

February 4, 2022

Shelly D Hipson  
RR3  
Shelburne, B0T 1W0

Sent via email: [shellyhipson@gmail.com](mailto:shellyhipson@gmail.com)

Dear Shelly D Hipson:

**Re: You are entitled to part of the information you requested – 2021-01645-HEA**

The Department of Health and Wellness received your application for access to information under the *Freedom of Information and Protection of Privacy Act* (the Act) on September 7, 2021.

In your application, you requested a copy of the following records:

*Amended November 22, 2021:*

*All records, e-mails, information held by Dr. Robert Strang on the topic of herd immunity and natural immunity. (Date Range for Record Search: From 9/30/2020 To 9/6/2021)*

You are entitled to part of the records requested. However, we have removed some of the information from this record according to subsection 5(2) of the Act. The severed information is exempt from disclosure under the Act for the following reasons:

- Section 14: advice by or for a public body or minister.  
14(1): The head of a public body may refuse to disclose to an applicant information that would reveal advice, recommendations or draft regulations developed by or for a public body or a minister.
- Section 19: conservation.  
19B(2): The head of a local public body may refuse to disclose details of the academic research being conducted by an employee of the local public body in the course of the employee's employment.
- Section 20: unreasonable invasion of personal privacy.  
20(1): The head of a public body shall refuse to disclose personal information to an applicant if the disclosure would be an unreasonable invasion of a third party's personal privacy.

Information outside the scope of your request and not related to herd immunity and natural immunity has been removed as not responsive. The remainder of the records are enclosed.

You have the right to ask for a review of this decision by the Information Access and Privacy Commissioner (formerly the Review Officer). You have 60 days from the date of this letter to exercise this right. If you wish to ask for a review, you may do so on Form 7, a copy of which is attached. Send the completed form to the Information Access and Privacy Commissioner, P.O. Box 181, Halifax, Nova Scotia B3J 2M4.

Please be advised that a de-identified copy of this disclosure letter and the attached response to your FOIPOP application will be made public after 14 days. The package will be posted online at <https://openinformation.novascotia.ca/>. The letter will not include your name, address, or any other personal information that you have supplied while making your application under FOIPOP.

Please contact Melinda Frelick at 902-424-6920 or by e-mail at [melinda.frelick@novascotia.ca](mailto:melinda.frelick@novascotia.ca), if you need further assistance regarding this application.

Sincerely,



Craig Beaton  
Associate Deputy Minister

Attachment

## Frelick, Melinda

---

**From:** Sommers, Ryan <Ryan.Sommers@nshealth.ca>  
**Sent:** December 16, 2020 6:36 PM  
**To:** Zygmunt, Austin J; Federico, Lucy; Carew, Maureen; Earle, Lynda; Strang, Robert; Watson-Creed, Gaynor; Cram, Jennifer; Sarbu, Claudia; Kempkens, Daniela; Patel, Alkesh; Davis, Heather  
**Subject:** FW: COVID-19 immunity passports

FYI

Ryan

Dr. Ryan Sommers, MD CCFP FRCPC(PHMP)

<https://www.cdha.nshealth.ca/coronavirus>  
<https://intra.nshealth.ca/SitePages/coronavirus-update.aspx>  
<https://novascotia.ca/coronavirus/>

Regional Medical Officer of Health, Northern Zone, Nova Scotia Health  
 Family Physician



Colchester East Hants Health Centre  
 Public Health Services  
 Level 1 / Wing B  
 600 Abenaki Road  
 Truro, Nova Scotia  
 B2N 5A1  
 Office: (902) 893 – 5820  
 Fax: (902) 893 – 2614  
 Email: [ryan.sommers@nshealth.ca](mailto:ryan.sommers@nshealth.ca)  
[www.nshealth.ca](http://www.nshealth.ca)

---

**From:** Prevent Epidemics <preventepidemics@resolvetosavelives.org>  
**Reply-To:** Prevent Epidemics <preventepidemics@resolvetosavelives.org>  
**Date:** Wednesday, December 16, 2020 at 5:47 PM  
**To:** Ryan Sommers <Ryan.Sommers@nshealth.ca>  
**Subject:** COVID-19 immunity passports

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# COVID-19 Weekly Science Review

 Prevent  
Epidemics

 RESOLVE  
TO SAVE LIVES

 Vital  
Strategies

## Science Update: December 16, 2020

*Covering articles published December 5 - 11, 2020*

[Read the complete Weekly Science Review here](#)

Dear Colleague,

This week's issue explores the scientific, ethical and legal issues surrounding the use of 'immunity passports' as evidence of protection against COVID-19. There are still questions about immunity after infection and the protection offered by various COVID-19 vaccines that will need to be answered. Until we know more, any license, certification or immunity passport program should be explicit about what is being attested to and should avoid guarantees of protection against COVID-19.

This issue also examines the recent changes to CDC's quarantine recommendations, the role of children in household transmission of SARS-CoV-2, and mitigation strategies used to reduce the risk of transmitting SARS-CoV-2 in early care and education settings.

COVID-19 has the upper hand as we see a surge in cases across the U.S.—but our future is in our hands. Vaccines are coming, but they're not here yet. We need to double down on protection protocols – as Chancellor Merkel said: patience, discipline, solidarity. When we all wear masks and take action to fight COVID-19, we're all safer.

I hope you find this resource useful and are staying safe.

All the best,

Tom



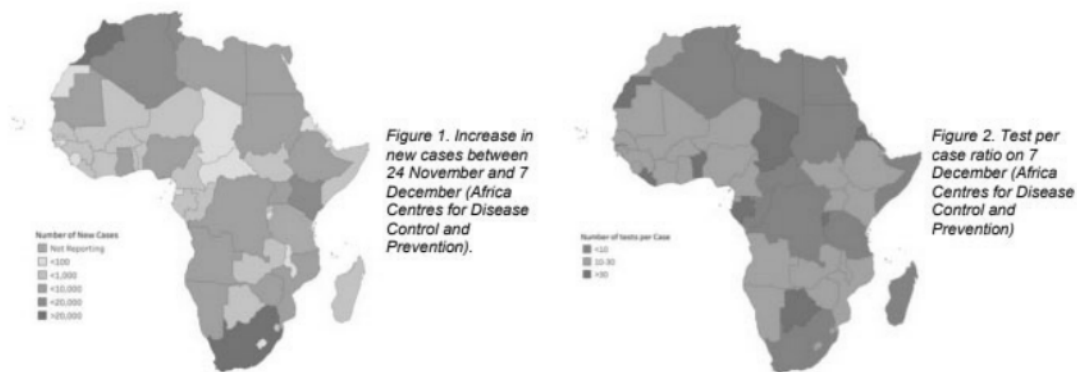


**Dr. Tom Frieden**

**President and CEO of Resolve to Save Lives, an Initiative of Vital Strategies**

[Download the Science Review PDF](#)

## Public Health and Social Measure Implementation in Africa



The Partnership for Evidence-Based Response to COVID-19 (PERC) released the latest biweekly report. It highlights rising COVID-19 cases in South Africa and Sudan, and troubling infections among health care workers in Kenya, as health officials are concerned that travel for the December holidays will increase cases and overwhelm already taxed health systems.

[Read the full document here.](#)

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## In-Depth:

# Immunity Passports

Much remains unknown about the scientific, ethical and legal feasibility of “immunity passports” to serve as evidence of protection against COVID-19. As we continue to learn more about COVID-19, some remaining questions about immunity after infection and the protection offered by various COVID-19 vaccines will eventually be answered.

Conceptually, immunity passports could be [implemented to document an immunizing event](#), whether that be infection or vaccination; passports following vaccination raise many fewer questions. If immunity passports are to be used, their application should be informed by sound science, reduce risky behaviors, and be founded on ethical principles to promote the safe exercise of fundamental rights and keep communities safe.

[Read the full in-depth here.](#)

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## FAQ

Our [Prevent Epidemics](#) team answers common questions that come up from new studies, media articles or emerging science. This week we are highlighting the below FAQ:

[What do the changes in the CDC’s quarantine recommendations mean for me?](#)

You can find additional COVID-19 FAQs from the [Public Health Communications Collaborative](#) [here](#).

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## Article Highlight

[Implementing Mitigation Strategies in Early Care and Education Settings for Prevention of SARS-CoV-2 Transmission — Eight States, September–October 2020](#)  
(MMWR, December 2020)

By successfully implementing mitigation strategies to reduce the risk of transmitting SARS-CoV-2, the virus that causes COVID-19, Head Start and Early Head Start Programs in eight states were able to offer ongoing in-person and hybrid child care programs with few cases of COVID-19. Adhering to these mitigation strategies in these settings as well as in other early care and education settings for young children can help maximize the benefit of these programs for children and their families during the pandemic, while minimizing the risk of disease transmission.

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[Read the complete Weekly Science Review here](#)

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## News Highlights

**The New York Times**

Dr. Tom Frieden spoke to the New York times on the likelihood of case counts climbing for weeks in the U.S. [Read here](#).

## healthline

Healthline highlighted the Resolve to Save Lives & Vital Strategies contact tracing playbook as an important tool to help public communication campaigns. [Read here.](#)

## Bloomberg Philanthropies

Dr. Tom Frieden joined the Bloomberg American Health Summit to discuss COVID-19 in the U.S. [Read here.](#)



Dr. Tom Frieden spoke to NBC News on the hope for relaxing COVID-19 measures in the second half of 2021. [Read here.](#)

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## Social Media Highlights

Dr. Tom Frieden shares his analysis of COVID-19 news and trends every week on LinkedIn, Twitter and Medium. You can find the most recent post [here](#).



**Dr. Tom Frieden** ✓  
@DrTomFrieden



An mRNA vaccine doesn't actually contain the virus itself. Think of it as an email sent to your immune system that shows what the virus looks like, instructions to kill it, and then—like a Snapchat message—it disappears. Amazing technology.



Resolve to Save Lives

@ResolveTSL



No one wants to tell their vulnerable loved ones to stay home, but protecting their health is the best gift you can give them. #CelebrateSafely

**Staying home this holiday means I love you.**



Older adults are at higher risk for COVID-19.  
Those 65+ are 90 times more likely to die.  
Stay home this year.  
#CelebrateSafely

**Wear** a mask  + **Watch** your distance  + **Wash** your hands 



**Vital Strategies**  
@VitalStrat



The #Data4Health Global Grants Program provides funds for results-oriented projects that improve public health data. What do we look for in a proposal?

