homeless Shelter Response Plan** – Over multiple announcements, the government invested \$4 million to support the ongoing and expanded needs of homeless shelters. This included the creation of additional shelter bed capacity and other supports for homelessness needs, such as addictions treatment.
- g) **Tax relief** - Government accelerated the elimination of sales tax on home and business property insurance, which saved taxpayers \$75 million.

- h) **Risk Recognition Program** – A \$121.8 million program that provided a one-time payment to eligible essential front-line workers who took extraordinary risks to keep Manitobans safe during the period of March 20, 2020 to May 29, 2020 of the COVID-19 pandemic. Based on the number of eligible applicants, it was estimated that successful applicants received \$1,377 (net of 10% withholding tax).
- i) **Long-Term Recovery Fund** - A \$50 million program to encourage the long-term sustainability and adaptation of Manitoba businesses coming out of COVID-19. Organizations such as the Manitoba Chambers of Commerce and Economic Development Winnipeg are working with the province on the allocation of these funds through various program proposals.
- j) **Moratorium on pension plan payments** – The Government of Manitoba temporarily waived certain payments that businesses and charities are required to put into pension plans. This would free up funds to help protect employees and prevent layoffs or shutdown.
- k) **Partnership with Opportunities for Employment** - The government announced an investment of \$1.9 million in a partnership with Opportunities for Employment, a not-for-profit corporation, to deliver three programs to connect Employment and Income Assistance recipients with training and employment services.
- l) **Commercial Rent Assistance** – In partnership with the federal government’s Canada Emergency Commercial Rent Assistance,

Manitoba provided rent relief for small businesses experiencing financial hardship due to COVID-19. Manitoba invested \$5.8 million.

m) **Benefits for redeployed health care workers.** The government committed a total of \$6.8 million to enhance wages and benefits for employees who were redeployed to critical care units, personal care homes, designated COVID-19 units and Alternate Isolation Accommodations.

6. I have attached the following exhibits to my affidavit, which describe mental health, addiction and other supports provided by the Government of Manitoba, related to the pandemic:

**Exhibit “J” – Covid-19 Novel Coronavirus – Care for Your Mental Health** (updated January 24, 2021). This offered two free sessions of confidential online mental health counselling for individuals 16 and older. The AbilitiCBT digital platform is being used for this purpose with an investment by the province of \$4.5 million. The Kids Help Phone was available for those under 16 years of age. Local mental health and addiction organizations adapted the way they offer services during the pandemic. The Addictions Foundation of Manitoba developed webinars to deal with substance use and addiction. Wellness Together Canada also provides free online resources and connects people with peer support, social workers, psychologists and other trained professionals.

**Exhibit “K” – Help Next Door.** A web-based application to connect volunteers ready to provide support to someone during these difficult times.

**Exhibit “L” – Safe at Home Manitoba Grant Program.** Grants provided for projects that encourage Manitobans to stay at home, while improving their quality of life through creative, fun and engaging activities in sports, arts, culture, health and wellness. Examples include online concerts, snow activities, works of art, gaming challenges, virtual yoga classes and neighbourhood decorating contests. On February 22, 2021, the program was expanded to cover more than 300 projects, totalling \$5 million.

7. Other support programs provided by the Government of Manitoba include:

- a) **Personal care home visitation shelters** - Government committed to invest \$56.7 million to build personal care home visitation shelters to allow safe, physically distanced visits to alleviate loneliness during the pandemic.
- b) **Remote Learning Support Centre** – Established to improve the delivery of remote education to students. This was an investment of \$10 million.
- c) **Addictions support** – The government doubled access to naloxone kits in June 2020, as part of the response of COVID-19. Naloxone is an antidote to prevent an opioid overdose death. In December 2020, the government also announced it was making legislative changes to remove barriers to access naloxone to further reduce opioid overdose deaths.

8. I have attached the following exhibits to my affidavit, which describe additional economic support programs related to the pandemic, provided by the Government of Canada.

**Exhibit “M”** – A list of support programs offered by the federal government can be found on the Manitoba Government’s website, including Canada’s COVID-19 Economic Response Plan for businesses and industries.

**Exhibit “N” – Canada’s COVID-19 Economic Response Plan.** A variety of supports for individuals and families include the Canada Recovery Benefit (previously, the Canada Emergency Response Benefit); Canada Recovery Sickness Benefit; Canada Recovery Caregiving Benefit; Mortgage payment deferral. Support for businesses include the Canada Emergency Wage Subsidy; Canada Emergency Business Account interest free loans; Canada Emergency Rent Subsidy; Lockdown support; Highly Affected Sectors Credit Availability Program; Loan Guarantee for Small and Medium Sized Enterprises; Co-Lending Program for Small and Medium Sized Enterprises; Regional Relief and Recovery Fund; Black Entrepreneurship Loan Fund; Mid-Market Financing Program; Mid-Market Guarantee and Financing Program; and the Large Employer Emergency Financing Facility. Support is also available for self-employed individuals and Indigenous businesses.

**Exhibit “O” – Additional Support for Canadian Businesses from the Economic Impact of COVID-19.** This includes deferral of various taxes and customs duties and new business loan programs.

9. The provincial and federal support programs discussed above are not exhaustive and do not cover the entire Government of Manitoba response to the pandemic and associated expenditures.

10. I make this affidavit bona fide.

AFFIRMED before me in the City )  
of Winnipeg, in the Province )  
of Manitoba, this 5th day of )  
March, 2021. )

 )

A Barrister-at-law entitled to practice )  
in and for the Province of Manitoba )

---

SZILVESZTER JOZSEF KOMLODI

**EXHIBIT " A "**

This is Exhibit " A " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



---

A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba



Learn about [Manitoba's vaccine program](#) to help protect Manitobans.



[Printer Friendly](#) [Français](#) [Site Map](#) [Contact Government](#)

[RESIDENT AND ONLINE SERVICES](#) [BUSINESS](#) [GOVERNMENT](#) [VISITORS](#)

[Manitoba.ca](#) > [COVID-19](#) > [Support Programs for Individuals and Businesses](#)

# Protecting Manitobans

## Support Programs for Individuals and Businesses

### Current Situation

**Economic and Fiscal Update - Assessing the impact of COVID-19 in Manitoba -**  
[Read the document \(pdf\)](#)

### Public Health Orders

Public health orders were issued on March 30th and come into effect at 12:01 a.m. on April 1. Please visit the [State of Emergency](#) page to see if these orders affect your business or workplace.

### B2B Manitoba

B2B Manitoba is an online marketplace to connect non-medical grade personal protective equipment (PPE) suppliers with businesses who may need PPE to open and operate safely. Learn more at <https://b2bmanitoba.ca>

[Manitoba Bridge Grant](#)

[Bridge Grant - Home Based Businesses](#)

[Caregiver Wage Support Program \(CWSP\)](#)

[Dine-in Restaurant Relief Program](#)

[Premier's Economic Opportunities Advisory Board](#)

[Back to Work in Manitoba Wage Subsidy Program](#)

[B2B Manitoba](#)

[StudentJobsMB](#)

[HelpNextDoorMB](#)

[Federal Programs](#)


[Tax and Fee Deferrals](#)

[Mental Health: Virtual Therapy Program](#)

[Manitoba Economic Support Center](#)

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)

**Manitoba** 

**EXHIBIT " B "**

This is Exhibit " B " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

Learn about [Manitoba's vaccine program](#) to help protect Manitobans.



[Printer Friendly](#) [Français](#) [Site Map](#) [Contact Government](#)

[RESIDENT AND ONLINE SERVICES](#)[BUSINESS](#)[GOVERNMENT](#)[VISITORS](#)

[Manitoba.ca](#) > [COVID-19](#) > [Support Programs for Individuals and Businesses](#)

## Get Started

[Support Programs for  
Individuals and Businesses](#)

[Manitoba Bridge Grant](#)

[Manitoba Bridge Grant -  
Home Based Businesses](#)

[Caregiver Wage Support  
Program](#)

[Manitoba Economic Support  
Centre](#)

[Premier's Economic  
Opportunities Advisory Board](#)

[Back to Work in Manitoba  
Wage Subsidy Program](#)

[B2B Manitoba](#)

[StudentJobsMB](#)

[Help Next Door](#)

[Federal Programs](#)

[Tax and Fee Deferrals](#)

# Protecting Manitobans

## Manitoba Bridge Grant

### Notice:

**Beginning January 8, 2021, the Manitoba Government will begin issuing a second payment to eligible applicants that applied for a Bridge Grant during the period of November 16 - December 31, 2020.**

- Bridge Grant recipients will receive a payment in the amount of \$5,000 whereas Bridge Grant for Home-Based Businesses recipients will receive a payment equal to their 2020 payment to a maximum of \$5,000.
- Payments will be **issued without any action on the part of the applicant** and will be deposited to the same bank account provided in the initial application.
- Recipients will receive email confirmation once the transaction has been processed. Please allow up to 48 hours following notification for the funds to be deposited into your bank account.

- Applications submitted before closure of the application window that are currently in the adjudication phase, will be eligible for the second payment if their application is approved.
- This payment is considered taxable business income.
- If you would like to opt out of the program, repay the funds, or if a payment has been made to you in error, please see the FAQs below.
- Please allow up to five business days for the process to be completed. If you have not received your second payment by January 15, 2021, please contact the Manitoba Bridge Grant administration office. Contact information, along with your Application Confirmation number, is located on the approval email that accompanied your 2020 payment.

*January 27, 2021*

#### **On this page:**

- [Program Overview](#)
- [Eligibility Criteria](#)
- [Organizations that do not qualify include](#)
- [Application Documents](#)
- [How to Submit Your Application](#)
- [Common Questions and Answers](#)

---

## **Program Overview**

- The Manitoba Bridge Grant provides a \$10,000 grant to eligible Manitoba businesses and organizations that are required to fully close their premises to the public as a result of Manitoba COVID-19 Prevention Orders in effect as of November 12, 2020

or any revisions to those Orders.

- If you operate a **home-based business** that has been impacted by COVID-19 Prevention Orders, please visit the [Manitoba Bridge B - Home-Based Business Support](#) page.
- A business or organization is defined as:
  - Sole proprietorship
  - Partnership
  - Corporation
  - Co-operative
  - Non-share corporation
  - Not-for-profit organization
  - Registered Charity
- To qualify:
  - the business or organization must be actively operating or conducting business in Manitoba immediately prior to the implementation of applicable public health orders;
  - the business or organization was required to fully close their premises to the public as a result of Manitoba COVID-19 Prevention Orders in effect as of November 12, 2020 or any revisions to those Orders.
  - For Businesses: businesses **not identified** in Schedule A - "Businesses Permitted to Open", **are eligible for the Bridge Grant**. To view a listing of businesses permitted to open, please visit the [summary page](#).
- **Exceptions:**
  - Eligible businesses and organizations that seek alternative ways to provide services to the public despite having to fully close their premises as a result of Manitoba COVID-19 prevention orders are eligible to apply.
  - Community clubs and Community Centres that had their premises ordered closed to the public by the relevant municipality on or after November 12, 2020 to prevent the spread of the COVID-19 are eligible to apply.
  - By exception to Schedule A - "Business Permitted to Open" of the public health order, the following business

are eligible for the Manitoba Bridge Grant

- Manitoba hotels, resorts, lodges and outfitters;
  - Travel agencies;
  - Janitorial services businesses;
  - Carnival operators;
  - Licensed Owner-operators of a licensed passenger transportation business for individuals.
- 
- Please ensure to apply to the correct program stream. For home-based businesses, please apply to the [Bridge Program for Home-Based Businesses](#).
  - the business or organization must operate a physical location in the region to which the public health order applies to:  
Region are as follows:
    - Interlake-Eastern Region
    - Northern Region
    - Prairie Mountain Region
    - Southern Health-Santé Sud Region
    - Winnipeg Metropolitan Region
  - Eligible businesses or organizations will receive a grant of \$10,000 per entity irrespective of the number of locations operated (i.e. one grant per business or organization).
  - The program application deadline is March 31, 2021.
  - The application deadline is subject to change as determined by the Manitoba government.
  - The Manitoba Bridge Grant is taxable income.

---

## Eligibility Criteria

To receive support from the Manitoba Bridge Grant, a business or

organization must meet all of the following criteria:

- be a permanent, Manitoba-based business or organization physically operating in the Province of Manitoba;
- have been actively operating or conducting business on November 9, 2020;
- operate as a sole proprietorship, partnership, corporation, co-operative, non-share corporation, not-for-profit organization, or registered charity;
- possess an active and valid Business Number;
- be in good standing with the Manitoba Companies Office (not required for sole proprietors and registered charities);
- have been required by Manitoba COVID-19 Prevention Orders in effect as of November 12, 2020, or any revisions to those Orders, to fully close their premises to the public;

Note:

- Community clubs and Community Centres that had their premises ordered closed to the public by the relevant municipality on or after November 12, 2020 to prevent the spread of the COVID-19 are eligible.
- Manitoba hotels, resorts, lodges and outfitters, travel agencies, janitorial services businesses, carnival operators, and owner-operators of a licensed passenger transportation business for individuals are eligible.
- have an e-mail address and a valid business bank account with a Canadian financial institution.

---

## Organizations that do not qualify include

- **Business** identified in Schedule A of the public health order.
- Business and organizations that continue to operate, but were required to limit the number of occupants within their premises as a result of COVID-19 Prevention Orders in effect as of November 12, 2020 or any revisions to those Orders;



- the following businesses or organizations are not eligible:
  - agriculture or farming industries;
  - real estate agents;
  - self-employed sales persons or commissioned-based sales;
  - health professionals;
  - lawyers, paralegals, accountants, translators, veterinarians, engineers or geoscientists;
  - businesses operating under a regulatory body of a profession;
  - businesses that deals in securities or manages financial portfolios or that provides financial services;
  - businesses that conduct multilevel marketing;
  - businesses that do not exist for the purpose of carrying on an active business in Manitoba; - passive businesses are not eligible\*;

**\*Passive income** is income that is derived from the ownership of capital property or assets that generate income without excessive effort on the part of the stakeholder. Examples of passive income include rental revenue, dividends, royalties etc.

- Businesses or organizations that were in arrears for taxes owing to Manitoba on March 20, 2020 (i.e., before the first state of emergency), and that have not since rectified the amount in arrears (note: this does not include businesses that have deferred tax remittances incurred between April and September 2020).

---

## How to Submit Your Application

Eligibility is determined based on information provided in the application form. The grant will be approved based on meeting the eligibility requirements.

---

## Application Documents

Before proceeding to the online application, ensure you have the following information ready:

- Your Business Number, Companies Office Registry Number, Workers Compensation Board or Retail Sales Tax account numbers (as applicable)
- The business or organization's bank account information
- Your Social Insurance Number, if you are applying as a sole proprietor or partnership, when the partner is an individual. The applicant must be the sole-proprietor, partner, director, or authorized representative of the business or organization.

**If you require assistance in completing the online form, please contact**

Manitoba Government Inquiry

204-945-3744

1-866-MANITOBA (1-866-626-4862)

**Apply here:** <https://forms.gov.mb.ca/bridge-grant/>

---

## Common Questions and Answers

› [Who is eligible to apply for the Manitoba Bridge Grant \(MBG\)?](#)

› [Can I apply for the grant if my occupancy limit has been decreased as a result of COVID-19 Prevention Orders?](#)

› [My business operates a restaurant and was required to fully close its premises to the public as a result of Manitoba COVID-19 prevention orders, however, I still provide food via takeout and/or delivery. Can I still apply?](#)

- ▶ My business operates a retail store and was required to fully close its premises to the public as a result of Manitoba COVID-19 prevention orders, however, I still provide curbside pickup. Can I still apply?
  
- ▶ My business or organization was required to fully close its premises to the public as a result of Manitoba COVID-19 Prevention Orders, but I am still providing services online or via delivery or curbside pickup. Can I still apply?
  
- ▶ What is the deadline for submitting my application?
  
- ▶ Can all Manitoba businesses or organizations apply for the Manitoba Bridge Grant?
  
- ▶ My industry is not listed on the application. Do I still qualify for the Manitoba Bridge Grant?
  
- ▶ My business already received funding from the Manitoba Gap Protection Program, do I still qualify for the Manitoba Bridge Grant?
  
- ▶ If my business received funding from the Manitoba Gap Protection Program, do I automatically qualify for the Manitoba Bridge Grant?
  
- ▶ Will I have to pay the Manitoba Bridge Grant amount back?
  
- ▶ I currently have a Manitoba business or organization registered with the Manitoba Companies Office or Canada Revenue Agency, but I have not

**declared any income. Does my business or organization still qualify for the Manitoba Bridge Grant?**

- ▶ **How do I apply for the Manitoba Bridge Grant?**
- ▶ **How much will I receive from the Manitoba Bridge Grant?**
- ▶ **I submitted my application, how long will it take to receive my payment?**
- ▶ **My business partner applied for the grant can I also apply for one?**
- ▶ **My business entity or organization operates more than one location. Is it eligible for more than one grant of \$10,000?**
- ▶ **Is the Manitoba Bridge Grant taxable?**
- ▶ **I didn't receive a confirmation email, was my application successfully submitted?**
- ▶ **Am I eligible to receive a second payment?**
- ▶ **I applied to the program in error and would like to repay the funds, what do I do?**

Learn about [Manitoba's vaccine program](#) to help protect Manitobans.