- ✓ Clear buy-in from stakeholders
- ✓ Leverages local expertise
- ✓ Flexibility during the #COVID19 era



Applying for Vital Strategies' Global Grants Funding? Learn What Makes a Success...  
A new round of funding from the Global Grants Program is now open, dedicated to projects that strengthen the collection, analysis and use of high-quality data i...  
[vitalstrategies.org](https://vitalstrategies.org)

For more insights and updates, and to read this week's Science Review, visit:  
[www.preventepidemics.org](http://www.preventepidemics.org)

 **Prevent  
Epidemics**

**RESOLVE**  
TO SAVE LIVES

 **Vital  
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**Our mailing address is:**

*\*preventepidemics@resolvetosavelives.org\**

You can [update your preferences](#) or [unsubscribe from this list](#).

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## Frelick, Melinda

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**From:** Sommers, Ryan <Ryan.Sommers@nshealth.ca>  
**Sent:** January 14, 2021 1:42 PM  
**To:** Strang, Robert; Watson-Creed, Gaynor; Kempkens, Daniela; Cram, Jennifer; Zygmunt, Austin J; Sarbu, Claudia; Carew, Maureen; Patel, Alkesh; Earle, Lynda; Davis, Heather  
**Subject:** Past COVID-19 infection provides some immunity but people may still carry and transmit virus - GOV.UK

FYI

PH England study – immunity last 5 mths.....

Hopefully, SAC/TAC will look at this and provide us with some insights....

<https://www.gov.uk/government/news/past-covid-19-infection-provides-some-immunity-but-people-may-still-carry-and-transmit-virus>

Dr. Ryan Sommers, MD CCFP FRCPC(PHPM)

NSHA COVID-19 Hub: <https://covid19hub.nshealth.ca/covid-19>

DHW COVID-19: <https://novascotia.ca/coronavirus/>

Regional Medical Officer of Health, Northern Zone, Nova Scotia Health  
 Family Physician, Northern Zone



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[www.nshealth.ca](http://www.nshealth.ca)

**Frelick, Melinda**

---

**From:** Barbrick, Tracey L  
**Sent:** February 1, 2021 2:49 PM  
**To:** Walsh, Tara A; Kiritsis, Tony; Benoit, David James; Strang, Robert  
**Subject:** RE: Gap to herd immunity

Interesting. Info is correct.

---

**From:** Walsh, Tara A <Tara.Walsh@novascotia.ca>  
**Sent:** February 1, 2021 10:20 AM  
**To:** Barbrick, Tracey L <Tracey.Barbrick@novascotia.ca>; Kiritsis, Tony <Tony.Kiritsis@novascotia.ca>; Benoit, David James <David.Benoit@novascotia.ca>; Strang, Robert <Robert.Strang@novascotia.ca>  
**Subject:** Gap to herd immunity

Thought this tweet was interesting.

*Useful chart. What is the source? <https://t.co/TmWzdWGiF1>*

*Original Tweet: <https://twitter.com/DonMillsHFX/status/1355557952426532865>*

Province	Vaccine Remaining Inventory	Vaccines Shipped Jan 17	Vaccine %age used	Vaccinated per 100,000	Estimated Herd Immunity 75% of Pop	GAP to Herd Immunity
ON	84,195	411,650	79.55%	2,222	11,051,000	10,749,782
QC	2,043	238,100	99.14%	2,753	6,431,000	6,195,484
BC	17,295	144,550	88.04%	2,472	3,861,000	3,797,674
AB	20,201	122,725	83.54%	2,319	3,316,000	3,191,464
MB	11,516	48,825	76.41%	2,705	1,034,000	1,002,244
SK	-2,366	32,725	107.23%	2,977	884,000	858,854
NS	14,261	28,850	50.57%	1,490	735,000	730,783
NB	7,418	21,675	65.78%	1,824	586,000	582,274
NL	6,420	16,500	61.09%	1,924	393,000	390,875
NW	4,929	14,400	65.77%	21,179	34,000	33,974
PE	1,715	9,225	81.41%	4,705	120,000	117,665
YT	7,904	14,400	45.11%	15,448	32,000	31,931
NU	6,684	12,000	44.30%	13,706	29,000	28,736
Canada	182,215	1,115,625	83.67%	2,456	28,506,000	27,711,740

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## Frelick, Melinda

**From:** Weighty Matters <feedblitz@mail.feedblitz.com>  
**Sent:** February 13, 2021 7:20 AM  
**To:** Strang, Robert  
**Subject:** Saturday Stories: No Herd Immunity Without Vaccines, Hygiene Theatre, And Sleepwalking Into Disaster

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# Saturday Stories: No Herd Immunity Without Vaccines, Hygiene Theatre, And Sleepwalking Into Disaster



Michaeleen Doucleff, in NPR, explains how a small town in Brazil has tragically shown us that without vaccines, herd immunity is impossible.

Derek Thompson, in The Atlantic, on the waste of resources and the disinformation that is hygiene theatre

Brooks Fallis, in The Globe and Mail, on how Canada is sleepwalking into our next disastrous surge.

Photo by By Jesus Solana from Madrid, Spain - Black sheep . Do u also feel different? // la Oveja negra. Tambien te sientes diferente?, CC BY 2.0 <https://commons.wikimedia.org/w/index.php?curid=5050231>



**Frelick, Melinda**

**From:** Medscape Public Health <Medscape\_Public\_Health@mail.medscape.com>  
**Sent:** February 23, 2021 9:42 PM  
**To:** Strang, Robert  
**Subject:** Growing Immunity Driving Drop in COVID Cases? Not So Fast, Experts Say

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Read the latest medical news, expert perspectives, journal articles, and professional resources



## Top Stories

Growing Immunity Driving Drop in COVID Cases? Not So Fast, Experts Say

Here's the COVID Exit Door -- Will We Walk Through It?

Healthcare Stakeholders Agree on Universal Coverage Plan

How Do You Run a Hospital With No Running Water?

Medscape Public Health Physician Lifestyle, Happiness & Burnout Report 2021

## Editor's Note

How concerned are you about adverse events related to the vaccines? [Tell us what you think.](#)

## News



## Featured News This Week

### COVID-19 Vaccines Were Rushed, but 'All Steps Taken'

Medscape Medical News

### Massive Drop in Routine Vaccinations Among Older Adults

Medscape Medical News

### How to Spot a Fake N95

Medscape Medical News

### FDA: COVID-19 Not Transmitted by Food or Packaging

WebMD Health News

### New Data Boost Calls for Single COVID-19 Vaccine Dose

Medscape Medical News

### CDC Warns of Drug-Resistant Typhoid Fever Outbreak

Medscape Medical News

### Cancer Warning Labels on Alcohol: Calls for Congress to Act

Medscape Medical News

## Features

### Key Topics This Week

#### Do Zinc and Vitamin C Reduce COVID Symptoms?

Medscape

#### Impact of Environmental Toxin Exposure on Male Fertility

Translational Andrology and Urology

#### Exercise to Counter Skeletal Muscle Clock Disruption

Exercise and Sport Sciences Reviews



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## Related Stories

- Saturday Stories: The Australian Response, The Brazilian Variant, And The Russian Vaccine
- Saturday Stories: Vaccines Alone Aren't Enough, Women And Vaccines, And Why Every Country Should Be Aiming At #COVIDZero, J&J And Novavax
- Saturday Stories: Anti-Vaxxer COVID Playbook, A Potentially Scarier Variant, And Ontario's Abysmal Response To Date

• Email to a friend •

## More Recent Articles

- Saturday Stories: The Australian Response, The Brazilian Variant, And The Russian Vaccine
- Saturday Stories: Vaccines Alone Aren't Enough, Women And Vaccines, Why Every Country Should Be Aiming At #COVIDZero, J&J And Novavax
- Saturday Stories: Anti-Vaxxer COVID Playbook, A Potentially Scarier Variant, And Ontario's Abysmal Response To Date
- Saturday Stories: The Myths Of Pandemic Fatigue, COVID Is Absolutely Controllable, And On Being A Female Expert
- Saturday Stories: Vaccination, Variants, and Lockdowns

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## Frelick, Melinda

---

**From:** WHO Media <Media@campaign.who.int>  
**Sent:** February 26, 2021 10:01 AM  
**To:** Strang, Robert  
**Subject:** WHO's Science in 5 on COVID-19: Vaccine, variants and herd immunity

No images? [Click here](#)



Friday, 26 February 2021

### WHO's Science in 5 on COVID-19: vaccine, variants and herd immunity

#### Overview:

As new variants emerge, people are wondering if they should wait for a more efficacious vaccine or go ahead and get vaccinated now.

WHO's Chief Scientist Dr. Soumya Swaminathan answers questions about COVID-19 vaccines, variants and herd immunity in Science in 5 this week.

Science in 5 is WHO's conversation in science. In this video and podcast series WHO experts explain the science related to COVID-19. The series is available every week on WHO's [YouTube](#), [Instagram](#), [Facebook](#), [Twitter](#), and [LinkedIn](#) channels and on all major podcasts platforms.

For media partnerships for embedding this series, please contact us: [communications@who.int](mailto:communications@who.int)

- YouTube: <https://youtu.be/DV2JF2jfpY>
- Podcasts available on your preferred platforms: <https://lnk.to/science-in-5>
- Playlist: <https://www.youtube.com/playlist?list=PL9S6xGsoqIBXRQzSDOfFb13iPrbL8fgy1>
- Transcripts, podcast: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/media-resources/science-in-5>

Thank you for amplifying through your networks.

More information: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

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#### Media contacts:

[mediainquiries@who.int](mailto:mediainquiries@who.int)

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World Health Organization, Avenue Appia 20, 1202 Geneva 27,  
Switzerland

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**From:** 20(1)  
**To:** Strang, Robert  
**Subject:** Re: Update on the Science of Immunity vs Virus Spread  
**Date:** March 2, 2021 7:19:24 PM

---

Hi again. Yes. I have all that information.

I firmly believe once the dust settles you will indeed see most of my arguments and suggestions had a great deal of merit.

Canadians in Arizona have been welcomed into the vaccination line with open arms at no charge. 20(1)

20(1)

Embarrassing.

Thank you for the reply. I know you're busy.