[Printer Friendly](#) [Français](#) [Site Map](#) [Contact Government](#)



Search for programs and online services

Search

RESIDENT AND ONLINE SERVICES BUSINESS GOVERNMENT VISITORS

Manitoba.ca > COVID-19 > Support Programs for Individuals and Businesses

### Get Started

Support Programs for  
Individuals and Businesses

Manitoba Bridge Grant

**Manitoba Bridge Grant -  
Home Based Businesses**

Caregiver Wage Support  
Program

Manitoba Economic Support  
Centre

Premier's Economic  
Opportunities Advisory Board

Back to Work in Manitoba  
Wage Subsidy Program

B2B Manitoba

StudentJobsMB

Help Next Door

Federal Programs

Tax and Fee Deferrals

## Protecting Manitobans

### Manitoba Bridge Grant - Home Based Businesses

#### Notice:

**Beginning January 8, 2021, the Manitoba Government will begin issuing a second payment to eligible applicants that applied for a Bridge Grant during the period of November 16 - December 31, 2020.**

- Bridge Grant recipients will receive a payment in the amount of \$5,000 whereas Bridge Grant for Home-Based Businesses recipients will receive a payment equal to their 2020 payment to a maximum of \$5,000.
- Payments will be **issued without any action on the part of the applicant** and will be deposited to the same bank account provided in the initial application.
- Recipients will receive email confirmation once the transaction has been processed. Please allow up to 48 hours following notification for the funds to be

deposited into your bank account.

- Applications submitted before closure of the application window that are currently in the adjudication phase, will be eligible for the second payment if their application is approved.
- This payment is considered taxable business income.
- If you would like to opt out of the program, repay the funds, or if a payment has been made to you in error, please see the FAQs below.
- Please allow up to five business days for the process to be completed. If you have not received your second payment by January 15, 2021, please contact the Manitoba Bridge Grant administration office. Contact information, along with your Application Confirmation number, is located on the approval email that accompanied your 2020 payment.

#### On this page:

- [Program Overview](#)
- [Eligibility Criteria](#)
- [Entitlement](#)
- [How to Submit Your Application](#)
- [Common Questions and Answers](#)

---

## Program Overview

Beginning January 13, 2021, the Manitoba Bridge Grant - Stream B Home-Based Business Support provides a maximum grant equal of up to \$10,000 to eligible **full-time Manitoba home-based businesses** that have been impacted by Manitoba COVID-19 Prevention Orders in effect as of November 12, 2020 or any revisions to those Orders.

- Qualifying applicants will receive a grant equal to **10 per cent of their 2019 gross income multiplied x two, to a maximum contribution of \$10,000.**
- For businesses that have completed a partial year in 2019, **the 2019 income will be annualized.** The benefit will be equal to 10 per cent of annualized income multiplied x two, to a maximum contribution of \$10,000, and is based on adjudication and determination by the Administration Office.
- For business that have launched in 2020 - the income generated from January 1, 2020 to October 31, 2020 will be annualized. The benefit will be equal to 10 per cent of annualized income multiplied x two, to a maximum contribution of \$10,000 and is based on adjudication and determination by the Administration Office.
- A business is defined as a:
  - Sole proprietorship;
  - Partnership;
  - Corporation;
  - That operates from a domicile - "home-based business"
- Businesses that have applied to the Manitoba Bridge Grant - Stream A are not eligible.
- The program deadline is March 31, 2021.

---

## Eligibility Criteria

### To qualify:

- be a permanent, home-based business located in Manitoba physically operating in the Province of Manitoba;
- have been actively operating or **conducting business on November 9, 2020;**
- operate as a sole proprietorship, partnership or corporation;
- possess an active and valid Business Number;

- be in good standing with the Manitoba Companies Office (not required for sole proprietors operating under their personal names who are not registered with the Companies Office);
- businesses started **before** January 1, 2020 must have filed a 2019 income tax return;
- businesses started **after** January 1, 2020 must provide a record of gross income generated in 2020;
- have an e-mail address and a valid business bank account with a Canadian financial institution;
- must operate on a full-time basis.

#### **Business Requirements:**

- The business must be a home-based business;
- must operate on a full-time and permanent basis;
- must be actively operating or conducting business in Manitoba immediately prior to the implementation of applicable public health orders;
- must have filed a 2019 tax return (T1 for sole proprietors and partnerships or T2 for corporations);
- **for businesses started after January 1, 2020** - must have proof of gross income generated between January 1, 2020 and October 31, 2020.
- impacted by Manitoba COVID-19 Prevention Orders in effect as of November 12, 2020 or any revisions to those orders;
- operate in the region to which the public health order applies to:
  - Interlake-Eastern Region
  - Northern Region
  - Prairie Mountain Region
  - Southern Health-Santé Sud Region
  - Winnipeg Metropolitan Region

#### **Applicant Requirements:**

- **Sole Proprietors and Partnerships** - the applicant be the registrant on record with the Canada Revenue Agency for the



Business Number used to apply for the program.

- **Corporation Shareholder(s)** - The applicant must be a shareholder of the applicant corporation.

---

## Entitlement

Eligible businesses will receive a grant in the amount equal to 10 per cent of their 2019 eligible gross business income multiplied x two, to a maximum of \$10,000.

- **For businesses that have completed a partial year in 2019**, the 2019 income will be annualized. The benefit will be equal to 10 per cent of annualized income multiplied x two, to a maximum of \$10,000, and is based on adjudication and determination by the Administration Office;
- **For business that have launched in 2020** - the gross income generated from January 1, 2020 to October 31, 2020 will be annualized. The benefit will be equal to 10 per cent of annualized income multiplied x two, to a maximum of \$10,000 and is based on adjudication and determination by the Administration Office;
- The program application deadline is March 31, 2021;
- The application deadline is subject to change as determined by the Manitoba government;
- The Manitoba Bridge Grant is taxable income.

### **Businesses that do not qualify include:**

- Businesses that are not home-based businesses;
- businesses that do not operate on a full-time, permanent basis;
- businesses that were not impacted by COVID-19 Manitoba prevention orders;
- the following businesses are not eligible:
  - agriculture or farming industries;
  - real estate agents;

- self-employed sales persons or commissioned-based sales;
- health professionals;
- lawyers, paralegals, accountants, translators, veterinarians, engineers or geoscientists;
- businesses operating under a regulatory body of a profession;
- businesses that deals in securities or manages financial portfolios or that provides financial services;
- businesses that conduct multilevel marketing;
- businesses that do not exist for the purpose of carrying on an active business in Manitoba; - passive businesses are not eligible\*;

\***Passive income** is income that is derived from the ownership of capital property or assets that generate income without excessive effort on the part of the stakeholder. Examples of passive income include rental revenue, dividends, royalties etc.

- businesses that were in arrears for taxes owing to Manitoba on March 20, 2020 (i.e., before the first state of emergency), and that have not since rectified the amount in arrears (note: this does not include businesses that have deferred tax remittances incurred between April and September 2020);
- businesses that have applied to the Manitoba Business Grant Stream A.

---

## How to Submit Your Application

### Application Documents

Before proceeding to the online application, ensure you have the following information ready:

- Your Business Number, Companies Office Registry Number, Workers Compensation Board or Retail Sales Tax account numbers (as applicable);
- 2019 Income Tax Return. For sole proprietors or partnerships, an image (.jpg or jpeg) of page 2 of the Statement of Business and Investment Income T2125, showing line 8299;

- for corporations, an image (.jpg or jpeg) of page 1 of Schedule 125 - Income Statement Information;
- for businesses started in 2020 - proof of income generated from January 1, 2020 to October 31, 2020 (e.g. image (.jpg or .jpeg) of trial balance or sales ledgers);
- the business' bank account information (personal bank accounts will not be accepted unless you are a sole proprietor operating without a registered business name), including an image (.jpg or jpeg) of a void cheque;
- your Social Insurance Number, if you are applying as a sole proprietor or partnership, when the partner is an individual. The applicant must be the sole-proprietor, partner, director, or authorized representative of the business or organization.
- **If you require assistance in completing the online form, please contact:**

Manitoba Government Inquiry  
204-945-3744  
1-866-MANITOBA (1-866-626-4862)

**Apply here:** [forms.gov.mb.ca/bridge-grant-stream-b/](https://forms.gov.mb.ca/bridge-grant-stream-b/)

---

## Common Questions and Answers

- › **Who is eligible to apply for the Manitoba Bridge Grant - Stream B**
- › **What is the deadline for submitting my application?**
- › **Can all Manitoba businesses apply for the Manitoba Bridge Grant- Stream B?**
- › **If my business received funding from the Manitoba Gap Protection Program, do I automatically qualify for the Manitoba Bridge Grant - Stream B?**

› If my business received funding from the Manitoba Bridge Grant- Stream A, am I eligible for the Manitoba Bridge Grant for Home-Based Businesses?

› What is the payment that I'll receive?

› Will I have to pay the Manitoba Bridge Grant amount back?

› I currently have a Manitoba home-based business registered with the Manitoba Companies Office or Canada Revenue Agency, but I have not declared any income. Does my business still qualify for the Manitoba Bridge Grant?

› How do I apply for the Manitoba Bridge Grant?

› I submitted my application, how long will it take to receive my payment?

› My business partner applied for the grant can I also apply for one?

› Is the Manitoba Bridge Grant taxable?

› I didn't receive a confirmation email, was my application successfully submitted?


› What are the terms and conditions of the Manitoba Bridge Grant?

› Who can assist me if I have more questions about my application?

- › [Am I eligible to receive a second payment?](#)
- › [I applied to the program in error and would like to repay the funds, what do I do?](#)

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)

**Manitoba** 

**EXHIBIT " C "**

This is Exhibit " C " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March, A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

Learn about [Manitoba's vaccine program](#) to help protect Manitobans.



[Printer Friendly](#) [Français](#) [Site Map](#) [Contact Government](#)

Search for programs and online services

Search

[RESIDENT AND ONLINE SERVICES](#) [BUSINESS](#) [GOVERNMENT](#) [VISITORS](#)

Manitoba.ca > COVID-19 > Support Programs for Individuals and Businesses

## Get Started

[Support Programs for Individuals and Businesses](#)

[Manitoba Bridge Grant](#)

[Manitoba Bridge Grant - Home Based Businesses](#)

[Caregiver Wage Support Program](#)

[Manitoba Economic Support Centre](#)

[Premier's Economic Opportunities Advisory Board](#)

[Back to Work in Manitoba Wage Subsidy Program](#)

[B2B Manitoba](#)

[StudentJobsMB](#)

[Help Next Door](#)

[Federal Programs](#)

[Tax and Fee Deferrals](#)

# Protecting Manitobans

## Caregiver Wage Support Program (CWSP)

### On this page:

- [Program Overview](#)
- [Financial Benefit](#)
- [Who is Eligible to Receive This Benefit?](#)
- [Application Process](#)
- [Common Questions and Answers](#)

## Program Overview

The \$35 million Caregiver Wage Support Program provides a \$5 per hour wage supplement to eligible front-line workers that provide direct patient or residential care to vulnerable Manitobans, between November 1, 2020 and January 10, 2021.

---

## Financial Benefit

- Eligible applicants will receive a \$5 per hour wage supplement.
- Eligible hours include actual regular and overtime hours worked between November 1, 2020 and January 10, 2021, performed in an eligible position and facility.
- A 10 per cent withholding tax will be remitted to the Canada Revenue Agency on the applicant's behalf.
- A T4A information slip will be issued to applicants for inclusion in their 2020 and 2021 income tax returns.

---

## Who is Eligible to Receive This Benefit?

To be eligible for this program **applicants must meet all of the criteria:**

- Earn a regular wage of \$25/hr or less excluding shift premiums and overtime rates.
- Work in one or more of the following positions:
  - Health care aide or equivalent
  - Housekeeping staff
  - House Supervisor
  - Direct Service Worker (CLDS, CFS, FVPP and Shelters)
  - Youth Care Worker/ Practitioner
  - Recreation Worker
  - Rehabilitation Worker

Note: following positions are not eligible for the Caregiver Wage Support Program:

- Dietary aides, nutritional aides, kitchen staff, maintenance



staff, home care workers, reception, administration or clerical staff.

- Work in one or more of the following facilities:
  - Child and Family Services (CFS) Group Home
  - Community Living disABILITY Services (CLDS) shift-staffed group home or 24/7 cluster living arrangement
  - Emergency Placement Resources shelter
  - Family violence prevention shelter
  - Homeless shelter
  - Personal care home
  - Retirement residence
  - Supportive housing residence
  
- Possess a valid Social Insurance Number (SIN), e-mail address and a valid Canadian bank account.

Note:

- The hours claimed may include:
  - regular hours worked in an eligible position and facility;
  - overtime hours worked in an eligible position and facility
  - Only report the actual hours worked. Example: if you worked 8 hours of overtime at "time and a half", please report 8 hours, and not 12 hours because it was "time and a half."
  
- The following are not eligible to be claimed as "hours worked":
  - vacation time, or hours away from the workplace;
  - sick time in which you did not work;  
**Always follow the Manitoba COVID-19 prevention orders as well as your employer's guidelines.**
  - time away from work when in self-isolation due to COVID-19 exposure or other;
  - hours worked in a non-eligible position with an eligible employer.

## Application Process

- The program will accept applications in the following intake windows;
  - **Application Intake 1:** December 7, 2020 to December 14, 2020
    - applicants will be required to report the number of eligible hours worked for the period of November 1, 2020 - December 6, 2020.
  - **Application Intake 2:** January 11, 2021 - January 18, 2021
    - applicants will be required to report the number of eligible hours worked for the period of December 7, 2020 - January 10, 2021.
- Payment will be made within five business days following the closure of the application intake window.
- Please allow up to 48 hours for the funds to be deposited into your account after receiving payment notification.



### Sample Claim

An employee that worked for 125 hours in an eligible position between November 1, 2020 to December 6, 2020:

- Must submit their claim during application intake 1 (December 7, 2020 - December 14, 2020).
- Their first wage support payment will be \$625 (\$5 per hour X 125 hours) less a 10 per cent withholding tax, for a net payment of \$562.50.
- The payment will be issued by December 21, 2020.

If the same person wants to claim hours worked from December 7,

2020 and January 10, 2020, they would need to submit a new claim for application intake 2 January 11, 2021 to January 18, 2021.

Following the closing of Application Intake 2, approved claimants will receive payment by January 25, 2020.

---

## How to Submit Your Application

The Intake window is now closed. Thank you for your interest in the Caregiver Wage Support Program.

---

## Common Questions and Answers

- ▶ [Where can I find my Intake 1 Application Confirmation Number?](#)
  
- ▶ [When will I be able to apply?](#)
  
- ▶ [When will I receive a payment?](#)
  
- ▶ [How much should I expect to receive?](#)
  
- ▶ [Is there a maximum or minimum number of hours that I need to work in order to qualify for the program?](#)
  
- ▶ [How much do I need to earn in order to qualify for the program?](#)
  
- ▶ [Will I automatically receive funds through my employer?](#)

- ▶ [Do hospital workers qualify?](#)
  
- ▶ [Which job titles or positions qualify for this benefit?](#)
  
- ▶ [I applied for the program in error, or reported hours incorrectly. How do I repay funds that I have received in error?](#)

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)

**Manitoba** 

**EXHIBIT " D "**

This is Exhibit " D " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba



## Dine-in Restaurant Relief Program

The Manitoba Chambers of Commerce in partnership with the Manitoba Restaurant and Foodservices Association has opened the online application process for the *Dine-in Restaurant Relief Program*, a new COVID-19 emergency relief fund for businesses announced on December 22, 2020.

This program is funded by a \$5-million grant from the Province of Manitoba and is intended to provide financial relief to dine-in restaurant operators who have been affected financially by Critical (red) level restrictions of the #RestartMB Pandemic Response System.

The program is designed to provide a rebate to traditionally dine-in restaurants across Manitoba that have shifted to a food delivery model as a result of COVID-19 prevention orders prohibiting dining room operation. The rebate will help offset costs related to delivery services, whether a restaurant provides its own delivery service or uses a third-party delivery company.



Learn more and apply for relief now!



# Dine-in Restaurant Relief Program Application

On December 22, 2020 the Manitoba government announced it is providing \$5 million in financial relief to dine-in restaurants that have been affected financially by the province moving to Critical (red) on the #RestartMB Pandemic Response System and resulting public health orders.

Based on a recommendation from business leadership and stakeholders, the \$5-million Dine-in Restaurant Relief Program will be delivered by the Manitoba Chambers of Commerce in partnership with the Manitoba Restaurant and Foodservices Association and Economic Development Winnipeg.

The program is designed to provide a rebate to dine-in restaurants across Manitoba that have had to significantly shift operations to a delivery model as a result of moving to Critical (red) and subsequent public health orders. The rebate will help offset additional costs of this operations shift related to food delivery services, whether a restaurant provides its own delivery service or uses a third-party delivery company.

1. Online application process to begin on Wednesday, January 6, 2021 at noon CST.
2. Two Step application process
  - i. Applicant completes initial online application which is then vetted to determine if they are eligible for program.
  - ii. If eligible applicant asked to upload monthly delivery invoices via online portal for reimbursement which is vetted again.
3. If approved applicant would receive reimbursement by Electronic Funds Transfer.
4. Applications can be made monthly for November (retroactive to when community went in to Critical (Red) on the #RestartMB Pandemic Response System), December and January.

## Attestations

Does your organization operate a bar or restaurant? \*

Yes

No

Privacy Policy | Manitoba Chambers of Commerce | Economic Development Winnipeg  
Manitoba Restaurant & Food Services Association | Province of Manitoba

**Collaguazo, Gonzalo (JUS)**

---

**From:** News Media Services <[REDACTED]>  
**Sent:** December 22, 2020 11:32 AM  
**To:** Conner, Michael (JUS)  
**Subject:** Manitoba News Release: Province Provides \$5 Million to Support Manitoba Restaurants Impacted by COVID-19 Restrictions

**NewsRelease**

December 22, 2020

**PROVINCE PROVIDES \$5 MILLION TO SUPPORT MANITOBA  
RESTAURANTS  
IMPACTED BY COVID-19 RESTRICTIONS**

---

**Committed to Protecting  
Manitoba Small Businesses: Pallister**

The Manitoba government is providing \$5 million to the Manitoba Chambers of Commerce to develop a program that provides financial relief to dine-in restaurants that have been affected financially by the province moving to Critical (red) on the #RestartMB Pandemic Response System and resulting public health orders, Premier Brian Pallister announced today.