20(1)

On Mar 2, 2021, at 3:54 PM, Strang, Robert <Robert.Strang@novascotia.ca> wrote:

Dear 20(1)

Thank you for your e-mail. As you would be entering Canada from another country you would be under federal authority through their *Quarantine Act*. According to their new requirements you would to provide proof of a negative COVID 19 test performed in the USA taken no more than 72 hours before entering Canada. I recommend that you look at the Federal government website for complete information of their new border measures for travellers into Canada.

Sincerely,

Dr. Robert Strang  
Chief Medical Officer of Health  
Department of Health and Wellness  
PO Box 488  
Halifax, NS  
B3J 2R8

---

**From:** 20(1)**Sent:** March 1, 2021 7:36 PM**To:** Strang, Robert <Robert.Strang@novascotia.ca>**Subject:** Update on the Science of Immunity vs Virus Spread**\*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\*****Exercise caution when opening attachments or clicking on links / Faites preuve de prudence si vous ouvrez une pièce jointe ou cliquez sur un lien**

Hi Doc. Just wishing to clarify your stance on the issue of quarantine exemption based on the fact that because my wife and I have successfully fought off the Virus and have been blood tested to have currently 98 percent immunity based on our present anti body level. 20(1)

20(1)

I've since been tested again for antibodies that are still present. Would you please consider that we are of no threat of spreading any virus when we return to Canada with 1) a current blood test showing we have active immunity and 2) a negative PCR test and 3) subsequent negative rapid tests.

Once we believe the science and use it, we can be progressive in allowing folks into Canada who have been vaccinated or can prove immunity. This should be what the goal is because you are never ever going to eradicate the virus. Protect against mass spread and have its effects not deadly, as is the goal with the 66 percent effective J and J vaccine. Keep you out of the morgue as Dr F indicates.

I would really like to see our government be proactive and give hope using what we know. We wear masks. We wash our hands and do what we are suppose to do. We are far far less likely to spread any virus than the truckers coming back and forth across the border daily. That's a fact.

Please consider my request.

Have a good night. Stay warm.



20(1)

Page 028 to/à Page 032

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**From:** Deeks, Shelley  
**To:** Barbrick, Tracey L; Strang, Robert  
**Subject:** FW: Time sensitive opportunity re: vaccine immunity in community living older people  
**Date:** March 24, 2021 9:05:08 AM  
**Importance:** High

---

Good morning,

We should get back to Lisa about this. 14(1)

14(1) Not responsive

Not responsive

Now on to this one. 14(1); 19B(2)

14(1); 19B(2)

Thoughts?

**Shelley Deeks, MD, MHSc, FRCPC, FAFPHM**  
**Public Health Surveillance Medical Officer of Health**  
 Office of the Chief Medical Officer of Health

---

**From:** Barrett, Lisa L <Lisa.Barrett@nshealth.ca>  
**Sent:** March 23, 2021 12:46 PM  
**To:** McNeil, Shelly <Shelly.McNeil@nshealth.ca>; Deeks, Shelley <Shelley.Deeks@novascotia.ca>; Strang, Robert <Robert.Strang@novascotia.ca>; tracy.barbrick@novascotia.ca  
**Subject:** Time sensitive opportunity re: vaccine immunity in community living older people  
**Importance:** High

Hello folks

19B(2)

19B(2)

Two questions:

14(1)

19B(2)

Happy to chat if there are questions, and thanks to all on this email for your hard work. It is seen and appreciated.

Lisa

-----  
Lisa Barrett MD PhD FRCPC  
Clinician Scientist, Infectious Diseases  
NSHA/Dalhousie University  
Rm. 5076, Dickson Building  
Halifax, NS  
[Lisa.Barrett@nshealth.ca](mailto:Lisa.Barrett@nshealth.ca)  
Ph. 902 473 8477  
Cell 902 233 3795

**From:** [Barrett, Lisa L](#)  
**To:** [McNeil, Shelly](#)  
**Cc:** [Deeks, Shelley](#); [Strang, Robert](#); [tracy.barbrick@novascotia.ca](mailto:tracy.barbrick@novascotia.ca)  
**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people  
**Date:** March 25, 2021 11:46:52 AM

---

Thanks Shelly.

If I can provide further context, happy to do so.

19B(2)

Lisa

-----  
 Lisa Barrett MD PhD FRCPC  
 Clinician Scientist, Infectious Diseases  
 NSHA/Dalhousie University  
 Rm. 5076, Dickson Building  
 Halifax, NS  
[Lisa.Barrett@nshealth.ca](mailto:Lisa.Barrett@nshealth.ca)  
 Ph. 902 473 8477  
 Cell 902 233 3795

---

**From:** McNeil, Shelly  
**Sent:** Thursday, March 25, 2021 7:32 AM  
**To:** Barrett, Lisa L  
**Cc:** Deeks, Shelley; Strang, Robert; [tracy.barbrick@novascotia.ca](mailto:tracy.barbrick@novascotia.ca)  
**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people

Hi Lisa

Apologies for the delay. As you know, this is a hot topic so glad to hear CITF is funding studies to address this question.

14(1); 19B(2)

14(1); 19B(2)



14(1); 19B(2)

Happy to discuss and help any way I can!

Good luck

Shelly

Sent from my iPhone

On Mar 23, 2021, at 12:46 PM, Barrett, Lisa L <Lisa.Barrett@nshealth.ca> wrote:

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Duplicate

Page 037

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**From:** [Barrett, Lisa L](#)  
**To:** [Deeks, Shelley](#); [McNeil, Shelly](#)  
**Cc:** [Strang, Robert](#); [tracy.barbrick@novascotia.ca](mailto:tracy.barbrick@novascotia.ca)  
**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people  
**Date:** March 25, 2021 4:58:20 PM  
**Attachments:** [TIMING protocol.version4 19feb2021.clean.docx](#)

---

Thanks Shelley.

I agree - a coordinated approach to all public facing, integrated COVID related research should have a common platform.

19B(2)

To address the numbered items below:

19B(2)

Hopefully that is helpful.....

Lisa

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Lisa Barrett MD PhD FRCPC  
Clinician Scientist, Infectious Diseases  
NSHA/Dalhousie University  
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Lisa.Barrett@nshealth.ca  
Ph. 902 473 8477  
Cell 902 233 3795

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**From:** Deeks, Shelley <Shelley.Deeks@novascotia.ca>  
**Sent:** Thursday, March 25, 2021 12:10 PM  
**To:** McNeil, Shelly; Barrett, Lisa L  
**Cc:** Strang, Robert; tracy.barbrick@novascotia.ca  
**Subject:** RE: Time sensitive opportunity re: vaccine immunity in community living older people

Hi Lisa and Shelly

14(1); 19B(2)

A couple of responses and additional questions:

19B(2)

19B(2)

While we work on the DHW process, if you could address the above and we can circle back next week. Does that work?

Shelley

**Shelley Deeks, MD, MHSc, FRCPC, FAFPHM**  
**Public Health Surveillance Medical Officer of Health**  
Office of the Chief Medical Officer of Health

---

**From:** McNeil, Shelly <Shelly.McNeil@nshealth.ca>

**Sent:** March 25, 2021 7:32 AM

**To:** Barrett, Lisa L <Lisa.Barrett@nshealth.ca>

**Cc:** Deeks, Shelley <Shelley.Deeks@novascotia.ca>; Strang, Robert  
<Robert.Strang@novascotia.ca>; tracy.barbrick@novascotia.ca

**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people

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Page 041 to/à Page 042

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Page 043 to/à Page 051

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14(1) ; 19B(2)

**From:** [Deeks, Shelley](#)  
**To:** [Barbrick, Tracey L](#); [Strang, Robert](#)  
**Subject:** FW: Time sensitive opportunity re: vaccine immunity in community living older people  
**Date:** March 30, 2021 9:21:37 AM  
**Attachments:** [COVID vaccine associated immunity in older adults.pptx](#)

---

14(1); 19B(2)

Please advise if you

concur and then who I should link with to ensure vaccine put aside.

*Shelley Deeks, MD, MHSc, FRCPC, FAFPHM*  
*Public Health Surveillance Medical Officer of Health*  
 Office of the Chief Medical Officer of Health

---

**From:** Barrett, Lisa L <Lisa.Barrett@nshealth.ca>  
**Sent:** March 30, 2021 12:12 AM  
**To:** Deeks, Shelley <Shelley.Deeks@novascotia.ca>; McNeil, Shelly <Shelly.McNeil@nshealth.ca>  
**Cc:** Strang, Robert <Robert.Strang@novascotia.ca>; tracy.barbrick@novascotia.ca  
**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people

Hi Shelley.

Attached is a the updated proposal. 19B(2)

19B(2)



19B(2)

Hope this is helpful. I think this is important work

14(1); 19B(2)

14(1); 19B(2)

Thanks for considering.

lisa

-----  
 Lisa Barrett MD PhD FRCPC  
 Clinician Scientist, Infectious Diseases  
 NSHA/Dalhousie University  
 Rm. 5076, Dickson Building  
 Halifax, NS  
[Lisa.Barrett@nshealth.ca](mailto:Lisa.Barrett@nshealth.ca)  
 Ph. 902 473 8477  
 Cell 902 233 3795

---

**From:** Deeks, Shelley <[Shelley.Deeks@novascotia.ca](mailto:Shelley.Deeks@novascotia.ca)>

**Sent:** Friday, March 26, 2021 3:35 PM

**To:** Barrett, Lisa L; McNeil, Shelly

**Cc:** Strang, Robert; [tracy.barbrick@novascotia.ca](mailto:tracy.barbrick@novascotia.ca)

**Subject:** RE: Time sensitive opportunity re: vaccine immunity in community living older people

Thanks Lisa. I have reviewed quickly the attached

19B(2)

19B(2)

Thanks  
 Shelley

*Shelley Deeks, MD, MHSc, FRCPC, FAFPHM*  
*Public Health Surveillance Medical Officer of Health*  
Office of the Chief Medical Officer of Health

---

**From:** Barrett, Lisa L <[Lisa.Barrett@nshealth.ca](mailto:Lisa.Barrett@nshealth.ca)>

**Sent:** March 25, 2021 4:58 PM

**To:** Deeks, Shelley <[Shelley.Deeks@novascotia.ca](mailto:Shelley.Deeks@novascotia.ca)>; McNeil, Shelly  
<[Shelly.McNeil@nshealth.ca](mailto:Shelly.McNeil@nshealth.ca)>

**Cc:** Strang, Robert <[Robert.Strang@novascotia.ca](mailto:Robert.Strang@novascotia.ca)>; [tracy.barbrick@novascotia.ca](mailto:tracy.barbrick@novascotia.ca)

**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people

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Page 055 to/à Page 058

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Duplicate

# **CITF LTCF COVID immunity and frailty**

Already funded and fully recruited

Page 060 to/à Page 065

Withheld

19B(2)

**From:** [Barrett, Lisa L](#)  
**To:** [Deeks, Shelley](#); [McNeil, Shelly](#)  
**Cc:** [Strang, Robert](#); [tracy.barbrick@novascotia.ca](mailto:tracy.barbrick@novascotia.ca)  
**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people  
**Date:** March 30, 2021 12:11:59 AM  
**Attachments:** [COVID vaccine associated immunity in older adults.pptx](#)

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Page 067 to/à Page 079

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**From:** [Barrett, Lisa L](#)  
**To:** [Deeks, Shelley](#); [McNeil, Shelly](#)  
**Cc:** [Strang, Robert](#); [tracy.barbrick@novascotia.ca](mailto:tracy.barbrick@novascotia.ca)  
**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people  
**Date:** March 31, 2021 12:23:42 PM

---

Thanks shelly. I look forward to hearing about the new process, and am happy to be a part of the development from the research perspective!