"Manitoba's restaurant community has made significant sacrifices in order to help halt the spread of this deadly virus and protect all Manitobans during this crucial time in our fight against COVID-19," said Pallister. "Many businesses have taken on additional costs to adapt their operations to comply with public health orders and safely provide Manitobans with the services they rely on while supporting their efforts to stay home. Our government continues to work with the business community to identify industry needs and help target our support to help offset new expenses."

Based on a recommendation from business leadership and stakeholders, the \$5-million Dine-in Restaurant Relief Program will be delivered by the Manitoba Chambers of Commerce in partnership with the Manitoba Restaurant and Foodservices Association. The program will be designed to provide a rebate to dine-in restaurants across Manitoba that have shifted to a delivery model as a



For more information:

- Public information, contact Manitoba Government Inquiry: 1-866-626-4862 or 204-945-3744.
- Media requests for general information, contact Communications Services Manitoba: 204-945-3765.
- Media requests for ministerial comment, contact Communications and Stakeholder Relations: 204-945-4916.

*Please be advised that this email account is not monitored for inquiries or followup questions. You can also follow us [www.twitter.com/mbgovnews](http://www.twitter.com/mbgovnews). Ce compte de courriel n'est pas surveillé et vous ne recevrez pas de réponse à vos demandes d'information ou questions. Vous pouvez aussi nous suivre au [www.twitter.com/mbgovnews](http://www.twitter.com/mbgovnews)*

[Click here to manage your subscriptions](#)

**EXHIBIT " E "**

This is Exhibit " E " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

Learn about [Manitoba's vaccine program](#) to help protect Manitobans.



[Printer Friendly](#) [Français](#) [Site Map](#) [Contact Government](#)

Search for programs and online services

Search

RESIDENT AND ONLINE SERVICES BUSINESS GOVERNMENT VISITORS

Manitoba.ca > COVID-19 > Support Programs for Individuals and Businesses

## Get Started

Support Programs for  
Individuals and Businesses

Manitoba Bridge Grant

Manitoba Bridge Grant -  
Home Based Businesses

Caregiver Wage Support  
Program

Manitoba Economic Support  
Centre

Premier's Economic  
Opportunities Advisory Board

**Back to Work in Manitoba  
Wage Subsidy Program**

B2B Manitoba

StudentJobsMB

Help Next Door

Federal Programs

Tax and Fee Deferrals

# Protecting Manitobans

## Back to Work in Manitoba Wage Subsidy Program

### On this page:

- [Program Overview](#)
- [Employer eligibility criteria](#)
- [Financial support](#)
- [Employer obligations:](#)
- [How to submit your application](#)
- [Common Questions and Answers](#)

## Program Overview

The Back to Work Manitoba initiative is a hiring program designed to support Manitoba's economic recovery by encouraging Manitoba

employers to bring back their employees or take on new hires. The program covers 50 per cent of wage costs between July 16 and December 31, 2020. Employers can be supported to hire up to 20 employees.

---

### **November 10, 2020 Program Update:**

Employers that applied to the program on or before November 9 are eligible to receive an advance payment of \$1,500 for every eligible worker hired or re-hired to date under the program. Employers will receive an email advising of the advance. The email will include a link to request confirmation of the number of eligible employees hired and other information required to process payment. Employers that re-hire workers laid off as a result of restrictions under the #RestartMB Pandemic Response System are eligible for the subsidy. Employers will receive their balance of payment upon providing proof of payment of wages by February 1, 2021.

---

## **Employer eligibility criteria**

The program is open to all private sector and non-profit employers who are operating in Manitoba and meet all of the following criteria:

- Manitoba-based businesses and non-profit organizations operating in the Province of Manitoba, including new startups, are eligible.
- Employers must possess an active and valid Business Number, business bank account, and e-mail address.
- Employers must be registered, and in good standing with the Companies Office (not required for sole proprietors).
- Employers can hire 20 new or rehired employees under this program.

Employers cannot receive funding for any existing employees that are

or have been subsidized by another government program. This includes, but is not limited to, the Canada Summer Job Program, Green Team, Canada Emergency Wage Subsidy, Manitoba Back to Work this Summer Program and Manitoba Summer Student Recovery Jobs Program. (This does not include the Federal government's 10 per cent Temporary Wage Subsidy for Employers.)

Employers that received support under the Manitoba Back to Work this Summer Program and Manitoba Summer Student Recovery Jobs Program are eligible to receive support to hire 20 new or rehired employees under this program.

**September 14, 2020 Program Update:** Employers can apply under Back to Work Manitoba to rehire students that they previously employed under a summer wage subsidy program. This includes employers that previously hired students through the Manitoba Summer Student Recovery Jobs Program, Canada Summer Job Program and Green Team Program. The student must have been laid off prior to the announcement of this policy update (September 14, 2020) or as a result of restrictions resulting from the #RestartMB Pandemic Response System.

The following employers are not eligible:

- Employers are not eligible if they were in arrears for taxes owing to Manitoba on March 20, 2020 (i.e., before the state of emergency), and that have not since rectified this amount in arrears. (This does not include businesses that have deferred taxes as a result of COVID-19 relief programs to defer tax remittances.)
- Employers that conduct multilevel marketing are not eligible, nor are passive businesses or corporate entities that do not exist for the purpose of carrying on an active business in Manitoba.
- Employers that currently have an active Manitoba Business Start Loan Guarantee, a loan under the Manitoba Industrial Opportunities Program, or an agreement under The Community Revitalization Tax Increment Financing Act, are not eligible.
- Public sector employers, including public health, educational institutions, and municipal/provincial/federal governments and agencies and political parties, are not eligible.

## Financial support

Employers are eligible to receive a reimbursement of 50 per cent of total wages actually paid between July 16 and December 31, 2020, to a maximum of \$5,000 per worker.

Employers that applied to the program on or before November 9 are eligible to receive an advance payment of \$1,500 for every eligible worker hired or re-hired to date under the program. The balance of the wage subsidy will be paid out at the end of the program upon submitting final claims.

Employers that applied on or after November 10 will receive a lump sum upon submitting final claims.

All final claims must include minimum supporting payroll documentation demonstrating proof of wages paid. See the Questions and Answers section below for a description of the minimum supporting payroll documentation required.

Please note:

- Employers are eligible to receive reimbursement only for wages paid and employees hired on or after July 16, 2020.
- Employers that re-hire workers laid off as a result of restrictions under the #RestartMB Pandemic Response System are eligible for the subsidy.
- Employers can re-hire students previously employed under a summer wage subsidy program. The student must have been laid off prior to September 14, 2020 or as a result of restrictions resulting from the #RestartMB Pandemic Response System.
- To participate in the program, employers will be required to submit an application on or before December 1, 2020.

Employers can apply to receive funding for up to 20 positions and receive up to \$100,000.

Please note that owners are not eligible to receive reimbursement for wages paid to themselves.

---

## Employer obligations:

- The program is open to all workers who are residents of Manitoba and legally entitled to work in Canada, including students.
- All positions are eligible, regardless of work hours (full-time, part-time, and casual) and term (permanent, contract, and seasonal).
- There is no maximum wage amount. However, reimbursement under the program is limited to \$5,000 per eligible worker.
- Employers cannot hire a member of their immediate family for any positions for which they are requesting funding. This includes immediate family members of someone who has a direct financial interest in the company (owner, major shareholder), board member, director, executive member of the applicant organization or any person who is involved in the hiring or responsible for the supervision of the employee. Immediate family is defined as a person's smallest family unit, consisting of their closest relatives, such as parents, spouse, siblings, and children. This includes biological, adopted and relatives through marriage.
- Employers must comply with all federal, provincial and municipal laws and regulatory requirements.
- Employers must follow Manitoba's COVID-19 public health guidelines for the workplace.
- Employers must maintain complete and correct payroll, employment and accounting records, financial documents and other records for each worker hired under this program.
- \* The worker may be a previous employee laid-off due to COVID-19, provided they had not been re-hired prior to July 16, 2020, or a new employee. Workers hired under this program must not displace any existing employees.

---

## How to submit your application

The application for the program is closed.

For information on supports currently available to employers in Manitoba, please visit:

<https://manitoba.ca/covid19/programs/index.html>.

Eligible employers must provide proof of payment of wages and supporting payroll documentation no later than February 1, 2021 to receive reimbursement through the program.

For inquiries related to the Back to Work Manitoba Program, please contact [ITESinfo@gov.mb.ca](mailto:ITESinfo@gov.mb.ca).

#### **For General Inquiries**

Call: 204-945-3744 or 1-866-626-4862 (Toll-Free)

Email: [mgi@gov.mb.ca](mailto:mgi@gov.mb.ca)

---

## **Common Questions and Answers**

- ▶ **What is the deadline for submitting my application?**
  
- ▶ **What period can I receive wage subsidies for?**
  
- ▶ **Can I rehire a summer student who was previously subsidized under a government-run summer wage subsidy program?**
  
- ▶ **Can I rehire an employee that has been laid off because of restrictions under #RestartMB Pandemic Response Level Red?**
  
- ▶ **Who is eligible to receive an advance payment?**
  
- ▶ **When will I receive my advance payment?**
  
- ▶ **Will I have to pay the advance payment back?**



- ▶ [When are final claims due?](#)
- ▶ [What are the minimum supporting documents required when I submit my final claim?](#)
- ▶ [I submitted an application, can I request to receive additional wage subsidies?](#)

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)

**Manitoba** 

**EXHIBIT " F "**

This is Exhibit " F " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021

  
\_\_\_\_\_

A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

Learn about [Manitoba's vaccine program](#) to help protect Manitobans.



[Printer Friendly](#) [Français](#) [Site Map](#) [Contact Government](#)

[RESIDENT AND ONLINE SERVICES](#) [BUSINESS](#) [GOVERNMENT](#) [VISITORS](#)

[Manitoba.ca](#) > [COVID-19](#) > [Support Programs for Individuals and Businesses](#)

## Get Started

[Support Programs for  
Individuals and Businesses](#)

[Manitoba Bridge Grant](#)

[Manitoba Bridge Grant -  
Home Based Businesses](#)

[Caregiver Wage Support  
Program](#)

[Manitoba Economic Support  
Centre](#)

[Premier's Economic  
Opportunities Advisory Board](#)

[Back to Work in Manitoba  
Wage Subsidy Program](#)

[B2B Manitoba](#)

[StudentJobsMB](#)

[Help Next Door](#)

[Federal Programs](#)

[Tax and Fee Deferrals](#)

# Protecting Manitobans

## Tax and Fee Deferrals

The province is providing the following protections for the next six months until Oct. 1:

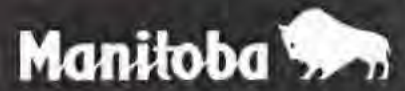
- instructing Manitoba Hydro, Centra Gas and Manitoba Public Insurance (MPI) to not charge interest or penalties in the event that Manitobans are unable to pay at this time;
- instructing MPI to relax ordinary practices on policy renewals and collections;
- instructing Manitoba Liquor and Lotteries not to charge interest on receivables from restaurants, bars and specialty wine stores;
- supporting Workers Compensation Board (WCB) to do the same and asking WCB to extend relief from penalties for late payments;
- directing Manitoba Hydro and Centra Gas to not disconnect customers during these times; and
- working with municipal partners to ensure municipalities do not charge interest on provincial education taxes and school division fees and the province is encouraging municipalities to do the same with respect to their own taxes and will start discussions to support implementation.

**More Information:**

**News Release:** [April 3, 2020 - Province Announces over \\$100 Million in support and relief for Manitoba's fight against COVID-19](#)

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)





Search for programs and online services

Search

RESIDENT AND ONLINE SERVICES BUSINESS GOVERNMENT VISITORS

## News Releases

[Manitoba.ca > News](#)

### Get Started

[Today's releases \(0\)](#)

[This week's releases \(15\)](#)

[This month's releases \(15\)](#)

News Releases

April 2020

GO

[Archived News Releases](#)

[Subscribe for Email Alerts](#)

[Subscribe for RSS Alerts](#)

### Need More Info?

Public information, contact Manitoba Government Inquiry: 1-866-626-4862 or 204-945-3744.

Media requests for general information, contact Communications Services Manitoba: 204-945-3765.

Media requests for ministerial comment, contact

## News Release - Manitoba



April 3, 2020

[Français](#)

# PROVINCE ANNOUNCES OVER \$100 MILLION IN SUPPORT AND RELIEF FOR MANITOBA'S FIGHT AGAINST COVID-19

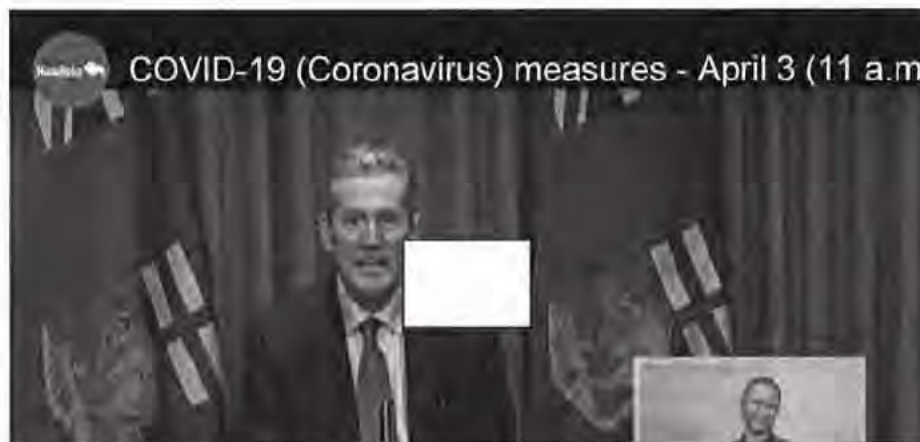
---

Manitoba Protection Plan Ensures Government Can Respond Quickly and Effectively to Needs of Manitobans: Pallister

## Watch news conference

[Backgrounder](#)

[Background Information](#)



Communications and  
Stakeholder Relations: 204-  
794-0732.



## Twitter Feed

Tweets by @MBGovNews  
**Quick Links**

Manitoba Ombudsman  
Manitoba Auditor General  
Manitoba Advocate for  
Children and Youth  
Manitoba Public Insurance  
Manitoba Hydro  
Manitoba Liquor and Lotteries  
Elections Manitoba

The Manitoba government is announcing new measures in the Manitoba Protection Plan to provide extra support and relief to homeowners and businesses, and to enhance health preparedness for new medical equipment and shelter space in the fight against COVID-19, Premier Brian Pallister announced today.

"Our government's number one priority during this global pandemic is keeping Manitobans safe and ensuring our health-care system is there for us and our loved ones," said Pallister. "We must protect our most valuable service – our health-care system – and protect our most vulnerable people, our senior citizens, our homeless, those faced with threats of violence and those who are facing new financial challenges."

### Faster Health Equipment Procurement

The government is investing more than \$100 million to accelerate the pace at which Manitoba is procuring essential medical supplies and equipment, hotel capacity and other critical needs to help prepare for COVID-19.

"Manitobans have always risen to the challenge and what we've seen so far during this pandemic is no exception," said Pallister. "This \$100-million investment will allow us to support made-in-Manitoba products and solutions from local businesses to quickly help in our collective efforts to fight COVID-19 and protect Manitobans in the weeks and months ahead."

Manitoba manufacturers or businesses that are prepared to rapidly scale up production or re-tool manufacturing lines to develop products made in Manitoba to help in the fight against COVID-19 can go to the portal at [www.manitoba.ca/covid19](http://www.manitoba.ca/covid19), and then visit the business and workplace page.

The province is also issuing a call to businesses who have a stock of personal protective equipment. If the equipment is not being used due to closures and physical distancing, they can also reach out by visiting the portal at [www.manitoba.ca/covid19](http://www.manitoba.ca/covid19).

In addition, Manitoba businesses can donate unused personal protective equipment supplies in original packaging, clean and in useable condition. For more info, visit: <https://sharedhealthmb.ca/covid19/supply-donations/>.

### Cash Flow Tax Relief

Today's measures will provide immediate relief to Manitobans facing financial challenges by deferring provincial fees and charges, the premier noted.

As part of the Manitoba Protection Plan, the province is providing the following protections for the next six months until Oct. 1:

- instructing Manitoba Hydro, Centra Gas and Manitoba Public Insurance (MPI) to not charge interest or penalties in the event that Manitobans are unable to pay at this time;
- instructing MPI to relax ordinary practices on policy renewals and collections;
- instructing Manitoba Liquor and Lotteries not to charge interest on receivables from restaurants, bars and specialty wine stores;
- supporting Workers Compensation Board (WCB) to do the same and asking WCB to extend relief from penalties for late payments;
- directing Manitoba Hydro and Centra Gas to not disconnect customers during these times; and
- working with municipal partners to ensure municipalities do not charge interest on provincial education taxes and school division fees and the province is encouraging municipalities to do the same with respect to their own taxes and will start discussions to support implementation.

The government is also deferring provincial income tax and corporate income tax filing deadlines and payments to coincide with the current revised federal deferral of income tax to Aug. 31 and has indicated it would be willing to extend these deferrals until Oct. 1, should the federal government agree, the premier added.

The new measures are in addition to the recently announced two-month deferral for small businesses that remit up to \$10,000 in Manitoba payroll tax or \$10,000 in sales tax. This will result in \$80 million in deferred remittance to the province.

Pallister also announced plans to help make insurance more affordable for Manitobans. While the province has no ability to allow for deferrals of payments or the waiver of interest charges and penalties, Manitoba is taking steps to make home and business property insurance more affordable to Manitobans by accelerating the removal of \$75 million of annual PST from residential and business properties, effective July 1.

This will save residential property owners an estimated \$38 million per year and business property owners \$37 million a year.

### **Expanded Shelter Capacity**

The Manitoba government will add more than 140 new shelter beds to support people affected by homelessness and allow for social distancing protocols as part of the province's broader Manitoba Protection Plan response to COVID-19, the premier announced.

"While many of us have the capacity to shelter at home, the reality is some of us

do not," said Pallister. "Through our Manitoba Protection Plan, our government will ensure people who don't have a stable home have a place to stay safe and healthy as we respond to the COVID-19 pandemic together."

Up to \$1.2 million will be invested at several locations in Winnipeg to:

- repurpose a vacant Manitoba Housing building on Sargent Avenue to create 31 new beds;
- add 35 beds provided by the Salvation Army at its Martha Street location;
- expand Siloam Mission's capacity by 50 beds; and
- move individuals currently using the Salvation Army's SonRise Village to alternate locations, making its 26 beds available for new clients.

The beds at the Sargent Avenue location will be managed by Main Street Project, which is partnering with other shelters to co-ordinate access among their clients. This location will open today and others will become available as soon as possible.

The provincial building on Sargent Avenue may also be used as self-isolation units for homeless individuals who need it.

The premier noted the province is also looking into additional options to support homeless and vulnerable people outside of Winnipeg as part of the province's Manitoba Protection Plan response to COVID-19.

"Our government remains committed to looking at every possible way to help all Manitobans through these uncertain times, by providing financial relief and support needed on the front line as we face this global pandemic together."

The province continues to rely on the recommendations of the chief provincial public health officer in response to the COVID-19 pandemic and encourages all Manitobans to engage in social distancing protocols.

For more information, visit [www.manitoba.ca/covid19](http://www.manitoba.ca/covid19).

- 30 -

#### BACKGROUND INFORMATION ATTACHED

For more information:

- Public information, contact Manitoba Government Inquiry: 1-866-626-4862 or 204-945-3744.
- Media requests for general information, contact Communications Services Manitoba: 204-945-3765.
- Media requests for ministerial comment, contact Communications and Stakeholder Relations: 204-794-0732.



**EXHIBIT " G "**

This is Exhibit " G " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba





RESIDENT AND ONLINE SERVICES BUSINESS GOVERNMENT VISITORS

Manitoba.ca > COVID-19 > Manitoba Protection Plan

## Get Started

- Manitoba Protection Plan
- State of Emergency
- Manitoba Protection Plan
- HelpNextDoorMB
- Online Learning Investments
- Expanded Shelter Capacity
- COVID-19 Research Funding
- Manitoba Risk Recognition Program
- Manitoba Risk Recognition Program
- Child Care Services During COVID-19
- Seniors Economic Recovery Credit
- Manitoba Gap Protection Plan**
- Tax and Fee Deferrals
- Disability Economic Recovery Credit
- Ensuring Manitobans Stay Safe and Healthy
- Ensuring Safe/Health Workplaces

## Manitoba Gap Protection Program

The intake window for the Manitoba Gap Protection Program is now closed. The Manitoba government continues to review and process the applications it received.

Please visit the Support Programs for Individuals and Businesses page for the latest information:

[www.manitoba.ca/covid19/programs/index.html](http://www.manitoba.ca/covid19/programs/index.html)

## Program Description

- The \$120 million Manitoba Gap Protection Program (MGPP) provided a one-time \$6,000 grant to eligible Manitoba small and medium-sized businesses.
- On November 10, 2020, the MGPP was converted from a forgivable loan to a grant, meaning recipients no longer have to repay the province if they received federal COVID support. This allows Manitoba businesses that received this grant to apply for the wide range of federal support programs currently available.
- The deadline for applications was November 10, 2020. The intake period is now closed.
- Businesses that applied for the MGPP must have experienced hardships as a result of the COVID-19 pandemic and related public-health orders. This includes:
  - inability to access financing or capital;
  - retail or commercial customer demand has diminished;
  - capacity to serve customers has diminished due to physical distancing;

- export market demand has diminished;
  - domestic or supply chain problems;
  - workers/employees/contractors are not available international for work;
  - self-isolation has been required; and
  - costs or availability of COVID-19 personal protective equipment.
- Grant eligibility was based on information provided in the application form. The grant was approved based on meeting the eligibility requirements

## Frequently Asked Questions

### **Do I need to pay back the MGPP if I received federal government funding?**

No. The MGPP has been converted from a forgivable loan to a grant, meaning recipients no longer have to repay the province if they received federal COVID support.

### **Can I apply for the MGPP?**


No. The deadline for applications was November 10, 2020. The intake period is now closed.

### **Is the MGPP grant taxable?**

Yes. The \$6,000 MGPP Grant is taxable and businesses will need to declare it as taxable income.

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)

**Manitoba** 

**EXHIBIT " H "**

This is Exhibit " H " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba



Search for programs and online services

Search

RESIDENT AND ONLINE SERVICES BUSINESS GOVERNMENT VISITORS

Manitoba.ca > COVID-19 > #RestartMB

#RestartMB

Manitoba Economic Support Centre

Premier's Economic Opportunities Advisory Board

Event Attraction Strategy

Manitoba Risk Recognition Program

B2B Manitoba

Student Wage Subsidy

Manitoba Back to Work This Summer initiative

Back to Work in Manitoba Program

**Manitoba Job Restart Program**

StudentJobsMB

Federal Programs

Commercial Rent Assist

News Conferences and Bulletins



## Manitoba Job Restart Program

### On this page:

- [Program Description](#)
- [Eligibility Criteria](#)
- [Financial Support](#)
- [How to Apply](#)
- [Application Deadline](#)
- [Frequently Asked Questions](#)

## Program Description

The Manitoba Job Restart Program (MJRP) provides a taxable financial benefit to a maximum of \$2,000 to Manitobans who:

- *safely* return to work for a cumulative 30 hours/week with one or more eligible employers

- voluntarily stop collecting Canada Emergency Response Benefit (CERB), the Canada Emergency Student Benefit (CESB) or similar COVID-19 financial support programs delivered by the federal government

Individuals who return to work for a cumulative 30 hours per week during the period of June 26, 2020 to July 31, 2020 will:

- receive \$500 upon enrollment in the MJRP
- plus receive three additional bi-weekly payments of \$500 upon completion of the required bi-weekly reporting survey for a total taxable benefit of \$2,000

Once enrolled in the program through the initial application, participants will be asked to complete the bi-weekly report. To complete the online bi-weekly reporting survey, program participants must confirm:

- their employment status, that they continue to be employed for at least a cumulative 30 hours per week with one or more eligible employers
- they are not enrolled in CERB, CESB, or similar COVID-19-related financial support programs delivered by the federal government.

Once confirmed and submitted online, the bi-weekly taxable funds of \$500 will be paid to the program participant.

---

## Eligibility Criteria

You are eligible to apply for this program if you meet all of the criteria below:

- Receiving benefits from the CERB or CESB at the time of the application
- Have been offered employment by an eligible employer with an anticipated start-date no more than 7 days into the future
- Anticipate to work a minimum of 30 hours per week
- Be legally entitled to work in Canada
- Be a Manitoba resident since April 1, 2020

- Have a valid Canadian bank account

Individuals currently employed on a part-time basis **and** receiving CERB or CESB (making less than \$1,000 from employment income per month) are eligible to apply for this program. To qualify, individuals must either increase their number of hours to a minimum of 30 hours per week with their currently eligible employer, or find supplemental or full-time employment with an eligible employer providing them with a cumulative minimum of 30 hours of work per week. Individuals would also have to voluntarily stop collecting CERB or CESB benefits.

As an enrolled program participant, you must:

- Agree to complete a bi-weekly (every two weeks) reporting survey to remain in the program and receive subsequent benefits
- Stop receiving CERB, CESB or other COVID-19 related financial benefits by the federal government at the time of submitting the application
- Attest that you will follow Manitoba's COVID-19 public health guidelines for the workplace

#### **Bi-weekly Reporting Survey**

To receive the additional benefit of \$500 every two weeks, the applicant must attest to re-confirm on a bi-weekly basis the following:

- That they continue to be employed with one or more eligible employers for a cumulative minimum of 30 hours per week.
- That they are not enrolled in CERB or CESB or similar COVID-19 related benefits offered by the federal government.
- That they continue to follow Manitoba's COVID-19 public health guidelines for the workplace

Program participants will be notified of their reporting dates.

**If you do not complete and submit your bi-weekly reporting survey - you will be disqualified from the program. That means you will not be eligible to receive payments under the program.**

#### **Eligible Employer**

An eligible employer is defined as:

- a business (sole proprietors, partnerships, for-profit corporations)
- cooperatives
- not-for-profit organizations
- associations
- registered charities

An ineligible employer is:

- Businesses who are owned by the immediate family of the applicant
- Businesses that conduct multilevel marketing or networking marketing
- Business and corporate entities that earn passive income and that do not exist for the purpose of carrying on an active business in Manitoba
- Public institutions are **not eligible** for the subsidy. This includes municipalities and local governments, Crown corporations, public universities, colleges and schools, and hospitals.
- Sole proprietors receiving CERB are not eligible for this program.

---

## Financial Support

Eligible program participants will receive a total of four (4) payments, for total support of \$2,000. Funds are direct-deposited into program participants' bank account.

The MJRP is a taxable benefit - participants will be issued a tax slip for the 2020 tax year.

All payments will be made within 2 to 3 days of the application and completion of the bi-weekly report survey dates.

Participation in this program will end on the earliest of the following:

- The program participant no longer meets the eligibility criteria, or
- The program participant receives the fourth and final payment



---

## How to Apply

**Applications are now closed.**

Ensure you have the following information in advance:

- a social insurance number
- the name of your employer and proposed return-to-work start date
- Canadian bank account information - payments will be directly deposited into your account (no cheques will be issued)

Begin the **online application** process by answering the qualifying questions.

As you move through the online application process:

- Ensure that all application fields are completed in full.
- Declare and attest that the information provided is true and accurate.
- Provide your consent and authorization to disclose the information on your application.

---

## Application Deadline

**You will be able to begin to apply to this program at 2 p.m. on June 26, 2020.**

Applications will be accepted on an ongoing basis until July 31, 2020.

**Applications are now closed.**

---

## Frequently Asked Questions

- ▶ What is the deadline for submitting my application?
- ▶ Can any Manitoban apply for this program?
- ▶ When do I apply?
- ▶ Does the type of employment that I find matter?
- ▶ What happens if I find two jobs that equal 30 hours per week?
- ▶ Am I eligible to apply if I currently work part-time and collect CERB or CESB?
- ▶ I was on CERB/CESB in previous months, but returned to work in June. Do I qualify?
- ▶ I'm a sole proprietor and am receiving CERB. Am I eligible for the MJRP?
- ▶ How do I apply for the Manitoba Job Restart Program?
- ▶ How much will I receive from the program?
- ▶ I submitted my application. How long will it take to receive my payment?
- ▶ What happens if I don't submit my bi-weekly status report?
- ▶ I'm having difficulty completing the online application. Can someone assist me?

▶ Will I have to repay the amount I receive under the Manitoba Job Restart Program?

▶ Who do I call if I have more questions about my application?

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)

**Manitoba** 

**EXHIBIT " I "**

This is Exhibit " I " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

# Canada-Manitoba Job Grant

## What is the Job Grant?

The Canada-Manitoba Job Grant is an employer-driven training support program that assists employers to obtain skilled labour to meet their needs and helps Manitobans gain the skills they need to fill available jobs.

Employers are eligible to apply for **up to \$10,000** for each individual employee or prospective employee to assist with direct training costs. Manitoba's contribution will not exceed \$100,000.

Employers decide who obtains training, what training is required, and which approved third-party trainer will deliver training. The Manitoba government can help employers to determine their workforce and training needs and connect them to job seekers.

## What are the requirements?

Participating employers must have a job available for the trainee upon successful completion of the training. For existing employees, the purpose of training should be to upgrade their skills so they may move up to a better job or meet employer needs in the workplace.

Employers that receive funding under the Canada-Manitoba Job Grant must contribute a minimum one-third of the eligible training costs. Small businesses (50 employees or less), or employers that train unemployed individuals may be eligible for additional funding support.

Eligible training costs include:

- tuition fees or fees charged by a training provider
- mandatory student fees
- textbooks, software and other required materials
- examination fees
- travel costs for individuals residing in northern and remote communities to attend training events in Manitoba delivered outside their communities or unavailable online

Training can be delivered at the workplace, online or in a classroom or training facility and must be provided by an approved third-party trainer. This could include:

- post-secondary institutions
- private vocational institutions
- sector councils or industry associations
- union halls

Employers may propose other organizations for consideration to deliver the training. Examples include equipment manufacturers, software developers and private trainers (consultants) if they have:

- applicable curriculum available or curriculum development expertise
- specialized equipment and materials required for training
- qualified trainers (credentials and/or experience)

The Manitoba government reserves the right to approve the suggested trainer.

The employer is responsible for selecting and contracting directly with the approved trainer. The trainer invoices the employer for the training costs; the Manitoba government then pays the grant to the employer.

Employers must agree to provide confirmation of the direct training costs, information about how and who the training has helped, and the business impact/outcomes of the training.

Trainees must agree to provide personal information for performance monitoring, reporting, research and evaluation purposes (ex: gender, age, education, social insurance number, employment status, hours worked, wages, etc.)

## Who can be trained?

Candidates for training include individuals who are:

- unemployed and seeking training to get a job
- working, but underemployed and seeking training to get a better job
- employed, but looking to train for a better job
- employed, but seeking training to enhance their skills in an existing job

Training participants must be individuals working in Manitoba who are Canadian citizens or permanent residents. Training of temporary foreign workers is not eligible.

## How are grant applications assessed?

To assist in making fair and objective assessments of grant applications, Manitoba considers factors such as the number of net new jobs created, the type of job of the trainee (ex: full time, seasonal), the type of training (ex: technical skills, regulatory training), etc.

Employers may apply for any number of grants, but preference may be given to employers who have not previously received a grant.

## How can we help?

Manitoba can assist employers with:

- identifying their training needs
- connecting with suitable job seekers
- completing the grant application
- information about training delivered by third-party service providers
- information about other available workforce development programs and services

## For information about how to apply for the Canada-Manitoba Job Grant contact:

Manitoba Government Inquiry

Tel: 204-945-3744

Toll Free in North America: 1-866-626-4862

Email: [mgi@gov.mb.ca](mailto:mgi@gov.mb.ca)

[www.gov.mb.ca/tce/lwd/cjq.html](http://www.gov.mb.ca/tce/lwd/cjq.html)

Canada

Manitoba 

**EXHIBIT " J "**

This is Exhibit " J " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

[RESIDENT AND ONLINE SERVICES](#) [BUSINESS](#) [GOVERNMENT](#) [VISITORS](#)[Manitoba.ca](#) > [COVID-19](#) > [Care for Your Mental Health](#)

## Get Started

[Pandemic Response System](#)[Testing COVID-19](#)[Schools](#)[Focus on the Fundamentals](#)[Resources, Guidelines and Links](#)[Support Programs for Individuals and Businesses](#)[News Releases and Conferences](#)[Vaccine](#)

## Care for Your Mental Health

[Virtual Therapy](#)[Contact](#)

# COVID-19 NOVEL CORONAVIRUS

## Care for Your Mental Health

NEW Last updated: January 24, 2021

The COVID-19 pandemic brings a high level of stress and anxiety as it rapidly changes the way we work, socialize and live.

Caring for your mental health is important in these times. If you need help or know someone who does, you are not alone.

### Ask for help

Health and well-being must be supported by a network of people who can share your experiences with you. Don't try and manage by yourself. Talk to family and friends and use the resources in your community:

- health care providers
- spiritual care providers and advisors
- professional counsellors

**Need Help Now? Contact a [Crisis Line](#).**

## Services Available for Manitobans

### **NEW: Two-session virtual counselling by calling 1-844-218-2955**

Starting October 13, every Manitoba resident age 16 or older have access to up to two free counselling sessions with a trained professional at Morneau Shepell.

To book your first session, call toll free 1-844-218-2955. Counselling sessions can be by video or telephone, as preferred. Sessions are offered in multiple languages.

### **Sign up now for AbilitiCBT: free and confidential online mental health virtual therapy**

AbilitiCBT by Morneau Shepell is a free online virtual therapy program available to Manitobans age 16 and older experiencing mild to moderate symptoms of anxiety and depression due to the pandemic. It's confidential and accessible from home on your computer, smartphone or tablet. So far, over 6,000 Manitobans have signed up for the service.

**Kids Help Phone is available to those under 16 years of age.**

**Local mental health and addiction organizations have adapted the way they are offering service to better accommodate Manitobans during the pandemic.**

**Addictions Foundation of Manitoba has developed a series of helpful webinars for dealing with substance use and addiction during the pandemic.**

**Wellness Together Canada: Mental Health and Substance Use Support provides free online resources, and connects you to peer support workers.**



social workers, psychologists and other trained professionals for confidential chat sessions or phone calls, in both official languages. Resources include modules for addressing low mood, worry, substance use, social isolation and relationship issues.

- › [Caring for Yourself](#)
- › [Caring for Youth](#)
- › [Caring for Seniors, Older Relatives, Friends and Neighbours](#)

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)

**Manitoba** 

## **Caring for Yourself**

Naturally there are many different feelings and responses, both positive and negative, when coping with the pandemic, including:

- panic, anxiety, worry, fear
- anger, disbelief
- helplessness, despair
- sleeplessness
- lack of concentration
- exhaustion
- loneliness
- co-operation, teamwork
- generosity towards others
- inspiration
- strength in connecting with others/community

### **Know yourself**

Learn the common signs of stress and think about how you usually deal with it.