19B(2)

May I ask who

the question came from and perhaps I can be more specific?

19B(2)

Thanks for the time, effort and back and forth on this piece of work.

Lisa

-----  
 Lisa Barrett MD PhD FRCPC  
 Clinician Scientist, Infectious Diseases  
 NSHA/Dalhousie University  
 Rm. 5076, Dickson Building  
 Halifax, NS  
[Lisa.Barrett@nshealth.ca](mailto:Lisa.Barrett@nshealth.ca)  
 Ph. 902 473 8477  
 Cell 902 233 3795

---

**From:** Deeks, Shelley <[Shelley.Deeks@novascotia.ca](mailto:Shelley.Deeks@novascotia.ca)>  
**Sent:** Wednesday, March 31, 2021 12:06 PM  
**To:** Barrett, Lisa L; McNeil, Shelly  
**Cc:** Strang, Robert; [tracy.barbrick@novascotia.ca](mailto:tracy.barbrick@novascotia.ca)  
**Subject:** RE: Time sensitive opportunity re: vaccine immunity in community living older people

Thanks Lisa. We are developing a process to evaluate urgent research requests but in the interim, I have evaluated the attached

19B(2)

19B(2)



19B(2) Can you clarify if this is the case.

Thanks

Shelley

*Shelley Deeks, MD, MHSc, FRCPC, FAFPHM*  
*Public Health Surveillance Medical Officer of Health*  
Office of the Chief Medical Officer of Health

---

**From:** Barrett, Lisa L <Lisa.Barrett@nshealth.ca>

**Sent:** March 25, 2021 4:58 PM

**To:** Deeks, Shelley <Shelley.Deeks@novascotia.ca>; McNeil, Shelly  
<Shelly.McNeil@nshealth.ca>

**Cc:** Strang, Robert <Robert.Strang@novascotia.ca>; tracy.barbrick@novascotia.ca

**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people

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**From:** [Barrett, Lisa L](#)  
**To:** [Deeks, Shelley](#); [McNeil, Shelly](#)  
**Cc:** [Strang, Robert](#); [Barbrick, Tracey L](#)  
**Subject:** Re: Time sensitive opportunity re: vaccine immunity in community living older people  
**Date:** March 31, 2021 12:56:49 PM

---

Hello all.

19B(2)

Is that acceptable to you folks?

Lisa

-----  
Lisa Barrett MD PhD FRCPC  
Clinician Scientist, Infectious Diseases  
NSHA/Dalhousie University  
Rm. 5076, Dickson Building  
Halifax, NS  
[Lisa.Barrett@nshealth.ca](mailto:Lisa.Barrett@nshealth.ca)  
Ph. 902 473 8477  
Cell 902 233 3795

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**From:** [Medscape CME & Education](#)  
**To:** [Strang, Robert](#)  
**Subject:** Vaccine Approaches to COVID-19 Immunity  
**Date:** May 2, 2021 4:00:51 PM

---

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# COVID-19: THE PATH TO IMMUNITY

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**From:** [Chouinard, Vanessa P](#)  
**To:** [Strang, Robert](#)  
**Cc:** [Deeks, Shelley](#)  
**Subject:** Fwd: C19 immunity exceptions  
**Date:** May 4, 2021 5:17:30 AM

---

FYI... Rob hopefully we can chat about this when we meet today.

There is also something on exceptions for us to discuss. I will add to our agenda!

Begin forwarded message:

**From:** "DeCoste, Kathleen" <Kathleen.DeCoste@novascotia.ca>  
**Date:** May 3, 2021 at 11:22:27 PM ADT  
**To:** "Chouinard, Vanessa P" <Vanessa.Chouinard@novascotia.ca>  
**Cc:** "Heatley, Jennifer G" <Jennifer.Heatley@novascotia.ca>, "Riley, Patrick" <Patrick.Riley@novascotia.ca>, "Hemphill, Eric B" <Eric.Hemphill@novascotia.ca>  
**Subject:** C19 immunity exceptions

Hi Vanessa,

As discussed, I'm following up to raise to you and Jen whether or not it makes sense to pause immunity exceptions that are granted to those who have recovered from Covid in the past 6 weeks. We have been doing this and saw big spikes in these requests periodically from students (in Fall and January). Other than that, we grant about 25 every two weeks.

Given the evolving science around variants and the current epidemiology in surrounding provinces, I'm wondering if it makes sense to pause these for the next 6 weeks and then revisit. To be honest, we see mostly students being granted exceptions, and then coming back and forth within that time often to and from Ontario.

Do we know enough about the variants to say for sure that these individuals pose no or limited risk?

Wanted to raise. Happy to stop if it makes sense and re visit in 6 weeks as our vaccination conversation also evolves

I'm away from the office tmrw but copying Patrick and Eric here who are the experts in these cases, not me!

Thanks,  
 Kathleen

Sent from my iPhone

**Frelick, Melinda**

---

**From:** Brookings Brief <info@brookings.edu>  
**Sent:** May 4, 2021 8:13 AM  
**To:** Strang, Robert  
**Subject:** Businesses Can Help Achieve Herd Immunity, UN Election Observation, and More

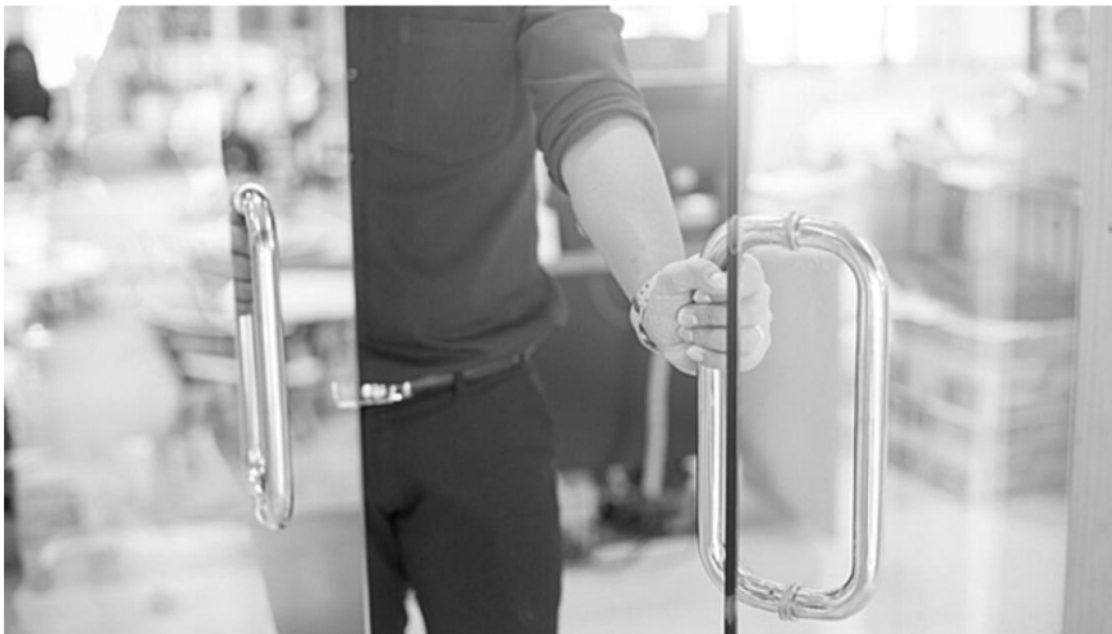
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# the **BROOKINGS BRIEF**

May 4, 2021



**Government won't get us herd immunity. Businesses can.**

COVID-19 vaccines are becoming widely available, but many people still express skepticism or resistance to getting these shots, threatening America's ability to

reach herd immunity. To put the country on a faster path to recovery, Joshua Gotbaum writes that U.S. employers should require vaccinations.

[Read more](#)



## **The prospects and limitations of United Nations election observation in Iraq**

Members of Iraq's political elite and electorate have both requested some form of United Nations involvement in the country's October elections. Can U.N. services ensure electoral integrity, help restore trust in democracy, and grant legitimacy? Marsin Alshamary and Maya Nir emphasize the need for realistic expectations.

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## Do immigrants harm native students academically?

Over the past 50 years, America's immigration wave has sparked a policy debate about the effects of immigration on public education and the perceived costs for schools, local governments, and educational outcomes of U.S.-born students. To help inform this debate, David Figlio and his co-authors share findings from their recent study of Florida schools.

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**Frelick, Melinda**

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**From:** American Institute for Economic Research <info@aier.org>  
**Sent:** June 4, 2021 12:21 PM  
**To:** Strang, Robert  
**Subject:** Why Is There Such Reluctance to Discuss Natural Immunity?

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**DAILY ECONOMY**

June 4, 2021



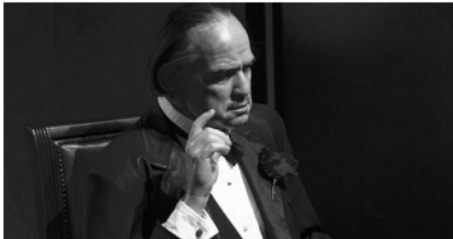
**Why Is There Such Reluctance to Discuss Natural Immunity?**

By Jon Sanders | "Whatever the reason, it's keeping Americans in the dark about how many people have active immunity from Covid-19. It's keeping people needlessly fearful and suspicious of each other. It's empowering executive overreach. Worst of..."

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### **Exit, Voice, and Loyalty, the Godfather, and Dr. Fauci's ...**

By Donald Siegel & Robert M. Sauer | "Perhaps the proceeds from Dr. Fauci's upcoming book, including the large speaking fees he will earn and the undisclosed advance he garnered for writing the book while 'serving' the taxpayer, can be used to...

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### **Capitalism Can't Fix An Artificial Labor Shortage**

By John Tamny | "Governments only have spending power and faux swagger insofar as they arrogate to themselves a rising percentage of the production created by capitalistic endeavor. In other words, capitalism is the source of congressional largesse.

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## Fun Ways to Annoy China and Support Taiwan

By Ethan Yang | "China is deeply concerned with its global image and is also highly sensitive to having its narrative broken. The best ways to annoy China are ultimately to shine sunlight on its lies and to restore our confidence in ourselves as a...

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## When Crowds Go Mad

By Joakim Book | Fad, craze, fluke, mania, insanity, chaos, exuberance, stupidity, foolish, irrational - we have many words for people losing their minds, individually and collectively. Ostensibly, these are fueled by deep-rooted emotions that all...

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## Services-Sector Expansion Continued in May

By Robert Hughes | The Institute for Supply Management's composite services index increased to 64.0 in May, rising 1.3 points from 62.7 in the prior month. The index remains solidly above neutral and suggests the 12th consecutive month of...

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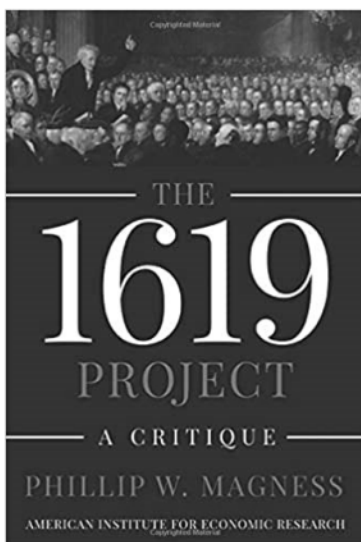
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### Featured Publication

"The 1619 Project, it seemed, could serve as both an enduring long-term curriculum for high school and college classrooms and an activist manual for the 2020 campaign season. Unfortunately the blending of these two competing aims usually results in the sacrifice of scholarly standards in the service of the ideological objective."

- Phil Magness

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**From:** Univadis  
**To:** Strang, Robert  
**Subject:** COVID-19: ECDC says herd immunity is far from being reached  
**Date:** June 11, 2021 1:09:42 PM

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Weekly updates on the latest news in occupational health

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## This week in Occupational Health


Hello Robert A - 11 June 2021



### News in your specialty



#### Canine coronavirus strain found in humans

 Coronavirus strain associated with dogs found in swabs taken from pneumonia patients.

#### CVST Risk Still Higher With COVID-19 Than With AZ, J&J

- **Vaccination**

**COVID-19 Around the world weekly highlights: new naming convention, removing lockdown restrictions, billing fraud in test centers, and vaccination in health care workers...**

- **Nasal IgM offers broad protection from SARS-CoV-2 variants**

**COVID-19 Around the world weekly highlights: Delta variant, false vaccination certificates, and vaccines approved for children...**

- **EMA evaluating Moderna COVID-19 vaccine for 12-17-year-olds**

**CGM benefits people with T2D on less intensive insulin regimens**

- **Methotrexate hampers the efficacy of mRNA COVID-19 vaccine**

- **Automated software drives the spread of misinformation**



- **COVID-19: patients having stroke tend to be young men without respiratory symptoms**

### Quizzes of the week



3 pts



**Dual-purpose medication.**  
Dual-purpose medication.

4 pts

**Hip replacement: what is the functional benefit of supervised exercise interventions?**

3 pts

**MIS-C represents a delayed immunologic response to SARS-CoV-2.**

4 pts

**Atrial fibrillation with heart failure: bisoprolol vs. digoxin, a foregone conclusion?**

3 pts

**Would early preventative anticoagulation be beneficial in patients admitted to hospital for COVID-19?**

[Take more quizzes](#)

### More conference reports in other specialties

- **'Thinner Strut' Bioresorbable Scaffold Holds Own vs Mainstay**

### Xience DES at 1 Year

- **Mavacamten boosts quality of life in patients with hypertrophic cardiomyopathy**
- **Subgroup analysis from INBUILD trial finds results similar to overall study cohort**
- **Combination therapy may benefit patients with migraine**
- **EAS 2021 — Serum PCSK9 levels tied to risk of cardiovascular diseases in CKD patients**

### News in other specialties

#### Dengue Vaccine: Takeda Reports Promising Results

Dengue Vaccine: Takeda Reports Promising Results

- **Upper GI bleed guidelines say endoscopy within 24 hours of bleed**
- **New Obesity Target? Dopamine Circuit in Brainstem Affects Satiety**
- **Limited-variant screens for familial hypercholesterolemia miss almost all Black patients**
- **Waist circumference a marker for NAFL in type 1 diabetes**



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**Frelick, Melinda**

---

**From:** [20(1)]@gmail.com>  
**Sent:** June 25, 2021 3:29 PM  
**To:** Strang, Robert; Premier; Rafah DiCostanzo; Health and Wellness Minister; Patty.Hajdu@parl.gc.ca; Derek.Sloan@parl.gc.ca; People's Party of Canada PPC; nancy.maccready@doctorsns.com; phac.naci-ccni.aspc@canada.ca; pictouwestmla@bellaliant.com; Gary C. Burrill; becky.kent@halifax.ca; mla@esmithmccrossinmla.com  
**Subject:** Don't use population immunity as excuse not to get vaccinated: Dr. Strang

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**Shove your ineffective and dangerous pig pharma snake oil wares up your ass you incompetent, corrupt, filthy, fascist piece of fucking shit!! Remember the trials of Nuremberg!! "Least We Forget" the last time you fascists in the public health/medical mafia dared rear your ugly faces!! Nuremberg II coming right at ya, unelected fascist clown!!**



**From:** [Doyle-Bedwell, George H](#)  
**To:** [Strang, Robert](#)  
**Cc:** [Doyle-Bedwell, George H](#)  
**Subject:** FW: PRO/AH/EDR> COVID-19 update (286): super immunity, booster shots, waning immunity, WHO  
**Date:** August 23, 2021 9:33:17 AM  
**Attachments:** PROBABLE-SPAM PROAHEDR Avian influenza human (15) India (HR) H5N1 confirmed WHO.msg

---

Dear Dr. Strang:

The piece on super immunity is interesting. Also there have been cases of H5N1 in India (it has moved out of China). Just for your information

Thank you  
 Take Care  
 George

George Doyle-Bedwell,  
 Policy Analyst,  
 Office of the Chief Medical Officer of Health (OCMOH),  
 Public Health Branch,  
 Nova Scotia Department of Health and Wellness,  
 3<sup>rd</sup> Floor, Barrington Tower,  
 1894 Barrington Street.  
 Halifax, Nova Scotia, B3J 2A8  
 (902) 424-2910 (office)  
[George.doyle-bedwell@novascotia.ca](mailto:George.doyle-bedwell@novascotia.ca) (email)

---

**From:** ProMED <[promed@isid.org](mailto:promed@isid.org)>  
**Sent:** August 19, 2021 7:59 PM  
**To:** Doyle-Bedwell, George H <[George.Doyle-Bedwell@novascotia.ca](mailto:George.Doyle-Bedwell@novascotia.ca)>  
**Subject:** PRO/AH/EDR> COVID-19 update (286): super immunity, booster shots, waning immunity, WHO

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CORONAVIRUS DISEASE 2019 UPDATE (286): SUPER IMMUNITY, BOOSTER SHOTS,  
 WANING IMMUNITY, WHO

\*\*\*\*\*  
 \*\*\*\*\*

A ProMED-mail post  
<http://www.promedmail.org>  
 ProMED-mail is a program of the  
 International Society for Infectious Diseases  
<http://www.isid.org>

In this update:

- [1] Super immunity
- [2] US: booster vaccination
- [3] Waning immunity
- [4] WHO: daily new cases reported (as of 18 Aug 2021)
- [5] Global update: Worldometer accessed 18 Aug 2021 22:25 EST (GMT-5)

\*\*\*\*\*

[1] Super immunity

Date: Wed 18 Aug 2021

Source: Science [edited]

<https://www.sciencemag.org/news/2021/08/covid-19-vaccines-may-trigger-superimmunity-people-who-had-sars-long-ago>

Almost 20 years before SARS-CoV-2, a related and even more lethal coronavirus sowed panic, killing nearly 10% of the 8000 people who became infected. But the 2003 outbreak of severe acute respiratory syndrome (SARS) may have left some survivors with a gift. Former SARS patients who have been vaccinated against COVID-19 appear able to fend off all variants of SARS-CoV-2 in circulation, as well as ones that may soon emerge, a new study suggests. Their formidable antibodies may even protect against coronaviruses in other species that have yet to make the jump into humans--and may hold clues to how to make a so-called pancoronavirus vaccine that could forestall future outbreaks.

A team led by emerging disease specialist Linfa Wang from Duke-NUS Medical School in Singapore identified 8 SARS survivors who recently received 2 shots of a messenger RNA COVID-19 vaccine. In the test tube, antibodies sieved from their blood potentially "neutralized" an early strain of SARS-CoV-2 as well as SARS-CoV, the virus that caused SARS, Wang and colleagues report today [18 Aug 2021] in The New England Journal of Medicine [see citation below]. The team further found these neutralizing antibodies worked well against the alpha, beta, and delta variants of SARS-CoV-2 and stymied 5 related coronaviruses found in bats and pangolins that potentially could infect humans.

This study's demonstration of broad-spectrum immunity against sarbecoviruses--a subset of coronaviruses that includes the causes of SARS and COVID-19--is "amazing and very good news," says Priyamvada Acharya, a structural biologist at Duke University who works on pancoronavirus vaccine research and was not involved in the new study.

"This paper provides a proof of principle that a pansarbecovirus vaccine is possible." It also marks an important step toward a long-term hope--a vaccine that works against all coronaviruses--several researchers trying to develop this dreamed-of protection say.