Signs can range from headaches, muscle tension, sleeplessness and trouble concentrating, to irritability, anger, anxiety and sadness. Think about the resources available to you to help manage your stress, including:

- family, friends, connection with others
- spirituality, faith
- awareness of own values
- sense of purpose
- exercise, leisure, creative activities
- ability to help others
- initiative to plan and prepare for future events/changes
- acknowledgement of good feelings, not just negative ones
- awareness of the world around you

### **Care for your body and mind**

When you're feeling stressed, take regular breaks and relax. Use relaxation techniques that help you slow down, stay calm and de-stress.

An important stress indicator is shallow, fast breathing. Take slow, deep breaths (from your stomach) and focus on calming your breaths.

- Go for walks, stretch your muscles. Any kind of exercise is good.
- Eat healthy food and eat regularly. Good nutrition is key to managing stress.
- Keep to a regular sleep routine.
- Take regular breaks from electronic devices.
- Try to focus on the positive and show compassion for yourself and others.

### **Check in with yourself regularly**

- Self-awareness is important and you can monitor your moods and attitudes at different times of the day.
- Make a point to stop and check in with yourself, often, and make sure you are doing things that support a healthy body, mind and spirit.

### **Social (physical) distancing**

When you are asked to social (physical) distance to protect your health, those around you and your community:

- Try to set up a routine with as many familiar activities as possible.
- Plan to do some basic school work with children for part of the day.
- Understand and reassure yourself and family members that the disruption is only temporary.
- Talk to others who are having the same experience.
- Avoid alcohol and drug misuse.

### **Stay informed**

- Keep on top of current news but don't spend the whole day tuned into media broadcasts.
- Try and keep as close to your normal daily routines as possible and only check the news occasionally. (no more than once a day is best for most people).
- Obtain your health information from reliable sources only (e.g., Health Canada).
- [www.gov.mb.ca/covid19/updates/index.html](http://www.gov.mb.ca/covid19/updates/index.html)

## Caring for Youth

There are many healthy ways to help youth cope with stress. Have them:

- Talk to people they trust about their feelings - email, text, phone, video-chat. This could be a friend, parent, Elder, teacher, counsellor or a phone line support person.
- Visit the Kids Help Phone at [www.kidshelpphone.ca](http://www.kidshelpphone.ca), for information and resources directed to youth.
- Have fun! Do things they enjoy. Remember physical activity/exercise can lower stress and make them feel happier and energized.
- Find ways to relax. Take a walk, read, listen to music, watch a movie, have a nap, pray, smudge, do yoga or do deep breathing. For more relaxation tips, go to: [www.stresshacks.ca](http://www.stresshacks.ca).
- Ask friends what helps them feel better and cope with the stress.
- Tell a story about how the COVID-19 pandemic has affected them: draw, write, sing, dance, journal, take photos.
- Think about times in the past when things were difficult for you, and what helped you get through the hard times then.
- Help support others. When feeling stressed, helping to support others takes you outside your own troubles for awhile.
- Find a way to remember both the good and the bad things during the pandemic (ex: shoot a video, write, take pictures).



### **Video: Kids & COVID-19 - A Question and Answer Session**

Lanette Siragusa, provincial lead, health system integration, quality, and chief nursing officer, Shared Health

Dr. William Li, pediatrician  
Ace Burpee, host

## **Caring for Seniors, Older Relatives, Friends and Neighbours**

### **Supporting Seniors**

While many Manitoba seniors are active and self-sufficient, there are some who will need extra support during a pandemic, particularly if they live alone. Everyone, including seniors, will react differently to the stress of dealing with a pandemic. It's natural for people to:

- feel overwhelmed and unable to focus on daily tasks
- get preoccupied with a particular problem (e.g., groceries, medications, health)
- feel helpless or hopeless
- get preoccupied with the past and previous events they remember

Signs of anxiety or stress in seniors, including:

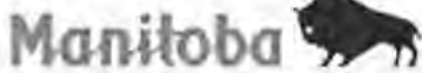
- withdrawal
- intense worry and panic symptoms
- denial of the situation, refusing help or personal contact
- unkempt appearance, taking unhealthy risks, not taking medication
- change in eating habits, appetite, sleep patterns
- talk of being a burden, depression, hopelessness

### **How to help seniors, older relatives, friends and neighbours**

- Check in with them regularly by phone, video chat, text for social interaction and to make sure they have everything they need.
- Actively include them in planning discussions.
- Take time to listen and let them talk out their anxiety and concerns.
- Call frequently to remind them they're important in your life.
- If an in-person visit is required, ensure you are not sick and have not travelled, and wash your hands and practice social distancing.
- Help them with tasks that may be difficult (ex: getting to or rebooking appointments, picking up medication or arranging for delivery of groceries and medications, cleaning, cooking).
- Access medical care or advice if there are significant changes in an older adult's overall health and well-being.
- Help them connect by phone, video chat or text with community or faith groups that work with and help seniors, if it seems appropriate.
- Support and encourage them to stay connected to the community in

general through phone, television or the Internet, when possible.

- A & O Support Services for Old Adults - [www.aosupportservices.ca/resources/covid-19-response-programs/](http://www.aosupportservices.ca/resources/covid-19-response-programs/)



Search for programs and online services

Search

RESIDENT AND ONLINE SERVICES BUSINESS GOVERNMENT VISITORS

Manitoba.ca > COVID-19 > Care for Your Mental Health

### Get Started

Pandemic Response System

Testing COVID-19

Schools

Focus on the Fundamentals

Resources, Guidelines and Links

Support Programs for Individuals and Businesses

News Releases and Conferences

Vaccine

Care for Your Mental Health Virtual Therapy

Contact

## Mental Health Virtual Therapy Program

Help when you need it. Where you need it.



# Mental Health Virtual Therapy Now Expanded

The COVID-19 pandemic brings a high level of stress and anxiety as it rapidly changes the way we work, socialize and live. **Mental health virtual therapy can help Manitobans age 16 or older who are coping with mild to moderate symptoms of anxiety and now includes two free counselling sessions.**

### NEW: Two-session virtual counselling

Starting October 13, every Manitoba resident age 16 or older have access to up to two free counselling sessions with a trained professional at Morneau Shepell.

To book your first session, call toll free **1-844-218-2955**. Counselling sessions can be by video or telephone, as preferred. Sessions are offered in multiple languages.

**Sign up for the AbilitiCBT program now**



AbilitiCBT is a free digital therapy program from Morneau Shepell, available to all residents of Manitoba age 16 or older experiencing mild to moderate symptoms of anxiety due to the pandemic. So far, over 4,000 Manitobans have signed up for the service in the last 6 months.

**Kids Help Phone is available to those under 16 years of age.**

### **What to expect at signup with AbilitiCBT program**

- You will be redirected to the AbilitiCBT home page to sign up in English or French.
- You will need to enter your email and create a password to access the program.
- Next, you will be asked to complete the health screening questionnaire online.
- After you sign up, you will receive a welcome email outlining your next steps, including:
  - Connecting with a professional therapist by phone or video
  - Moving through 10 structured modules

If you prefer to work from your smartphone or tablet, download the AbilitiCBT app.

### **About the AbilitiCBT digital therapy program**

Cognitive behavioural therapy (CBT) is one of the most effective forms of therapy. AbilitiCBT by Morneau Shepell is a free online digital therapy program available to Manitoba residents age 16 or older experiencing mild to moderate symptoms of anxiety and depression due to the pandemic. It's free, confidential and accessible at home on your computer, smartphone or tablet.

You do not need to be referred by a doctor to use AbilitiCBT. You will be able to connect to a professional therapist trained to help you deal with:

- pandemic challenges

- the state of uncertainty
- physical isolation
- care for family and community members
- information overload
- stress management

AbilitiCBT can help you:

- Learn what anxiety is and how it affects your emotions, mind, body and behaviour.
- Reduce anxiety by learning cognitive behavioral therapy skills and using them to change responses to triggers.
- Develop coping strategies to track and reduce anxiety and better manage daily activities.



### How AbilitiCBT works

- The AbilitiCBT program starts by assessing your needs through an online questionnaire and consultation with a professional therapist – either by phone or video chat.
- Then, you move through 10 modules, at your own pace, while the therapist tracks and monitors your progress.

- There will be scheduled check-ins along the way to make sure you're getting the help you need. You can connect with your therapist over the phone, via chat, or through a video check-in.

## Why use AbilitiCBT

- It's confidential
- It works and is clinically effective
- It's supported by experts
- It's accessible from home
- It's free and convenient

**Not quite ready for therapy?** Review these self-guided resources to support your total well-being.

## Resources


- [Frequently Asked Questions](#)
- [Partner Toolkit](#)
- [Self-guided resources](#) to support your total well-being

### Therapists in Manitoba: Join the Morneau Shepell Team

Morneau Shepell is recruiting professional therapists to support Manitobans struggling with COVID-19-related anxiety. Visit their [website](#) for information about the role and how to apply.

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)

**Manitoba** 

## Self-guided Learning

We can all use a little help to navigate life's challenges. Morneau Shepell's digital mental health support includes a wealth of articles, videos and other resources you can consult to help manage the demands of work, family and children, and life in general.

[Work](#) [Health](#) [Life](#) [Money](#) [Family](#) [Children/Youth](#)

### Work

[Show All](#) →

#### Communicating During Times of Change at Work

Communicating well is always a challenge. But during changing times, it can be even harder. People tend to be less trusting of oth...

[➔ Read Article](#)

#### Helping Employees Stay Focused During Times of Change and Uncertainty

Uncertainty can be stressful -- whether it arises close to home, such as changes in the organization; or on a larger scale, such a

[➔ Read Article](#)

#### Managing Concerns and Anxieties About Infectious Diseases at Work

Whether they are common or rare, infectious diseases may affect your business, workforce, and the people you manage. The rece...

[➔ Read A](#)

### Health

[Show All](#) →

**Are You Too Sick to Go to Work?**

When are you too sick to go to work? As you think about what to do, it's important to consider both your own health and the ...

[➔ Read Article](#)

**COVID-19 Resources**

Protecting yourselfBasic Protective Measures Against the New Coronavirus (WHO)Coronavirus Disease (COVID-19): Outbreak Update (Hea...

[➔ Read Article](#)

**How To Be Active and Stay Fit at Ho**

You don't need to leave the house to st: There are things you can do to stay hea and incorporate fitness into your...

[➔ Read A](#)

**Life**

[Show All →](#)

**Coping with Change: Understanding the benefits of change**

Change is a natural part of life. Most of us are continually making adjustments that reflect our changing needs or interests&mdash...

[➔ Read Article](#)

**Coping with Loneliness During Self-Isolation**

The recent outbreak and rapid spread of COVID-19 has a lot of people self-isolating. While necessary to curb the spread of the dis...

[➔ Read Article](#)

**How the Assistance Program Can H in a Crisis**

An employee assistance program (EAP confidential service that offers help with personal and work-related issues; and i: prov...

[➔ Read A](#)

**Money**

[Show All →](#)

**Coping with an Interruption in Income**

Whether you're working or retired, an interruption in your income can cause stress and hardship. Fortunately, there are meas...

[➔ Read Article](#)

**Investment Anxiety: Coping with a Volatile Market**

A 2010 study by the American Psychological Association found that an overwhelming 76 percent of Americans consider money to be a 5...

[➔ Read Article](#)

**Working With a Financial Planner**

A financial planner helps clients make choices about what to do with their money, property, and other assets. Most financial planners...

[➔ Read Article](#)

**Family**

[Show All →](#)

**Using Technology to Connect With Friends and Family During the COVID-19 Outbreak**

If you or a loved one is currently self-isolating or practicing physical distancing due to the COVID-19 pandemic, staying connected...

[➔ Read Article](#)

**Children/Youth**

[Show All →](#)

**Using Technology to Connect With Friends and Family During the COVID-19 Outbreak**

If you or a loved one is currently self-isolating or practicing physical distancing due to the COVID-19 pandemic, staying connecte...

[➔ Read Article](#)

**How to Practice Physical Distancing**


[➔ Read Article](#)

**Preventive Measures: Best practices handwashing**

[➔ Read A](#)

**EXHIBIT " K "**

This is Exhibit " K " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba



Learn about **Manitoba's vaccine program** to help protect Manitobans.



[Printer Friendly](#) [Français](#) [Site Map](#) [Contact Government](#)

[RESIDENT AND ONLINE SERVICES](#)[BUSINESS](#)[GOVERNMENT](#)[VISITORS](#)

[Manitoba.ca](#) > [COVID-19](#) > [Support Programs for Individuals and Businesses](#)

## Get Started

[Support Programs for  
Individuals and Businesses](#)

[Manitoba Bridge Grant](#)

[Manitoba Bridge Grant -  
Home Based Businesses](#)

[Caregiver Wage Support  
Program](#)

[Manitoba Economic Support  
Centre](#)

[Premier's Economic  
Opportunities Advisory Board](#)

[Back to Work in Manitoba  
Wage Subsidy Program](#)

[B2B Manitoba](#)

[StudentJobsMB](#)

**Help Next Door**

[Federal Programs](#)

[Tax and Fee Deferrals](#)

# Protecting Manitobans

## Help Next Door

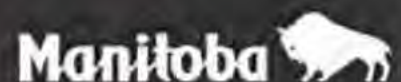
Manitoba has introduced a web-based application to connect volunteers ready to provide your support with someone who needs a helping hand through these difficult times.

The innovative tool, created by Manitobans for Manitobans, puts people all over the province who need assistance easily in contact with those nearby - while adhering to social distancing protocols - who want to help them.

For more information, visit: [www.HelpNextDoorMB.ca](http://www.HelpNextDoorMB.ca).

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Twitter](#) [Facebook](#) [YouTube](#) [Flickr](#)





## Help Next Door MB

Home

Ask for Help

Help Someone

My Help Requests

My Volunteer History

FAQ

Contact Us

My Account

[Legal Terms & Conditions](#)

[Privacy Policy](#)

[Log in](#)

# Help Next Door MB



### Manitobans Helping Manitobans

Help Next Door MB is a network of helpers coming together as a community.

If you are a volunteer ready to provide your support or someone who needs a helping hand through these difficult times, this platform can connect you.

[Learn More](#)

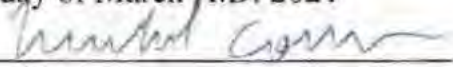


Powered By



**EXHIBIT " L "**

This is Exhibit " L " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021

  
A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba



Let's create some great ways to help people stay safe.

This section is where you can access information about grants and other initiatives where you or your group can get financial support to create Safe At Home events and programming. If you have an idea that helps Manitobans stay active and engaged while restrictions are at their highest levels, maybe we can help you.

## Introducing the Safe at Home Manitoba Grant Program.

The Safe at Home Manitoba Grant Program has been created to help Manitobans enjoy active, engaged lives during a period of critical level restrictions in our communities. The Manitoba Government is seeking grant applications for projects that encourage Manitobans to stay at home and stay safe, while improving their quality of life.

The grant supports Manitobans wanting to participate in creative, fun and engaging activities throughout the winter, while staying safe! From online concerts to new snowbound activities; from a collective work of art to gaming challenges; from a citywide

virtual yoga class to neighborhood decorating contests. The sky is the limit! Sport. Arts. Culture. Health and Wellness. Outreach. Kindness. Caring.

In partnership with community organizations, grants will be quickly approved and issued for initiatives that can start quickly and are in support of our goal to stay safe at home over the holiday period.

---

The Safe at Home Manitoba Grant Program supports projects that help Manitobans enjoy active, engaged lives during a period of critical level restrictions in our communities. The Manitoba Government began receiving applications on December 7th, 2020 for projects that encouraged Manitobans to stay home and stay safe, while improving their quality of life.

Public response to the Safe at Home Manitoba Grant Program has been tremendous. We have already approved funding for over 150 projects across Manitoba and have many more projects under consideration by our selection committee.

Due to the volume of applications under consideration the intake for this program will be closed as of December 31, 2020.

Thank you for your interest in helping to keep Manitobans Safe, Connected and Home.

## Who can apply?

- Municipalities, First Nations, and local authorities such as planning districts and Northern Affairs Community Councils
- Not-for-profit organizations

- Registered charities
- For-profit businesses
- Government agencies, such as Travel Manitoba or Centre Culturel Franco Manitobain
- Post-secondary institutions
- Professional artists

In all cases, applicants must have been operating in Manitoba as of November 1, 2020. Applicants that have been closed due to public health orders may still apply if their organization was in operation prior to November 1, 2020.

## When are the application deadlines?

Applications will open starting December 7, 2020 and will be evaluated and approved on a continuous basis until the fund is fully allocated.

Due to the volume of applications under consideration the intake for this program will be closed as of December 31, 2020.

## What do we fund?

- New projects that support social inclusion, mental health and physical wellness

while staying home

- Expansion or additions to existing projects, including the removal of fees or costs to participate
- Equipment or supplies required to deliver a program or project
- Administration or event costs directly related to program delivery

## Ineligible Projects:

- Projects with restricted or limited public access (by fee, ticket price, membership or other barriers)
- Projects that cannot be delivered by the end of March 2021
- Capital projects and related leasehold improvements
- Core or essential municipal, provincial, federal projects or programs and services that are the responsibility of the municipal, provincial or federal body
- Post-secondary institution projects for academic purposes, or facilities that provide provincially-regulated programs, services or training for accredited programs
- Projects that are linked to the delivery of core education, or health and social services programs, delivered through provincial or federal governments
- Projects delivered by Crown corporations
- Ongoing programs that existed prior to November 1, 2020, unless the proposal is for an expansion or addition as outlined above
- Projects, programs or services outside of Manitoba
- Projects that charge a fee for use or participation



## Religious services or political events

### How much do we fund?

The program funds up to 100 per cent of eligible project costs, up to a maximum grant of \$50,000. Applicants are welcome to apply for more than one project, however first consideration will be given to new applicants. We provide 90% of the recommended grant on approval. The final 10% of the approved grant would be provided upon the submission of the final project report, pending final project expenses.