SARS-CoV and SARS-CoV-2 are about 80% identical, and both initiate infections when their surface protein spike binds to the human cellular receptor known as angiotensin-converting enzyme 2 (ACE2). So Wang was surprised this year [2021] when other researchers reported that people who had recovered from SARS retained antibodies that could prevent SARS-CoV from binding to the ACE2 receptor, but didn't seem to have any power against SARS-CoV-2. "It was always in the back of my mind that the 2 viruses bind to the same receptor, so why don't [these people's antibodies] cross neutralize?" he wondered.

The immune system's B cells make a potpourri of antibodies against any virus, but lab tests typically measure the presence of the most abundant ones. Maybe SARS survivors harbored a population of B cells that recognized both SARS-CoV and SARS-CoV-2 but were in the minority and difficult to see, Wang reasoned. If so, he thought, a COVID-19 vaccine might bolster the population of those double-action B cells, and broaden survivors' immunity.

To test that possibility, Wang's team compared neutralizing antibodies from the vaccinated SARS survivors--all health-care workers in Singapore--with those from SARS patients who had not received a COVID-19 vaccine. Wang's team also analyzed antibodies in 3 other groups: unvaccinated people who currently had COVID-19, along with vaccinated people who had recovered from SARS-CoV-2 or had never been infected with that virus.

The vaccinated SARS survivors were the only cohort whose antibodies neutralized 10 different coronaviruses, according to a new assay Wang's team developed that tests the antibodies' ability to block binding between ACE2 and the receptor-binding domains (RBDs) of different spikes. And the levels of the neutralizing antibodies were relatively high against each one. "It's super interesting," says Neil King, a biomedical engineer at the University of Washington, Seattle, who is also working on pancoronavirus vaccines. "It may lead people to reprioritize their efforts."

Several groups working on pancoronavirus vaccines are combining spikes or just the key RBDs from 8 or more different viruses. But the new work suggests a combination of just 2 may be enough to reach a less



ambitious goal, protecting against all sarbecoviruses. Then again, Wang has yet to identify why these antibodies work so well, which is critical to designing vaccines, because the RBDs themselves likely will not trigger production of the wanted immune response. The design of what are known as immunogens will require a complicated structural biology analysis, now underway in his group, that can determine precisely where they bind to the RBDs. That information, in turn, might allow researchers to reverse engineer the parts of spike that trigger production of these antibodies.

For a booster shot against possible SARS-CoV-2 variants or a pansarbecovirus vaccine, Wang suggests the best immunogens would combine common regions of SARS-CoV and the SARS-related viruses from pangolins and bats. "We want the vaccine to be as far away as possible from SARS-CoV-2, so that you really get the human immune system to work out only the common neutralizing antibody," he says.

In parallel with the vaccine work, the lab has also isolated several individual antibodies from the COVID-19-vaccinated SARS survivors that are "much more potent" against SARS-CoV-2 than anything described by other groups. Made in quantity in the lab, those monoclonal antibodies could play a critical role in future outbreaks, Wang thinks. "We are going to produce a cocktail of a dozen monoclonal antibodies that neutralize all the different sarbecoviruses and are ready to fight the next pandemic," he says. "If we are unfortunate enough to have a SARS-3 down the line, we'll already have a therapeutic cocktail ready to go."

Andrew Ward, a structural biologist at Scripps Research who is developing pancoronavirus vaccines, calls the results from Wang's team "pretty cool," although he isn't surprised that immunity to both SARS-CoV and SARS-CoV-2 may generate a broader sarbecovirus shield. He is just as impressed that the study could even be done. Blood from the few SARS survivors is "a unique resource that is hard to come by," he says.

The combination of access to the SARS survivors in Singapore, which had the 5th-highest number of cases of any country, and the new assay made this study possible, according to Wang. "No other lab could do this right now," he says.

[Byline: Jon Cohen]

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[The citation of the article referenced above follows:

Tan C-W, Chia W-N, Young BE, et al. Pan-Sarbecovirus Neutralizing Antibodies in BNT162b2-Immunized SARS-CoV-1 Survivors. New Engl J Med. 2021; <https://www.nejm.org/doi/full/10.1056/NEJMoa2108453>.]

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[2] US: booster vaccination

Date: Wed 18 Aug 2021

Source: CIDRAP (Center for Infectious Disease Research and Policy)

[edited]

<https://www.cidrap.umn.edu/news-perspective/2021/08/us-covid-19-vaccine-booster-program-begin-sep-20>

Today [Wed 18 Aug 2021] White House officials released details of their plan to deliver booster COVID-19 shots for all fully vaccinated US adults who completed their 2-dose mRNA vaccination regimen at least 8 months prior. The booster program will begin the week of 20 Sep [2021].

"It is now our clinical judgment that the time to put out a plan for boosters is now," said Vivek Murthy, MD, the US Surgeon General. "We have data that protection against moderate disease decreases over time."

Murthy said the boosters will be contingent on the Food and Drug Administration authorizing the 3rd dose.

Throughout the press briefing, officials explained new data published today [18 Aug 2021] in Morbidity and Mortality Weekly Report, which shows the current mRNA vaccines by Moderna and Pfizer/BioNTech afforded waning protection against infection from March-July 2021, and decreased effectiveness as the delta (B1617.2) variant has surged to become the dominant strain in the country. [See related CIDRAP News story in [3] below.]

Murthy said he anticipates a booster will also be needed for the more than 13 million Americans who have been vaccinated with the Johnson & Johnson vaccine, but guidance will hinge on data expected from that

company in the coming weeks.

"We are not recommending that you go out and get a booster today," he said.

Throughout today's [18 Aug 2021] press briefing, Murthy empathized that the new booster plan does not diminish 2 other goals of the administration: distributing vaccines globally and getting hesitant Americans to initiate the vaccination process.

"I do not think we have to choose between vaccinating Americans and the world, but we have to act based on the data we have," Murthy said.

Though cases across the country remain high, Jeff Zients, the head of the White House COVID-19 team, said the administration is noting an uptick in vaccination rates. In the past 2 weeks, he said, 7 million Americans got their 1st shot, the highest number since the beginning of June [2021].

And, ahead of school starting, there has been a 75% increase in the daily average of 12-15-year-olds getting vaccinated, he said. According to CNN, over the past 2 weeks, adolescents ages 12-15 account for 1/5 of all new vaccinations in the country. The share of fully vaccinated people who are ages 12-15 has risen from 21.5% in June [2021] to 32.2% in August [2021].

Zients said that, by the end of today [18 Aug 2021], 200 million Americans will have at least their 1st shot.

"This is a major milestone," he said. "Americans across the country are continuing to step up and get vaccinated."

The Centers for Disease Control and Prevention (CDC) COVID Data Tracker shows that 50.9% of Americans are fully vaccinated and 59.9% have at least one dose.

The United States reported 128 902 new COVID-19 cases yesterday [17 Aug 2021], and 1001 deaths, according to the Johns Hopkins COVID-19 tracker. The 7-day average of new cases is 139 872, according to the New York Times tracker.

After weeks of warnings from health officials and steep case increases, Alabama is now officially out of intensive care unit (ICU) beds.

"We've never been here before. We are truly now in uncharted territory in terms of our ICU bed capacity," said Alabama Hospital Association President Don Williamson, MD, to a local news station. "There were 1568 patients today [17 Aug 2021] who need ICU beds, and there are only 1557 designated ICU beds in the state today [17 Aug 2021]."

Currently, 2723 people in Alabama are hospitalized for COVID-19, including 40 children. Williamson said 12% of those hospitalized for COVID-19 are fully vaccinated.

Though the worst of the summer surge is still seen in Southern states and in communities with low vaccination rates, breakthrough infections in vaccinated people accounted for at least one in 5 new cases in 6 states--California, Colorado, Massachusetts, Oregon, Utah, and Vermont--and higher percentages in total hospitalizations and deaths than had previously been observed in all of them, according to figures gathered by the New York Times.

[<https://www.nytimes.com/2021/08/17/health/covid-vaccinated-infections.html>]

Other US news

-The Biden administration is extending a federal mask mandate on public transportation, including buses, trains, and planes, through January 2022.

-In New Orleans Public Schools, 3004 staff have been forced to quarantine after 299 students and staffers tested positive for COVID-19, the New Orleans Times-Picayune reported yesterday [17 Aug 2021]. [See comment below]

- The NFL's Las Vegas Raiders will require fans at their home stadium to show proof that they've been fully vaccinated, or get a shot at the stadium and wear a mask, according to NPR.

[<https://www.npr.org/sections/coronavirus-live-updates/2021/08/17/1028402797/nfl-raiders-require-fans-vaccination-proof-shots-las-vegas-masks-covid>]

[Byline: Stephanie Soucheray]

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Communicated by:

Mary Marshall

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[From the Times-Picayune:

"Within days of returning to school in person [in New Orleans] for the

2021-2022 school year, thousands of area students were sent back home as the coronavirus infected hundreds and forced widespread quarantines of students and staff.

In New Orleans public schools, 3004 students and staff were forced to quarantine after 299 students and staffers tested positive. In Jefferson, 1267 students and staff were sent back home after 345 people, including 295 students, tested positive."

These COVID cases are thought to be "spurred by low vaccination rates" in the community at the same time as "record high cases driven largely by the . . . delta variant."

([https://www.nola.com/news/coronavirus/article\\_1c977d72-ff5b-11eb-800e-03e50c9ee534.html](https://www.nola.com/news/coronavirus/article_1c977d72-ff5b-11eb-800e-03e50c9ee534.html)).

- Mod.LK]

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[3] Waning immunity

Date: Wed 18 Aug 2021

Source: CIDRAP (Center for Infectious Disease Research and Policy)

[edited]

<https://www.cidrap.umn.edu/news-perspective/2021/08/studies-covid-vaccine-protection-waning-against-infection-not>

A trio of new real-world US studies examine the ongoing effectiveness of 2 doses of the Pfizer/BioNTech and Moderna mRNA vaccines against COVID-19, one finding significantly ebbing efficacy against infection in nursing home residents and 2 showing sustained protection against coronavirus-related hospitalizations but declining coverage against new adult cases.

The studies were cited today [Wed 18 Aug 2021] as White House officials announced plans to offer booster doses of the vaccines beginning next month [Sep 2021] (see related CIDRAP News story in [2] above). They were published today in Morbidity and Mortality Weekly Report, the journal of the Centers for Disease Control and Prevention (CDC).

The results, the study authors said, underscore the need for heightened vigilance and a multipronged approach to prevent COVID-19 amid diminishing vaccine effectiveness (VE) and the ongoing surge of cases caused by the delta (B1617.2) variant.