### How decisions are made:

Applications will be reviewed and adjudicated by Manitoba's Grant Program Partner(s) which includes several external organizations with funding and subject matter expertise. All funding decisions will be made by Manitoba Grant Program Partner(s) include Manitoba Arts Council, Sport Manitoba, Manitoba Chambers of Commerce, The Winnipeg Foundation and United Way Winnipeg. Manitoba's Program Partner(s) and Manitoba Government will review and adjudicate grant applications.

---

### Adjudication Criteria:

For more information contact: [MGI@gov.mb.ca](mailto:MGI@gov.mb.ca) or [Coordination@gov.mb.ca](mailto:Coordination@gov.mb.ca)

## Questions and Answers

What is the Safe at Home Grant?

How much funding is available?

When are the application deadlines?

Who can apply?

How do organizations apply?

What can the grant fund/What is eligible for funding?

What criteria will be used to determine successful applicants?

How will decisions be made?

When will organizations receive funding once approved for the grant?

Are organizations eligible for other grants if they receive the Safe at Home

grant?

Will I have to pay the Safe at Home Grant amount back?

How do I know that my application has been successfully submitted?

What are the terms and conditions of the Stay at Home Grant?

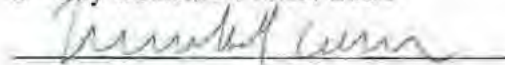
I am having difficulty completing the application form, can someone assist me?

[Accessibility](#) [Disclaimer](#) [Copyright](#) [Privacy](#)

[Facebook](#) [Flickr](#) [Twitter](#) [Youtube](#)

**EXHIBIT " M "**

This is Exhibit " M " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021



A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

Learn about [Manitoba's vaccine program](#) to help protect Manitobans.



[Printer Friendly](#) [Site Map](#) [Contact Government](#)



[RESIDENT AND ONLINE SERVICES](#) [BUSINESS](#) [GOVERNMENT](#) [VISITORS](#)

[Manitoba.ca](#) > [COVID-19](#) > [Support Programs for Individuals and Businesses](#)

## Get Started

[Support Programs for  
Individuals and Businesses](#)

[Manitoba Bridge Grant](#)

[Manitoba Bridge Grant -  
Home Based Businesses](#)

[Caregiver Wage Support  
Program](#)

[Manitoba Economic Support  
Centre](#)

[Premier's Economic  
Opportunities Advisory Board](#)

[Back to Work in Manitoba  
Wage Subsidy Program](#)

[B2B Manitoba](#)

[StudentJobsMB](#)

[Help Next Door](#)

## Federal Programs

[Tax and Fee Deferrals](#)

# Protecting Manitobans

## Federal Programs

The Government of Canada has introduced support programs for Canadian businesses facing financial hardship as a result of the COVID-19 pandemic.

### *Employment Insurance Work-Sharing Program*

The federal government is enhancing the [work-sharing program](#) to help support employers and workers who are impacted by a downturn in business due to the coronavirus, and making tax payment arrangements more flexible. For more information:

- [Canada's COVID-19 Economic Response Plan: Support for Businesses](#)
- [Canada's COVID-19 Economic Response Plan: Support for Industries](#)
- [Government of Canada Coronavirus disease \(COVID-19\) site](#)

### *Changes to Immigration Services for Your Skilled Workers*

International students, skilled workers, and entrepreneurs from all over the world are making Manitoba their new home. Visit the [Immigration, Refugees and Citizenship Canada website](#) for information on federal special measures to help temporary and permanent residents and applicants affected by the novel coronavirus (COVID-19).

*Government of Canada Call to Action for Manufacturers*

If you are a Canadian manufacturer or business that is prepared to rapidly scale up production or re-tool your manufacturing lines to develop products made in Canada to help in the fight against COVID-19, please contact the Government of Canada.

*Canada's Agricultural Sector*

The federal government has announced a number of programs to support Canada's agricultural sector, including helping producers with additional costs, helping redistribute existing and unsold inventories, increasing interim AgriStability payments and expanding AgriInsurance to include labour shortages. In addition, Farm Credit Canada has new supports in place, including loan deferrals and increased lending capacity for producers, agribusinesses and food processors.

*Temporary Wage Subsidy*

The Temporary Wage Subsidy for Employers is a three-month measure that will allow eligible employers to reduce the amount of payroll deductions required to be remitted to the Canada Revenue Agency (CRA).

*Canada Emergency Wage Subsidy*

The Canada Emergency Wage Subsidy provides a 75 per cent wage subsidy to eligible employers for up to 12 weeks, retroactive to March 15, 2020. This wage subsidy aims to prevent further job losses, encourage employers to re-hire workers previously laid off as a result of COVID-19, and help better position Canadian companies and other employers to more easily resume normal operations following the crisis.

*Corporate Income Tax Return and Payment Deferral*

The Canada Revenue Agency (CRA) has announced additional measures on March 26, 2020 in regard to the extension of tax reporting deadlines.

*Deferral of Sales Tax Remittance and Customs Duty Payments*

The Government of Canada is deferring Goods and Services Tax/Harmonized Sales Tax (GST/HST) remittances and customs duty payments to June 30, 2020.

*Deferral of Customs Duty and Sales Tax for Importers*

Payment deadlines for statements of accounts for March, April, and May are being deferred to June 30, 2020.

*New Loan Programs for Businesses*

The Government of Canada is announcing the launch of the new Canada Emergency Business Account to ensure small businesses have access to the capital they need to see them through

the current challenges.

*Canada Revenue Agency's Additional Measures for Individuals and Businesses*

The Government of Canada has introduced other measures including administrative tax measures, extending deadlines for trusts, partnerships and NR4 information returns, continuing to process objections, extending deadlines for filing objections, filing appeals for Canada Pension Plan and Employment Insurance, extending deadlines for charities, suspending audit activities and suspending collections on new debt.

*Canada's Energy Sector*

The federal government has announced more than \$2 billion in support for Canada's energy sector.

*Cultural, Heritage and Sport Organizations*

The federal government has established a \$500 million COVID-19 Emergency Support Fund for cultural, heritage and sport organizations that will help address the financial needs of affected organizations so they can continue to support artists and athletes.

*Business Credit Availability Program*

A new COVID-19 Emergency Support Fund for cultural, heritage and sport organizations will provide \$500 million to help address the financial needs of affected organizations.

*Bridge Funding Support for Business*

The government will provide \$675 million to support the work of Canada's regional development agencies (RDAs) to provide equivalent bridge financing support to businesses unable to access the government's broader support measures.

*Assistance for Entrepreneurs*

To support ongoing lending to young entrepreneurs, the government is also injecting \$20.1 million through Futurpreneur Canada and \$250 million through the Industrial Research Assistance Program.

*Non-Profits and Charitable Organizations*

The federal government is investing \$350 million to deliver essential services to those in need.

*Canada Emergency Commercial Rent Assistance (CECRA) Program*

This program for small businesses will seek to provide loans and/or forgivable loans to commercial property owners who in turn will lower or forgo the rent of small businesses for the months of April (retroactive), May, and June.

**EXHIBIT " N "**

This is Exhibit " N " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021

  
\_\_\_\_\_

A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba



[Canada.ca](#) > [Coronavirus disease \(COVID-19\)](#) > [Canada's response](#)

# Canada's COVID-19 Economic Response Plan

The Government of Canada is taking immediate, significant and decisive action to support Canadians and businesses facing hardship as a result of the COVID-19 outbreak.

## On this page

- [Support for individuals](#)
- [Support for businesses](#)
- [Support for sectors](#)
- [Support for organizations helping individuals](#)
- [Other measures](#)
- [Completed measures](#)

## Support for individuals

### Individuals and families

#### Employment Insurance (EI) program

We made temporary changes to the Employment Insurance (EI) program to better support Canadians who need financial assistance. As of September 27, 2020, the minimum benefit rate is \$500 per week before taxes in most cases.



[Apply to Employment Insurance](#)

If you are not eligible for EI, you may be eligible for the new benefits:

- [Canada Recovery Benefit \(CRB\)](#)
- [Canada Recovery Sickness Benefit \(CRSB\)](#)
- [Canada Recovery Caregiving Benefit \(CRCB\)](#)

### Canada Recovery Benefit (CRB)

The CRB provides \$500 per week for up to 26 weeks for workers who have stopped working or had their income reduced by at least 50% due to COVID-19, and who are not eligible for Employment Insurance (EI).

Apply to the Canada Recovery Benefit

### Canada Recovery Sickness Benefit (CRSB)

The CRSB provides \$500 per week for up to a maximum of two weeks, for workers who:

- Are unable to work for at least 50% of the week because they contracted COVID-19
- Are self-isolated for reasons related to COVID-19
- have underlying conditions, are undergoing treatments or have contracted other sicknesses that, in the opinion of a medical practitioner, nurse practitioner, person in authority, government or public health authority, would make them more susceptible to COVID-19.

Apply to the Canada Recovery Sickness Benefit

### Canada Recovery Caregiving Benefit (CRCB)

The CRCB provides \$500 per week for up to 26 weeks per household for workers:

- unable to work for at least 50% of the week because they must care for a child under the age of 12 or family member because schools, day-cares or care facilities are closed due to COVID-19
- because the child or family member is sick and/or required to quarantine or is at high risk of serious health implications because of COVID-19.

Apply to the Canada Recovery Caregiving Benefit

### Mortgage payment deferral

Homeowners facing financial hardship may be eligible for a

mortgage payment deferral.

The deferral is an agreement between you and your lender. Typically, the agreement indicates that you and your lender have agreed to pause or suspend your mortgage payments for a certain amount of time. After the agreement ends, your mortgage payments return to normal and the deferred payments — including principal and accumulated interest — are added to the outstanding principal balance and subsequently repaid throughout the life of the mortgage.

To know if you are eligible for a mortgage payment deferral or to learn what options are available, contact your lender — your bank or your mortgage professional.

[Learn more about mortgage payment deferral](#)

#### Provincial and territorial support

Other supports may be available to you in your province or territory

- [Alberta](#)
- [British Columbia](#)
- [Manitoba](#)
- [New Brunswick](#)
- [Newfoundland and Labrador](#)
- [Northwest Territories](#)
- [Nova Scotia](#)
- [Nunavut](#)
- [Ontario](#)
- [Prince Edward Island](#)
- [Quebec](#)
- [Saskatchewan](#)
- [Yukon](#)

Find the support you need

[Answer a few questions to get a list of benefits and support tailored to you](#)

## Support for businesses

### Avoiding layoffs, rehiring employees and creating new jobs

#### Canada Emergency Wage Subsidy (CEWS)

We are covering up to 75% of an employee's wages for qualifying eligible employers, with this subsidy rate in effect until March 13, 2021. The wage subsidy supports you to keep and re-hire your employees and avoid layoffs.

**The CEWS is available until June 2021.**

[Apply for the CEWS](#)

#### Extending the Work-Sharing program

We have extended the maximum duration of the Work-Sharing program from 38 weeks to 76 weeks for employers affected by COVID-19. This measure will provide income support to employees eligible for Employment Insurance who agree to reduce their normal working hours because of developments beyond the control of their employers.

[Apply to the Work-Sharing program](#)

### Financial support, loans and access to credit

#### Canada Emergency Business Account (CEBA) interest-free loans

The Canada Emergency Business Account (CEBA) provides interest-free, partially forgivable, loans of up to \$60,000, to small businesses and not-for-profits, that have experienced diminished revenues due to COVID-19 but face ongoing non-deferrable costs, such as rent, utilities, insurance, taxes and wages.

We have recently expanded CEBA to include an additional interest-free \$20,000 loan, 50% of which would be forgivable if repaid by December 31, 2022.

This means the additional loan effectively increases CEBA

loans from the existing \$40,000 to \$60,000 for eligible businesses, of which a total of \$20,000 will be forgiven if the balance of the loan is repaid by December 31, 2022.

Business owners can apply for support until March 31, 2021 through their [banks](#) and [credit unions](#).

[Learn more about the CEBA](#)

### Canada Emergency Rent Subsidy (CERS)

The Canada Emergency Rent Subsidy (CERS) provides a direct and easy-to-access rent and mortgage subsidy of up to 65% of eligible expenses to qualifying businesses, charities and non-profits. The subsidy rates are in effect until December 19, 2020. This support is available directly to tenants.

### Lockdown Support

Qualifying organizations that have been significantly restricted by a mandatory public health order issued by a qualifying public health authority can receive an additional 25% of rent support through the Lockdown Support.

The combined effect of the rent subsidy and the Lockdown Support is that hard-hit businesses, non-profits and charities subject to a lockdown can receive rent support of up to 90%.

The rent subsidy and the Lockdown Support are available until June 2021.

[Apply to the CERS](#)

### Highly Affected Sectors Credit Availability Program (HASCAP)

The Highly Affected Sectors Credit Availability Program (HASCAP) provides businesses heavily impacted by COVID-19, access guaranteed, low-interest loans of \$25,000 to \$1 million to cover operational cash flow needs.

HASCAP is available to businesses that operate in sectors such as tourism and hospitality, restaurants and those that

primarily rely on in-person services.

The program is available at some participating financial institutions. Other participating financial institutions will deploy the program progressively over the days that follow.

[Learn more about HASCAP eligibility requirements.](#)

#### Loan Guarantee for Small and Medium-Sized Enterprises

Through the Business Credit Availability Program, Export Development Canada (EDC) is working with financial institutions to guarantee 80% of new operating credit and cash flow term loans of up to \$6.25 million to small and medium-sized enterprises (SMEs).

This financing support is to be used for operational expenses and is available to both exporting and non-exporting companies.

This program is now available at various [banks](#) and [credit unions](#).

**This support is available until June 2021.**

[Learn more about the loan guarantee.](#)

#### Co-Lending Program for Small and Medium-Sized Enterprises

Through the Business Credit Availability Program, Business Development Canada (BDC) is working with financial institutions to co-lend term loans of up to \$6.25 million to SMEs for their operational cash flow requirements.

The program offers differing maximum finance amounts based on business revenues.

This program is now available at various [banks](#) and [credit unions](#).

**This support is available until June 2021.**

[Learn more about the Co-lending program.](#)

### Regional Relief and Recovery Fund (RRRF)

We are providing over \$1.5 billion through the Regional Relief and Recovery Fund (RRRF) to help more businesses and organizations in sectors such as manufacturing, technology, tourism and others that are key to the regions and to local economies. This fund is specifically targeted to those that may require additional help to recover from the COVID-19 pandemic, but have been unable to access other support measures.

[Apply to the RRRF through your local Regional Development Agency](#)

### Black Entrepreneurship Loan Fund

We are supporting Black business owners and entrepreneurs through the Black Entrepreneurship Loan Fund that will provide loans of between \$25,000 and \$250,000.

This initiative is part of the Black Entrepreneurship Program, in which we are investing up to nearly \$93 million.

More details on eligibility requirements and how to apply will be available soon

### Mid-Market Financing Program

Through the Business Credit Availability Program, the Business Development Canada's (BDC) Mid-Market Financing Program will provide commercial loans ranging between \$12.5 million and \$60 million to medium-sized businesses whose credit needs exceed what is already available through the Business Credit Availability Program and other measures.

BDC anticipates that qualifying companies will have annual revenues in excess of approximately \$100 million.

**This support is available until June 2021.**

[Learn more about the Mid-market Financing Program](#)

### Mid-Market Guarantee and Financing Program

Through the Business Credit Availability Program, EDC's Mid-Market Guarantee and Financing Program will bring liquidity to companies who tend to have revenues of between \$50 million to \$300 million, to sustain operations during this uncertain period. EDC will continue to work with Canadian financial institutions to guarantee 75 % of new operating credit and cash-flow loans – ranging in size from \$16.75 million to a maximum of \$80 million.

These expanded guarantees are available to exporters, international investors and businesses that sell their products or services within Canada.

Apply to the Mid-Market Guarantee and Financing Program

### Large Employer Emergency Financing Facility (LEEFF)

The Large Employer Emergency Financing Facility (LEEFF) provides bridge financing to Canada's largest employers, whose needs during the pandemic are not being met through conventional financing, in order to keep their operations going.

The additional liquidity provided through LEEFF allows Canada's largest businesses, their workers and their suppliers to remain active during this difficult time, and position them for a rapid economic recovery.

This program is delivered by the Canada Development Investment Corporation, in cooperation with Innovation, Science and Economic Development Canada and the Department of Finance.

Apply to the LEEFF program

### Additional support by sector

- [Agriculture and agri-food](#)
- [Aquaculture and fisheries](#)
- [Culture, heritage and sport](#)



## Energy

- [Infrastructure](#)

## Provincial and territorial support

Other supports for your business may be available to you in your province or territory

- [Alberta](#)
- [British Columbia](#)
- [Manitoba](#)
- [New Brunswick](#)
- [Newfoundland and Labrador](#)
- [Northwest Territories](#)
- [Nova Scotia](#)
- [Nunavut](#)
- [Ontario](#)
- [Prince Edward Island](#)
- [Quebec](#)
- [Saskatchewan](#)
- [Yukon](#)

## Support for self-employed individuals

### Canada Recovery Benefit (CRB)

The CRB provides \$500 per week for up to 26 weeks for workers who have stopped working or had their income reduced by at least 50% due to COVID-19, and who are not eligible for [Employment Insurance \(EI\)](#).

[Apply to the Canada Recovery Benefit](#)

### Canada Recovery Sickness Benefit (CRSB)

The CRSB provides \$500 per week for up to a maximum of two weeks, for workers who:

- Are unable to work for at least 50% of the week because they contracted COVID-19
- Are self-isolated for reasons related to COVID-19
- have underlying conditions, are undergoing treatments

or have contracted other sicknesses that, in the opinion of a medical practitioner, nurse practitioner, person in authority, government or public health authority, would make them more susceptible to COVID-19.

Apply to the Canada Recovery Sickness Benefit

#### Canada Recovery Caregiving Benefit (CRCB)

The CRCB provides \$500 per week for up to 26 weeks per household for workers:

- unable to work for at least 50% of the week because they must care for a child under the age of 12 or family member because schools, day-cares or care facilities are closed due to COVID-19
- because the child or family member is sick and/or required to quarantine or is at high risk of serious health implications because of COVID-19.

Apply to the Canada Recovery Caregiving Benefit

## Indigenous businesses

### Relief measures for Indigenous businesses

We are providing \$306.8 million in funding to help small and medium-sized Indigenous businesses, and to support Aboriginal Financial Institutions that offer financing to these businesses.

The funding will allow for short-term, interest-free loans and non-repayable contributions through Aboriginal Financial Institutions, which offer financing and business support services to First Nations, Inuit, and Métis businesses.

Financial support for Indigenous businesses will be provided through Aboriginal Financial Institutions, and administered by the National Aboriginal Capital Corporations Association and the Métis capital corporations in partnership with Indigenous Services Canada.

Learn more about this measure for Indigenous SME

Canada.ca > Department of Finance Canada > News

## Additional Details on the Canada Emergency Wage Subsidy

From: [Department of Finance Canada](#)

### Backgrounder

April 11, 2020

Applications for the [Canada Emergency Wage Subsidy](#) are now open.

The Government of Canada continues to take action to help Canadians and businesses facing hardship as a result of the COVID-19 outbreak. Learn more about the latest measures at [Canada's COVID-19 Economic Response Plan](#).

### What It Means for Canadian Employers

To help employers keep and return workers to their payroll through the challenges posed by the COVID-19 pandemic, the Prime Minister, Justin Trudeau, announced the new Canada Emergency Wage Subsidy on March 27, 2020. This would provide a 75-per-cent wage subsidy to eligible employers for up to 12 weeks, retroactive to March 15, 2020.

This wage subsidy aims to prevent further job losses, encourage employers to re-hire workers previously laid off as a result of COVID-19, and help better position Canadian companies and other employers to more easily resume normal operations following the crisis. While the Government has designed the proposed wage subsidy to provide generous and timely financial support to employers, it has done so with the expectation that employers will do their part by using the subsidy in a manner that supports the health and well-being of their employees.

#### Eligible Employers

Eligible employers would include individuals, taxable corporations, partnerships consisting of eligible employers, non-profit organizations and registered charities.

Public bodies would not be eligible for this subsidy. Public bodies would generally include municipalities and local governments, Crown corporations, wholly owned municipal corporations, public universities, colleges, schools and

hospitals.

This subsidy would be available to eligible employers that see a drop of at least 15 per cent of their revenue in March 2020 and 30 per cent for the following months (see *Eligible Periods*). In applying for the subsidy, employers would be required to attest to the decline in revenue.

We encourage all eligible employers to rehire employees as quickly as possible and to apply for the Canada Emergency Wage Subsidy if they are eligible. To ensure that the Canada Emergency Response Benefit (CERB) applies as intended, the Government will consider implementing an approach to limit duplication. This could include a process to allow individuals rehired by their employer during the same eligibility period to cancel their CERB claim and repay that amount.

## Calculating Revenues

An employer's revenue for this purpose would be its revenue in Canada earned from arm's-length sources. Revenue would be calculated using the employer's normal accounting method, and would exclude revenues from extraordinary items and amounts on account of capital.

On April 8, 2020, the government clarified that employers would be allowed to calculate their revenues under the accrual method or the cash method, but not a combination of both. Employers would select an accounting method when first applying for the CEWS and would be required to use that method for the entire duration of the program.

For registered charities and non-profit organizations, the calculation will include most forms of revenue, excluding revenues from non-arm's length persons. These organizations would be allowed to choose whether or not to include revenue from government sources as part of the calculation. Once chosen, the same approach would have to apply throughout the program period.

Special rules for the computation of revenue would be provided to take into account certain non-arm's length transactions, such as where an employer sells all of its output to a related company that in turn earns arm's length revenue. As well, affiliated groups would be able to compute revenue on a consolidated basis.

## Amount of Subsidy

The subsidy amount for a given employee on eligible remuneration paid in respect of the period between March 15 and June 6, 2020 would be the greater of:

- 75 per cent of the amount of remuneration paid, up to a maximum benefit of \$847 per week; and
- the amount of remuneration paid, up to a maximum benefit of \$847 per week or 75 per cent of the employee's pre-crisis weekly remuneration, whichever is less.

In effect, employers may be eligible for a subsidy of up to 100 per cent of the first 75 per cent of pre-crisis wages or salaries of existing employees. These employers would be expected where possible to maintain existing employees' pre-crisis employment earnings.

The pre-crisis remuneration for a given employee would be based on the average weekly remuneration paid between January 1 and March 15 inclusively, excluding any seven-day periods in respect of which the employee did not

receive remuneration.

Employers will also be eligible for a subsidy of up to 75 per cent of salaries and wages paid to new employees.

Eligible remuneration may include salary, wages, and other remuneration like taxable benefits. These are amounts for which employers would generally be required to withhold or deduct amounts to remit to the Receiver General on account of the employee's income tax obligation. However, it does not include severance pay, or items such as stock option benefits or the personal use of a corporate vehicle.

A special rule will apply to employees that do not deal at arm's length with the employer. The subsidy amount for such employees will be limited to the eligible remuneration paid in respect of any pay period between March 15 and June 6, 2020, up to a maximum benefit of the lesser of \$847 per week and 75 per cent of the employee's pre-crisis weekly remuneration. The subsidy would only be available in respect of non-arm's length employees employed prior to March 16, 2020.

There would be no overall limit on the subsidy amount that an eligible employer may claim.

Employers are expected to make their best effort to top-up employees' salaries to bring them to pre-crisis levels.

## Refund for Certain Payroll Contributions

On April 8, 2020, the Government proposed to expand the CEWS by introducing a new 100 per cent refund for certain employer-paid contributions to Employment Insurance, the Canada Pension Plan, the Quebec Pension Plan, and the Quebec Parental Insurance Plan. This refund would cover 100 per cent of employer-paid contributions for eligible employees for each week throughout which those employees are on leave with pay and for which the employer is eligible to claim for the CEWS for those employees.

In general, an employee will be considered to be on leave with pay throughout a week if that employee is remunerated by the employer for that week but does not perform any work for the employer in that week. This refund would not be available for eligible employees that are on leave with pay for only a portion of a week.

This refund would not be subject to the weekly maximum benefit per employee of \$847 that an eligible employer may claim in respect of the CEWS. There would be no overall limit on the refund amount that an eligible employer may claim.

For greater certainty, employers would be required to continue to collect and remit employer and employee contributions to each program as usual. Eligible employers would apply for a refund, as described above, at the same time that they apply for the CEWS.

## Eligible Periods

Eligibility would generally be determined by the change in an eligible employer's monthly revenues, year-over-year, for the calendar month in which the period began.

On April 8, 2020, the Government announced that all employers would be allowed to calculate their change in revenue using an alternative benchmark to determine their eligibility. This would provide more flexibility to employers for which the general approach may not be appropriate, including high-growth firms, sectors that faced

difficulties in 2019, non-profits and charities, as well as employers established after February 2019. Under this alternative approach, employers would be allowed to compare their revenue using an average of their revenue earned in January and February 2020. Employers would select the general year-over-year approach or this alternative approach when first applying for the CEWS and would be required to use the same approach for the entire duration of the program.

The Government is also announcing that, in order to provide certainty to employers, once an employer is found eligible for a specific period, the employer would automatically qualify for the next period.

- ABC Inc. is a start-up that started its operations last September. It reported revenues of \$100,000 in January and \$140,000 in February, for a monthly average of \$120,000. In March, its revenues dropped to \$90,000. Because revenues in March are 25 per cent lower than \$120,000, ABC Inc. would be eligible for the CEWS for the first and second claiming period. To be eligible for the third claiming period, ABC Inc. revenues would have to be \$84,000 or less for the month of April or May (that is, 30 per cent lower than \$120,000).

The amount of wage subsidy (provided under the [COVID-19 Economic Response Plan](#)) received by the employer in a given month would be ignored for the purpose of measuring year-over-year changes in monthly revenues.

- For example, if revenues in March 2020 were down 20 per cent compared to March 2019, the employer would be allowed to claim the CEWS (as calculated above) on remuneration paid in respect of the period between March 15 and April 11, 2020, as well as between April 12 to May 9.
- Alternatively, this employer could use its average revenue from the months of January and February 2020, instead of March 2019, to determine if it is eligible for the CEWS.
- Once an approach is chosen, the employer would have to apply it throughout the program period.

The table below outlines each claiming period, the required reduction in revenue and the reference period for eligibility.

## Eligible Periods

	Claiming period	Required reduction in revenue	Reference period for eligibility
<b>Period 1</b>	March 15 to April 11	15%	March 2020 over: <ul style="list-style-type: none"> <li>• March 2019 or</li> <li>• Average of January and February 2020</li> </ul>
<b>Period 2</b>	April 12 to May 9	30%	Eligible for Period 1 <b>OR</b> April 2020 over: <ul style="list-style-type: none"> <li>• April 2019 or</li> <li>• Average of January and February 2020</li> </ul>
<b>Period 3</b>	May 10 to June 6	30%	Eligible for Period 2 <b>OR</b> May 2020 over: <ul style="list-style-type: none"> <li>• May 2019 or</li> <li>• Average of January and February 2020</li> </ul>

## Eligible employees

An eligible employee is an individual who is employed in Canada.

Eligibility for the CEWS of an employee's remuneration will be available to employees other than those who have been without remuneration in respect of 14 or more consecutive days in the eligibility period, i.e., from March 15 to April 11, from April 12 to May 9, or from May 10 to June 6.

This rule replaces the previously announced restriction that an employer would not be eligible to claim the CEWS for remuneration paid to an employee in a week that falls within a 4-week period for which the employee is eligible for the Canadian Emergency Response Benefit.

## How to Apply

Eligible employers would be able to apply for the CEWS through the Canada Revenue Agency's *My Business Account* portal as well as a web-based application. Employers would have to keep records demonstrating their reduction in arm's-length revenues and remuneration paid to employees. More details about the application process will be made available shortly.

## Ensuring Compliance

In order to maintain the integrity of the program and to ensure that it helps Canadians keep their jobs, the employer would be required to repay amounts paid under the CEWS if they do not meet the eligibility requirements. Penalties may apply in cases of fraudulent claims. The penalties may include fines or even imprisonment. In addition, anti-abuse rules would be put in place to ensure that the subsidy is not inappropriately obtained and to help ensure that employees are paid the amounts they are owed.

Employers that engage in artificial transactions to reduce revenue for the purpose of claiming the CEWS would be subject to a penalty equal to 25 per cent of the value of the subsidy claimed, in addition to the requirement to repay in full the subsidy that was improperly claimed.

## Interaction with 10 per cent Wage Subsidy

On March 25, 2020, the *COVID-19 Emergency Response Act*, which included the implementation of a temporary 10 per cent wage subsidy, received Royal Assent. For employers that are eligible for both the CEWS and the 10 per cent wage subsidy for a period, any benefit from the 10 per cent wage subsidy for remuneration paid in a specific period would generally reduce the amount available to be claimed under the CEWS in that same period.

## Interaction with the Work-Sharing Program

On March 18, 2020, the Prime Minister announced an extension of the maximum duration of the Work-Sharing program from 38 weeks to 76 weeks for employers affected by COVID-19. This measure will provide income support to employees eligible for Employment Insurance who agree to reduce their normal working hours because of developments beyond the control of their employers.

For employers and employees that are participating in a Work-Sharing program, EI benefits received by employees through the Work-Sharing program will reduce the benefit that their employer is entitled to receive under the CEWS.

## Government Assistance

The usual treatment of tax credits and other benefits provided by the government would apply. As a consequence, the wage subsidy received by an employer would be considered government assistance and be included in the employer's taxable income.

Assistance received under either wage subsidy would reduce the amount of remuneration expenses eligible for other federal tax credits calculated on the same remuneration.

## How employers will benefit from the CEWS

Maude and Stéphane own a corporation that operates an automobile repair shop in Saint Boniface, Manitoba. They are working full time, each drawing a salary of \$1,300 per week, and have three part-time employees, each earning \$800 per week, for a total weekly payroll of \$5,000. Maude and Stéphane have reduced their opening hours due to decreased demand for their services. They had initially laid off their employees, but they have now decided to re-hire them following the announcement of the Canada Emergency Wage Subsidy. Their employees are not being asked to report to work during this challenging period.

Maude and Stéphane are now keeping their employees on the payroll, paying them 75 per cent of their pre-crisis salary (\$600 per week). Maude and Stéphane would be eligible for a weekly wage subsidy of \$3,494 (\$847 for each of themselves and \$600 for each of their employees). Maude and Stéphane would also be eligible for a 100-per-cent refund of their employer-paid contributions to Employment Insurance and the Canada Pension Plan in respect of their employees, providing an additional benefit of up to \$124 per week.

At the end of each claiming period, Maude and Stéphane would submit an application through the Canada Revenue Agency portal, attesting that their decline in revenues in each month is sufficient to qualify, when compared to the average of January and February. They would also report the total remuneration paid to themselves and their furloughed employees during the month. As Maude and Stéphane have access to direct deposits with the Canada Revenue Agency, they would receive their subsidy shortly after each application.

## Canada's COVID-19 Economic Response Plan— Cost and Implementation

These measures are part of the Government of Canada's [COVID-19 Economic Response Plan](#) - a comprehensive plan to help ensure that Canadians can pay for essentials like mortgages, rent and groceries, and to help employers



continue to pay their employees and their bills during this time of uncertainty.

## **Protecting Health and Safety**

**COVID-19 Response Fund (including \$500 million in support for Provinces and Territories (2019-20  
Funding for Personal Protective Equipment and Supplies (of which, \$200 million in 2019-20)**

***Total – Protecting Health and Safety***

### **Direct Support Measures**

**Canada Emergency Response Benefit**

**Enhanced GST Credit**

**Enhanced Canada Child Benefit**

**Temporary Business Wage Subsidy**

**Canada Emergency Wage Subsidy**

**Canada Student Loan Payments**

**Support for Indigenous Communities**

**Support for the homeless (through Reaching Home)**

**Support for women's shelters and sexual assault centres, including for facilities in Indigenous con**

**Support for Seniors (of which, \$9M in 2019-20), Children and Youth**

**Support for Food Banks and Local Food Organizations (of which, \$25M in 2019-20)**

**Lower RRIF Minimum Withdrawal**

**Support for the Air Transportation Sector**

***Total – Direct Support Measures***

### **Liquidity Support**

**CRA/CBSA liquidity support to businesses and individuals**

**Income Tax Payment Deferral until September**

**Sales Tax Remittance and Customs Duty Payments Deferral**

***Total – CRA/CBSA liquidity support***

**Business Credit Availability Program (BCAP) (through BDC and EDC)**

**Small and Medium-sized Enterprise Loan and Guarantee program**

**Canada Emergency Business Account**

**Credit and liquidity support for the Agricultural Sector**

**Credit and liquidity support through the Bank of Canada, OSFI, CMHC and commercial lenders**

***Total – BCAP, other credit and liquidity support***

Search for related information by keyword: [EC Economics and Industry](#) | [GV Government and Politics](#) | [Department of Finance Canada](#) | [Canada](#) | [Money and finances](#) | [Coronavirus \(COVID-19\)](#) | [general public](#) | [backgrounders](#)

[Report a problem or mistake on this page](#)

[Share this page](#)

Date modified: 2020-05-11

[Contact us](#)

[Departments and agencies](#)

[Public service and military](#)

[News](#)

[Treaties, laws and regulations](#)

[Government-wide reporting](#)

[Prime Minister](#)

[About government](#)

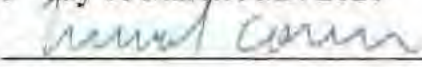
[Open government](#)

[Social media](#) • [Mobile applications](#) • [About Canada.ca](#) • [Terms and conditions](#) • [Privacy](#)



**EXHIBIT " O "**

This is Exhibit " O " referred to in  
the Affidavit of Szilveszter Jozsef  
Komlodi Affirmed before me this  
5<sup>th</sup> day of March A.D. 2021

  
\_\_\_\_\_  
A Barrister-at-Law entitled to practice  
in and for the Province of Manitoba

[Canada.ca](#)[Department of Finance Canada](#)[News](#)

# Additional Support for Canadian Businesses from the Economic Impact of COVID-19

**From: [Department of Finance Canada](#)**

## Backgrounder

The Government of Canada continues to take action to help Canadians and businesses facing hardship as a result of the COVID-19 outbreak. Learn more about the latest measures at [Canada's COVID-19 Economic Response Plan](#).

The Government of Canada is making additional investments to support Canadian businesses from the economic impacts of COVID-19. These new investments provide support to financial institutions and allow them to quickly provide credit and liquidity options for a range of businesses.

These measures are a part of the Government of Canada's [COVID-19 Economic Response Plan](#), which provides direct support and tax deferrals to Canadian workers and businesses to help them in these difficult times.

## On this page

- [Deferral of Sales Tax Remittance and Customs Duty Payments](#)
- [Deferral of Customs Duty and Sales Tax for Importers](#)
- [New Loan Programs for Businesses](#)
- [Canada Revenue Agency's Additional Measures for Individuals and Businesses](#)

## Deferral of Sales Tax Remittance and Customs Duty Payments

In order to provide support for Canadian businesses during these unprecedented economic times, the Government is deferring Goods and Services Tax/Harmonized Sales Tax (GST/HST) remittances and customs duty payments to June 30, 2020.

This measure could provide up to \$30 billion in cash flow or liquidity assistance for Canadian businesses and self-employed individuals over the next three months

## GST/HST Remittance Deferral

The GST/HST applies to sales of most goods and services in Canada and at each stage of the supply chain. Vendors must collect the GST/HST and remit it (net of input tax credits) with their GST/HST return for each reporting period.