In the 1st study, the researchers compared weekly reports of new infections by vaccination status from nursing homes certified by the

Centers for Medicare & Medicaid Services to evaluate the VE of 2 doses of either mRNA vaccine before the emergence of delta (1 Mar-9 May 2021) and after (21 Jun-1 Aug 2021).

Of all nursing home residents, 14.7% were unvaccinated, 49.6% were fully vaccinated with Pfizer, 25.3% were vaccinated with Moderna, and 10.4% had "other" vaccination status.

Before delta predominated, data from 17 407 reports from 3862 nursing homes showed that adjusted VE was 74.7%. But after, it fell to 53.1%, according to 85 593 reports from 14 917 facilities.

Pre-delta, adjusted VE against infection among those fully vaccinated (vs unvaccinated) was 74.7% for either mRNA vaccine, 74.2% for Pfizer, and 74.7% for Moderna. After the emergence of delta, adjusted VE against infection among fully vaccinated residents was 53.1% for either vaccine, 52.4% for Pfizer, and 50.6% for Moderna.

A total of 6879 COVID-19 asymptomatic and symptomatic infections were identified, 30.7% of them in unvaccinated residents, 37.8% in those fully vaccinated with Pfizer, 18.9% in those fully vaccinated with Moderna, and 12.5% in residents with other vaccination status.

The researchers, who pointed out that their study couldn't differentiate between the effects of delta and falling vaccine-generated immunity, called for research into whether VE against severe disease in nursing home residents is also waning over time. Because they are typically older and frail, nursing home residents may have a less robust immune response to vaccines and are at high risk for poor COVID-19 outcomes, they added.

"Because nursing home residents might remain at some risk for SARS-CoV-2 infection despite vaccination, multiple COVID-19 prevention strategies, including rigorous attention to infection control and testing practices and vaccination of nursing home staff members, residents, and visitors, are critical," the authors wrote. "Additional doses of COVID-19 vaccine might be considered for nursing home and long-term care facility residents."

The 2nd study evaluated the duration of mRNA VE against COVID-19 hospitalization in patients 18 years and older admitted to 21 hospitals in 18 states from March-July 2021.

Of 3089 hospitalized adults (1194 COVID-19 patients and 1895 uninfected control patients), 11.8% of case-patients and 52.1% of



controls had received 2 doses of the Pfizer or Moderna vaccine 14 days or more before symptom onset (median days after 2nd dose, 65). Median patient age was 59 years, 48.7% were women, 56.7% were White, and 21.1% were immunocompromised.

2-12 weeks after the 2nd dose, VE against coronavirus-related hospitalization was 86% overall, 63% in immunocompromised patients, and 90% in those with healthy immune systems. After 13-24 weeks, VE was 84%, a nonsignificant change. Whole-genome sequencing of specimens from 454 case patients showed that 53.3% were caused by the alpha (B117) variant, and 16.3% were due to delta.

Among patients with symptom onset from March - May [2021], before delta became predominant, VE against hospitalization was 87%, falling to 84% in June and July [2021]. The results were consistent among subgroups of participants at high risk of severe COVID-19, including older adults, those with at least 3 underlying illnesses, and those with compromised immune systems.

"Effectiveness of mRNA vaccines against COVID-19-associated hospitalization was sustained over a 24-week period, including among groups at higher risk for severe COVID-19; ongoing monitoring is needed as new SARS-CoV-2 variants emerge," the researchers wrote.

"To reduce their risk for hospitalization, all eligible persons should be offered COVID-19 vaccination. Continued monitoring of VE against infection and severe disease is needed as the elapsed time since vaccination increases and new SARS-CoV-2 variants emerge."

In the last study, the New York State Department of Health estimated rates of new adult COVID-19 infections and hospitalizations by vaccine status from 3 May-25 Jul [2021] by linking statewide immunization, testing, and hospitalization databases.

By the end of the study, 65.8% of adult New Yorkers were fully vaccinated, and 10.4% had received 1 dose. Of fully vaccinated adults, 51.3% had been given the Pfizer vaccine, 39.8% received Moderna, and 8.9% received Johnson & Johnson.

Over the study period, age-adjusted VE against COVID-related hospitalization was relatively steady, from 91.9%-95.3%. But the VE against infection fell from 91.7% to 79.8%.

Weekly VE against infection dropped in all age-groups during the study, declining from 90.6% to 74.6% in adults 18-49 years, 93.5% to

83.4% for those 50-64, and 92.3% to 88.9% for those 65 and older.

By 25 Jul [2021], 1271 fully vaccinated adults had been hospitalized with COVID-19 (0.17 per 100 000 person-days), versus 7308 (2.03) among the unvaccinated. The ratio of hospitalizations to cases was lower among the fully vaccinated than among the unvaccinated (13.1 per 100 cases and 19.0, respectively).

In general, hospitalization rates fell through the week of 5 Jul [2021] but then rose over the following 2 weeks; they were higher among those 65 and older than among younger adults, regardless of vaccination status.

The overall age-adjusted VE against hospitalization ranged from 91.9%-85.3% over the study period. VE against hospitalization stayed steady, at 90.8%-97.5% for adults 18-49 years, 92.4%-97.0% for those 50-64, and 92.3%-96.1% for those 65 and older.

By the end of the study, 9675 new infections occurred (1.31 per 100 000 person-days) in fully vaccinated adults, versus 38 505 (10.69) in the unvaccinated.

Of infections among fully vaccinated adults, 98.1% occurred 7 or more days after gaining full vaccination status (median, 85 days). New case rates among the fully vaccinated and the unvaccinated were similar across age-groups over the study period, declining in June [2021] before rising in July [2021].

While the vaccines are highly effective against hospitalization, they have become less effective amid the delta surge and easing of mask wearing and physical distancing guidelines, the authors noted.

"To reduce new COVID-19 cases and hospitalizations, these findings support the implementation of a layered approach centered on vaccination, as well as other prevention strategies such as masking and physical distancing," they wrote.

At a White House briefing today [Wed 18 Aug 2021], CDC Director Rochelle Walensky, MD, MPH, said that while VE against infection is waning, protection against hospitalization remains high but that "anticipating further waning immunity and the ongoing delta surge, we are preparing for a booster vaccine."

Anthony Fauci, MD, White House chief medical advisor, added that a 3rd mRNA shot increases antibody concentrations by 10-fold or more.



A statement from the US Department of Health and Human Services today said that, depending on a Food and Drug Administration determination and a CDC Advisory Committee on Immunization Practice's recommendation, all Americans will be offered a 3rd dose of the Pfizer or Moderna vaccine starting the week of 20 Sep [2021] for those who received their 2nd dose 8 months before. Recommendations for the Johnson & Johnson vaccine will be based on data expected in the next few weeks.

"Our top priority remains staying ahead of the virus and protecting the American people from COVID-19 with safe, effective, and long-lasting vaccines especially in the context of a constantly changing virus and epidemiologic landscape," the statement said. "We will continue to follow the science on a daily basis, and we are prepared to modify this plan should new data emerge that requires it."

[Byline: Mary Van Beusekom]

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[Citations:

1. Rosenberg ES, Holtgrave DR, Dorabawila V, et al. New COVID-19 Cases and Hospitalizations Among Adults, by Vaccination Status--New York, May 3-July 25, 2021. MMWR Morb Mortal Wkly Rep. ePub: 18 August 2021. DOI: <http://dx.doi.org/10.15585/mmwr.mm7034e1>

2. Tenforde MW, Self WH, Naioti EA, et al. Sustained Effectiveness of Pfizer-BioNTech and Moderna Vaccines Against COVID-19 Associated Hospitalizations Among Adults -- United States, March-July 2021. MMWR Morb Mortal Wkly Rep. ePub: 18 August 2021. DOI: <http://dx.doi.org/10.15585/mmwr.mm7034e2external icon>

3. Nanduri S, Pilishvili T, Derado G, et al. Effectiveness of Pfizer-BioNTech and Moderna Vaccines in Preventing SARS-CoV-2 Infection Among Nursing Home Residents Before and During Widespread Circulation of the SARS-CoV-2 B.1.617.2 (Delta) Variant--National Healthcare Safety Network, March 1-August 1, 2021. MMWR Morb Mortal Wkly Rep. ePub: 18 August 2021. DOI: <http://dx.doi.org/10.15585/mmwr.mm7034e3>]

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[4] WHO: Daily new cases reported (as of 18 Aug 2021)

Date: Wed 18 Aug 2021

Source: WHO [abridged, edited]

<https://covid19.who.int/table>

\*Daily case reports as of 18 Aug 2021 16:48 CET

#### Surveillance

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WHO region (no. countries/territories):

Total confirmed cases (new cases in last 24 hours) / Total deaths (new deaths in last 24 hours)

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Western Pacific Region (19): 5 526 878 (65 873) / 77 951 (807)

European Region (61): 62 920 972 (152 670) / 1 246 729 (1628)

South East Asia Region (10): 40 138 882 (55 693) / 615 981 (752)

Eastern Mediterranean Region (22): 13 813 261 (80 579) / 252 418 (1031)

Region of the Americas (54): 80 709 034 (166 388) / 2 056 686 (1817)

African Region (49): 5 360 584 (21 505) / 128 201 (704)

Cases on an international conveyance (Diamond Princess): 745 (0) / 13 (0)

Confirmed cases (new cases in last 24 hours) / Total deaths (new deaths in last 24 hours)

Grand total: 208 470 375 (542 708) / 4 377 979 (6739)

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[Data by country, area, or territory for 18 Aug 2021 can be accessed at

[https://promedmail.org/wp-content/uploads/world-pdf/2021%20WHO%20Daily%20Tables%20AUG18\\_1629398142.pdf](https://promedmail.org/wp-content/uploads/world-pdf/2021%20WHO%20Daily%20Tables%20AUG18_1629398142.pdf).

- The Americas region reported 30.6% of daily case numbers and 26.9% of the daily deaths reported in the past 24 hours and maintained its position as the most severely affected region, having reported more than 80.70 million cases. The USA reported over 113 000 cases over the last 24 hours followed by Brazil (14 471), and Cuba (9772). 5 additional countries reported more than 1000 cases in the past 24 hours, while 6 countries reported more than 500 but fewer than 1000

cases.