Vendors with annual sales of more than \$6 million remit and report monthly, and those with annual sales of \$1.5 million to \$6 million are able to remit and report on a quarterly basis (or monthly if they choose to). Small vendors can report annually.

The GST/HST amounts collected are generally due by the end of the month following the vendor's reporting period: e.g., for a monthly filer, the GST/HST amounts collected on its February sales are due by the end of March.

To support Canadian businesses in the current extraordinary circumstances, the Minister of National Revenue will extend until June 30, 2020 the time that:

- Monthly filers have to remit amounts collected for the February, March and April 2020 reporting periods;
- Quarterly filers have to remit amounts collected for the January 1, 2020 through March 31, 2020 reporting period; and
- Annual filers, whose GST/HST return or instalment are due in March, April or May 2020, have to remit amounts collected and owing for their previous fiscal year and instalments of GST/HST in respect of the filer's current fiscal year.

Businesses in need of information about their particular obligations may contact the Canada Revenue Agency or refer to its website.

## Deferral of Customs Duty and Sales Tax for Importers

Imported goods by businesses are generally subject to the GST, at a rate of 5 per cent, as well as applicable customs duties, which vary by product and country of origin. While the vast majority of imports enter Canada duty-free, some tariffs remain, especially on consumer goods.

The *Customs Act*, for which the Minister of Public Safety and Emergency Preparedness is responsible and which is administered by the Canada Border Services Agency (CBSA), governs the levying and payment of customs duties in Canada.

Typically, payments owing for customs duties and the GST on imports are due before the first day of the month following the month in which the Statements of Accounts are issued.

Section 33.7(1) of the *Customs Act* allows the Minister of Public Safety and Emergency Preparedness or

an officer designated by the President of the CBSA to extend, in writing, the timeline for accounting or payment of amounts owing.

Under this authority, payment deadlines for statements of accounts for March, April, and May are being deferred to June 30, 2020.

Businesses in need of information about their particular accounting and payment obligations on imported goods may contact the Canada Border Services Agency for more details.

## New Loan Programs for Businesses

### Canada Emergency Business Account

To ensure that small businesses have access to the capital they need to see them through the current challenges, the Government of Canada is announcing the launch of the new Canada Emergency Business Account, which will be implemented by eligible financial institutions in cooperation with Export Development Canada (EDC).

This \$25 billion program will provide interest-free loans of up to \$40,000 to small businesses and not-for-profits, to help cover their operating costs during a period where their revenues have been temporarily reduced, due to the economic impacts of the COVID-19 virus.

This will better position them to quickly return to providing services to their communities and creating employment.

Small businesses and not-for-profits should contact their financial institution to apply for these loans.

To qualify, these organizations will need to demonstrate they paid between \$50,000 to \$1 million in total payroll in 2019. Repaying the balance of the loan on or before December 31, 2022 will result in loan forgiveness of 25 percent (up to \$10,000).

### A New Loan Guarantee for Small and Medium Enterprises

Small and medium-sized enterprises (SMEs) may be particularly vulnerable to the impacts of COVID-19. To support their operations, EDC will guarantee new operating credit and cash flow term loans that financial institutions extend to SMEs, up to \$6.25 million.

The program cap for this new loan program will be a total of \$20 billion for export sector and domestic companies.

### A New Co-Lending Program for Small and Medium Enterprises

To provide additional liquidity support for Canadian businesses, the Co-Lending Program will bring the Business Development Bank of Canada (BDC) together with financial institutions to co-lend term loans to SMEs for their operational cash flow requirements.

Eligible businesses may obtain incremental credit amounts up to \$6.25 million BDC's portion of this program is up to \$5 million maximum per loan. Eligible financial institutions will conduct the underwriting and manage the interface with their customers. The potential for lending for this program will be \$20 billion.

### New Business Credit Availability Program Measures

Measure	Size
Canada Emergency Business Account	\$25B
SME Loan and Guarantee program	
EDC Guarantee	\$20B
BDC Co-Lending Program	\$20B
Total	\$65B

## Canada Revenue Agency's Additional Measures for Individuals and Businesses

The Canada Revenue Agency (CRA) understands that individuals and businesses might be dealing with difficulties filing their income and benefit returns, and could experience cash-flow challenges in the coming months. In response, the CRA will be applying these additional measures:

### Administrative tax measures

In addition to the income tax filing and payment deadline extensions, unless otherwise noted, administrative income tax actions required of taxpayers by the CRA that are due after March 18, 2020, can be deferred to June 1, 2020. These administrative income tax actions include returns, elections, designations and information requests. Payroll deductions payments and all related activities are excluded.

### Trusts, Partnerships and NR4 Information Returns

The deadlines for trusts, partnership and NR4 information returns are all extended to May 1, 2020. This is due to administrative requirements in advance of the June 1, 2020 deadline for filing individual income tax and benefit returns.

### Objections

Any objections related to Canadians' entitlement to benefits and credits have been identified as a critical service and will continue to be processed during the COVID-19 crisis. As a result, there should not be any delays associated with the processing of these objections.

With respect to objections related to other tax matters filed by individuals and businesses, the CRA is currently holding these accounts in abeyance. No collection action will be taken with respect to these accounts during this period of time.

### Extending the deadline for filing an objection

For any objection request due March 18 or later, the deadline is effectively extended until June 30, 2020.

### Canada Pension Plan/Employment Insurance (CPP/EI) appeals to the Minister

In cases where taxpayers wish to file an appeal in relation to CPP/EI rulings decision, they are encouraged to do so through MyAccount to avoid potential delays.

The CPP/EI appeals program is currently only actioning appeals that are related to cases where EI benefits are pending. These cases will be treated on a priority basis. All other appeals will be actioned when normal services resume.

In addition, the CPP/EI Appeals to the Minister program will exercise discretion on a case by case basis when additional time is required to respond to a request.

### Deadlines for charities

CRA is extending the filing deadline to December 31, 2020, for all charities with a Form T3010, Registered Charity Information Return due between March 18, 2020 and December 31, 2020. This will allow charities more time to complete and submit their T3010.

### Suspending audit activities

CRA will not initiate contact with taxpayers for audits, with certain exceptions. This includes:

- no new audits being launched;
- no requests for information related to existing audits; and
- no audits should be finalized and no reassessments should be issued.

### Suspending collections on new debt

Collections activities on new debts will be suspended until further notice, and flexible payment arrangements will be available.

Payment arrangements are also available on a case-by-case basis if you can't pay your taxes, child and family benefit overpayments, Canada Student Loans, or other government program overpayments in full.

If you have concerns and require contact with a Collections Officer, please contact our toll free number 1-800-675-6184 between 8:00 a.m. and 4:00 p.m. your local time.

### Requirement to pay (RTP)



Banks and employers do not need to comply or remit on existing RTPs during this time.

### Taxpayer relief requests

Taxpayers who are unable to file a return or make a payment by the tax-filing and payment deadlines because of COVID-19 can request the cancellation of penalty and interest charged to their account. Penalties and interest will not be charged if the new deadlines that the government has announced to tax-filing and payments are met. For more information about deadlines, see [Helping Canadians with the economic impact of the COVID-19 Pandemic](#).

For more information about taxpayer relief and how to make a request to the CRA to have interest and/or penalties cancelled, please go to [Canada.ca/taxpayer-relief](#).

**For more information,** visit [Helping Canadians with the economic impact of the COVID-19 Pandemic](#).

Search for related information by keyword: [Public finance](#) | [Department of Finance Canada](#) | [Canada](#) | [Money and finances](#) | [Coronavirus \(COVID-19\)](#) | [general public](#) | [backgrounders](#)

[Report a problem or mistake on this page](#)

[Share this page](#)

Date modified: 2020-03-27

[Contact us](#)

[Departments and agencies](#)

[Public service and military](#)

[News](#)

[Treaties, laws and regulations](#)

[Government-wide reporting](#)

[Prime Minister](#)

[About government](#)

[Open government](#)

[Social media](#) • [Mobile applications](#) • [About Canada.ca](#) • [Terms and conditions](#) • [Privacy](#)



[Canada.ca](#) / [Department of Finance Canada](#) / [News](#)

# Canada's COVID-19 Economic Response Plan: New Support to Protect Canadian Jobs

**From: [Department of Finance Canada](#)**

## Backgrounder

The Government of Canada is taking immediate, significant and decisive action through [Canada's COVID-19 Economic Response Plan](#) to support Canadians and businesses facing hardship as a result of the global COVID-19 outbreak.

The government is working in close consultation with all impacted sectors across the economy to take action where it is required, and is prepared to take further targeted action as needed to ensure that Canada is well-positioned for a strong recovery from the impacts of COVID-19 across all sectors of the economy.

## On this page

- [Small and Medium-sized Businesses across Canada](#)
- [Small Business and Community Support Measures](#)
- [Cultural, Heritage and Sport Organizations](#)
- [Entrepreneurs, Innovators and Pre-Revenue Firms](#)
- [Canada's Energy Sector](#)
- [Orphan and inactive oil and gas wells](#)
- [Reducing Greenhouse gas emissions in the oil and gas sector](#)
- [Business Credit Support for the Energy Sector](#)

## Small and Medium-sized Businesses across Canada

The government has launched a number of broad measures to help support the liquidity challenges that firms are facing in response to COVID-19. Support for small and medium-sized enterprises (SMEs) is anchored through the Business Credit Availability Program (BCAP), the Canada Emergency Business Account and the Canada Emergency Wage Subsidy.

However, some SMEs may find that they don't qualify for these measures or cannot access them. These accessibility gaps could be more pronounced in rural areas, in certain sectors like cultural, heritage and sport, or for innovative pre-revenue firms.

Today's targeted measures will help better support these businesses.

## Small Business and Community Support Measures

Canada's Regional Development Agencies (RDAs) are the front line for economic development in Canada and help to address key economic challenges by providing regionally tailored programs, services, knowledge and expertise.

There are six RDAs across the country (the Canadian Northern Economic Development Agency, Western Economic Diversification Canada, FedNor, FedDev Ontario, Canada Economic Development for Quebec Regions and the Atlantic Canada Opportunities Agency).

The government will provide \$675 million to support their work, and the businesses and workers they help. This will enable the RDAs to provide equivalent bridge financing support to businesses unable to access the government's broader support measures.

In response to the effect that COVID-19 may have on rural communities and businesses, the government is also providing \$287 million for the Community Futures Network, funded through the RDAs, to support rural businesses and communities, including through access to capital.

## Cultural, Heritage and Sport Organizations

Canadian cultural, heritage and sport organizations are facing significant financial losses due to COVID-19. They have lost potential revenues from closed facilities or cancelled events. Meanwhile, they are facing challenges accessing Canada's broader support measures such as the Canada Emergency Wage Subsidy because of unique seasonal revenues and costs.

The new COVID-19 Emergency Support Fund for Cultural, Heritage and Sport Organizations will provide \$500 million to help address the financial needs of affected organizations within these sectors so they can continue to support artists and athletes. The Fund will be administered by Canadian Heritage with the support of its partners.

Support will be provided in a manner consistent with other COVID-19 supports such as the Canada Emergency Wage Subsidy and the Canada Emergency Business Account (CEBA).

## Entrepreneurs, Innovators and Pre-Revenue Firms

Futurpreneur Canada is the only national non-profit organization that provides financing, mentoring and support tools to entrepreneurs aged 18-39. To support ongoing lending to young entrepreneurs, the



## Information to help your business take action during the COVID-19 crisis

We are here to help

Last updated on January 28, 2021

### Financial relief for entrepreneurs

Learn more about options for accessing credit to support you through to a more stable time.

### Support for businesses

#### BDC Financing

##### Working capital Financing

Loans of up to \$2 million for businesses directly or indirectly impacted by COVID-19, with flexible repayment terms such as principal postponements for qualifying businesses.

[Learn more](#)

##### Small Business Loan

Up to \$100,000 online for businesses who have been in operation for at least 24 months and are generating revenues.

[Apply now](#)

#### Access to credit through the Business Credit Availability Program (BCAP)

##### Canada Emergency Business Account (CEBA)

Up to \$60,000 interest-free loans for small businesses and not-for profits with a 2019 payroll between \$20,000 and \$1.5 million, available through most financial institutions.

[Learn more](#)

##### Co-Lending Program

Up to \$12.5 million for your operational cash flow requirements; available until or before June 2021 (extended)

[Learn more](#)

##### EDC Business Credit Availability Program (BCAP) Guarantee

Up to \$6.25 million to cover rent, payroll and other operating costs caused by the current crisis; available until or before June 2021 (extended).

[Learn more](#)

##### Mid-Market Financing Program

Junior loans ranging between \$12.5 million and \$60 million for medium-sized businesses particularly impacted by the COVID-19 pandemic; available until or before June 2021 (extended).

[Learn more](#)

## Other relief programs

### Large Employer Emergency Financing Facility

Bridge financing providing additional liquidity for large businesses whose needs are not being met to keep operations going through conventional financing during the pandemic.

[Learn more](#)

### Regional Relief and Recovery Fund

Additional funds for businesses and organizations unable to access other support measures and impacted by the COVID-19 pandemic in sectors key to the regions and to local economies.

[Learn more](#)

### Highly Affected Sectors Credit Availability Program (HASCAP) Guarantee

100% guaranteed loans of \$25,000 to \$1 million to cover operational cash flow in response to COVID-19, available through your financial institution until June 30, 2021.

[Learn more](#)

### New Canada Emergency Rent Subsidy (CERS)

Rent and mortgage support until June 2021 for qualifying businesses who have suffered a revenue drop by subsidizing a percentage of their expenses, on a sliding scale, up to a maximum of 65% of eligible expenses until December 19, 2020. A top-up of 25 per cent is available for organizations temporarily shut down by a mandatory public health order issued by a qualifying public health authority.

[Learn more](#)

### Canada Emergency Wage Subsidy (CEWS)

Employers may be eligible for a subsidy of 65% of employee wages for up to 24 weeks to re-hire workers laid off as a result of COVID-19. This measure is to help create over 1 million jobs and restore employment to the level it was before the pandemic. The Canada Emergency Wage Subsidy is extended until June 2021.

[Learn more](#)

For questions about BDC's financing solutions, advisory services or for any other question, write us. One of our representatives will be in touch.

A number of measures, in addition to access to credit, have been put in place through the **Government of Canada's Economic Response Plan** to help you through these trying times. We invite you to consult these pages to find out what measure best fits your needs.

## Frequently asked questions

Find answers to the most commonly asked questions on the special programs listed on this page, eligibility and processing times during the COVID-19 pandemic.

### BDC products and services

#### What kind of COVID-19 financing is available through BDC?

- If you are already a client, you may be eligible for a postponement of payments for up to 6 months, free of charge (for existing BDC clients with total BDC loan commitment of \$1 million or less).
- Canadian venture capital firm-backed companies impacted by COVID-19 who may not qualify for many of the federal government relief measures may be eligible for the BDC Capital Bridge Financing Program launched in collaboration with other venture capital firms. BDC could match a current financing round being raised through qualified existing and/or new investors into an eligible Canadian company with convertible notes starting at \$250,000. [Click here for details and eligibility criteria.](#)
- We also offer a variety of **other products and services** aimed at helping Canadian businesses.

#### Do you offer grants or subsidies?

No. BDC is a commercial bank offering long-term business financing, paid back with interest.

#### Do you provide financing for start-ups?

To be eligible for BDC financing when your business is at the start-up phase, you must:

- have been in business for at least 12 months,
- be generating revenue,
- demonstrate realistic market and sales potential,
- provide personal or credit references,
- demonstrate a reasonable investment of financial resources, and
- provide a solid business plan.

If you do not meet our eligibility criteria, we invite you to reach out to our partners who may be better positioned to support you with their programs:

- **Community Futures**
  - Delivers small business loans, tools, training and events for people living in rural communities who want to start, expand, franchise or sell a business
- **Futurpreneur Canada**
  - For aspiring business owners aged 18-39 years old
  - Up to \$60,000, collateral-free loans, with a five-year term
  - Interest-only payments in the first year; principal + interest payments in years two to five
  - All loan recipients also receive mentorship for two years

## Eligibility

### How do I know if I am eligible for one of these programs?

In order to be eligible, your business must have been:

- impacted directly or indirectly by recent events, and
- financially viable prior to the impact of COVID-19

### COVID-19 Resource Guide for entrepreneurs

A compilation of federal and provincial government support measures for business:

- Access to capital and other liquidity support
- Measures to avoid or minimize the impact from layoffs
- Provincial/Territorial measures
- Planning tools and tips to create resilience and emerge strong in recovery
- Additional resources and information

<sup>1</sup> This information is updated regularly.

## Advisory services

Expert advice to guide your business through uncertain times.

### Increase online presence and sales

Adapt to the uptick in online activity by optimizing your web presence and e-commerce capabilities.

[Learn more](#)

### Manage your recovery

Plan your finances and operations to support your new reality.

[Learn more](#)

### Optimize health guidelines

Ensure public health guidelines are properly updated and enforced in your workplace.

[Learn more](#)

## Articles and tools

Resources to help your business get back on track.

WEBINAR

### Profit from technology: Digital tools to drive efficiency and revenue

Subscribe

### COVID-19: Making your business resilient for the pandemic and beyond

### How to manage your team remotely during a crisis

Frequent and regular contact  
keeps employees 'in the loop'

### Digital Marketing

Resources to adapt and grow your  
digital strategy:

- Set up your business for e-commerce
- Market your business online

### Cash flow

Tools to project your short- and  
long-term cash flow, plus articles  
and quick tips to adjust your cash  
cycle.

- Optimize your business finances

### Business recovery

Ready your business to emerge  
stronger from the COVID-19 crisis.

- Restart your operations
- Prepare your business to thrive again

## Contact us

### Are you a BDC client?

We encourage you to reach out to your account manager.

### Not a BDC client?

If you're looking for financing for your business, take a look at our **business loans**.