- The European region reported 28.1% of daily case numbers and 24.1% of the daily deaths reported in the past 24 hours, and total cumulative cases reported exceed 62.92 million cases. Many countries not reporting cases in the last 24 hours or longer include Belgium (3 cases) , Sweden, Switzerland (9 cases), and Kazakhstan, among others. 15 countries reported more than 1000 cases in the past 24 hours, and an additional 8 countries reported more than 500 but fewer than 1000 cases.

- The Eastern Mediterranean region reported 14.8% of daily case numbers and 15.3% of the deaths reported in the past 24 hours, having reported a cumulative total of more than 13.81 million cases. Iran reported the highest number of cases (50 228) over the last 24 hours, followed by Morocco, Iraq, Pakistan, Libya, Jordan, Tunisia, Lebanon, and UAE. Saudi Arabia reported more than 500 but fewer than 1000 cases.

- The African region reported 3.95% of daily case numbers and 10.4% of the deaths reported in the past 24 hours, having reported a cumulative total of more than 5.36 million cases. South Africa (10 685), reported the highest number of cases over last 24 hours followed by Kenya, Mozambique, Algeria, Ghana, and Ethiopia. Eswatini, Rwanda, and Zimbabwe reported more than 500 but fewer than 1000 cases. Cameroon, Botswana, Uganda, Gabon, and Congo, among others, did not report any new cases in the past 24 hours.

- The Western Pacific region reported 12.1% of daily case numbers and 11.9% of the deaths reported in the past 24 hours, having reported a cumulative total of more than 5.52 million cases. Malaysia reported the highest number of cases over the last 24 hours (over 19 000 cases), followed by Japan, Philippines, Vietnam, South Korea, Mongolia, Cambodia, and Fiji.

- The South East Asia region reported 10.2% of the daily newly reported cases and 11.1% of reported deaths in the past 24 hours, having reported a cumulative total of more than 40.13 million cases. India is dominant reporting over 35 000 cases over the last 24 hours, followed by Thailand (20 515). Additionally, Bangladesh, Myanmar, Nepal, Sri Lanka, and Maldives have not reported any cases in the last many days.

On the Overview tab at the WHO source URL, the epidemic curve of confirmed COVID-19 cases by WHO region, 30 Dec 2019 through 18 Aug

2021, is an excellent visual representation of the pandemic. -  
Mod.UBA]

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[5] Global update: Worldometer accessed 18 Aug 2021 22:25 EST (GMT-5)

Date: Wed 18 Aug 2021

Source: Worldometer [edited]

<https://www.worldometers.info/coronavirus/#countries>

[For those who wish to see the detailed global data, a snapshot of the  
Worldometer table at the time we accessed it is available at

[https://promedmail.org/wp-content/uploads/world-pdf/2021%20WORLDDATA%20AUG18\\_1629398160.pdf](https://promedmail.org/wp-content/uploads/world-pdf/2021%20WORLDDATA%20AUG18_1629398160.pdf).

A 7-day series of cumulative data reported by countries, territories,  
and reporting entities can be found at

[https://promedmail.org/wp-content/uploads/world-pdf/2021%20AUG18WORLD7\\_1629398174.pdf](https://promedmail.org/wp-content/uploads/world-pdf/2021%20AUG18WORLD7_1629398174.pdf).

- Mod.UBA]

Total number of reported deaths: 4 405 219

Total number of worldwide cases: 210 091 010

Number of newly confirmed cases in the past 24 hours: 734 664

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[In the past 24 hours, 16 countries including the USA (158 127),  
Brazil (41 017), Iran (39 174), India (35 797), UK (33 804), France  
(28 405), Malaysia (22 242), Russia (20 914), Thailand (20 515),  
Turkey (19 944), Japan (18 872), Indonesia (15 768), Mexico(14 814),  
South Africa (14 727), Spain (11 956), and Philippines (10 698) have  
reported the highest numbers of cases, all reporting more than 10 000  
newly confirmed cases. A global total of 10 858 deaths were reported  
in the past 24 hours (late 16 Aug 2021 to late 17 Aug 2021). A total  
of 58 countries reported more than 1000 cases in the past 24 hours; 30  
of the 58 countries are from the European region, 7 are from the  
Americas region, 7 are from the Eastern Mediterranean region, 5 are  
from the South East Asia region, 5 are from the Western Pacific  
region, and 4 from the African region.

Comparing the 7-day averages of daily confirmed cases from the past 7  
days and those from 8-14 days ago, case counts have increased by

0.023%, while daily reported deaths have decreased by 14.3%. Similar comparative 7-day averages in the USA show a 7.9% increase in daily reported cases and a 27.4% increase in reported deaths.

Impression: The global daily reported over 700 000 newly confirmed infections in the past 24 hours with over 210.09 million cumulative reported cases and over 4.40 million reported deaths. - Mod.UBA

HealthMap/ProMED map:

Worldwide: <http://healthmap.org/promed/p/8854>

[See Also:

COVID-19 update (285): animal, Spain (GA) mink, OIE

<http://promedmail.org/post/20210819.8604021>

COVID-19 update (284): New Zealand, Israel, USA, WHO, global

<http://promedmail.org/post/20210818.8605056>

COVID-19 update (283): virus spread, funding, wildfires, ARDS, saliva test, WHO <http://promedmail.org/post/20210817.8602225>

COVID-19 update (282): Israel, antibody kinetics, WHO

<http://promedmail.org/post/20210816.8599381>

COVID-19 update (281): USA, China, Philippines, WHO

<http://promedmail.org/post/20210815.8597166>

COVID-19 update (280): new variant B.1.621, Canada, regional, WHO

<http://promedmail.org/post/20210814.8595594>

COVID-19 update (279): UK schools, cognitive, WHO

<http://promedmail.org/post/20210813.8593500>

COVID-19 update (278): inhaled corticosteroid, breast milk antibodies, WHO <http://promedmail.org/post/20210813.8590939>

COVID-19 update (277): variant names, Bangladesh, SE Asia, vaccine adverse events, WHO <http://promedmail.org/post/20210812.8587809>

COVID-19 update (276): animal, Poland, mink, research

<http://promedmail.org/post/20210811.8587558>

COVID-19 update (275): Israel vaccine, delta variant PAHO, WHO

<http://promedmail.org/post/20210810.8584828>

COVID-19 update (274): resp viruses, USA, rapid tests, WHO

<http://promedmail.org/post/20210809.8581724>

COVID-19 update (273): vaccine effect, motorcycle rally, delta variant, WHO <http://promedmail.org/post/20210809.8579489>

COVID-19 update (272): outcomes, mixing vaccines, children, S Asia, WHO <http://promedmail.org/post/20210808.8577773>

COVID-19 update (270): myocarditis, pericarditis, Australia, WHO <http://promedmail.org/post/20210806.8575370>

COVID-19 update (269): herd immunity, children, flu vaccine, WHO <http://promedmail.org/post/20210806.8572839>

COVID-19 update (268): China tests, ischaemia, detainees, WHO



<http://promedmail.org/post/20210804.8569503>  
 COVID-19 update (267): USA, CIDRAP, obesity, rapid tests, WHO  
<http://promedmail.org/post/20210803.8566627>  
 COVID-19 update (266): variants, breakthrough infection, WHO  
<http://promedmail.org/post/20210802.8564010>  
 COVID-19 update (264): booster, relaxing NPI & variant risk, China, WHO  
<http://promedmail.org/post/20210801.8561674>  
 COVID-19 update (263): lambda and delta variants, CDC, South Asia, WHO  
<http://promedmail.org/post/20210731.8559796>  
 COVID-19 update (262): Pfizer effect., MIS-C, Israel  
 breakthroughs/boosters, WHO  
<http://promedmail.org/post/20210730.8557829>  
 COVID-19 update (261): Singapore, mental illness, vaccine mix & match, WHO  
<http://promedmail.org/post/20210729.8554984>  
 COVID-19 update (258): CDC mask policy, IDSA, Japan, WHO, global  
<http://promedmail.org/post/20210728.8551757>  
 COVID-19 update (256): masks, Promed-ESP, mRNA vaccine 2nd dose, WHO  
<http://promedmail.org/post/20210727.8549125>  
 COVID-19 update (255): Indonesia medic. fatal. & variants, nasal  
 involv., WHO <http://promedmail.org/post/20210726.8546570>  
 COVID-19 update (253): child vaccines, immunocompromised, Europe  
 restrict., WHO <http://promedmail.org/post/20210725.8544147>  
 COVID-19 update (252): lambda variant, South Asia, Viet Nam,  
 malnutrition, WHO <http://promedmail.org/post/20210724.8542486>  
 COVID-19 update (251): USA delta variant, Israel vaccines, Olympics,  
 WHO, global <http://promedmail.org/post/20210723.8540650>  
 COVID-19 update (250): caregiver loss, school buses, mRNA vaccines,  
 WHO <http://promedmail.org/post/20210722.8538296>  
 COVID-19 update (249): T cell response, GAO, UK, vaccination USA &  
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 COVID-19 update (248): immunity and variants, vaccines, azithromycin,  
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 COVID-19 update (245): UK, Israel, mask trial retraction,  
 Eurosurveillance, WHO <http://promedmail.org/post/20210718.8527924>  
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 COVID-19 update (243): Olympics, Africa, MIS-C possible causes, WHO,  
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 COVID-19 update (242): inc. cases and deaths, hosp resources, infec.  
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 COVID-19 update (241): South Africa, beta variant, vaccines,  
 Netherlands, WHO <http://promedmail.org/post/20210714.8518836>  
 COVID-19 update (240): Delta, long Covid, vaccine boosters,

Guillian-Barre, WHO <http://promedmail.org/post/20210713.8516206>

COVID-19 update (210): mucormycosis, Delta var US, quarantine transmission, WHO <http://promedmail.org/post/20210617.8456074>

COVID-19 update (200): animal, China, origin  
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COVID-19 update (100): antibodies, vaccine, Thailand, Cambodia, WHO, global <http://promedmail.org/post/20210316.8250009>

COVID-19 update (50): UK vaccine study, Brazil reinfection, WHO  
<http://promedmail.org/post/20210205.8167161>

COVID-19 update (01): variants, vaccine, Thailand, global, WHO  
<http://promedmail.org/post/20210101.80629382020>

2020

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Undiagnosed pediatric inflammatory syndrome (06): COVID-19, heart, young adults <http://promedmail.org/post/20200522.7364506>

COVID-19 update (562): viral load, UK vacc dose, ECDC, WHO  
<http://promedmail.org/post/20201231.8061525>

COVID-19 update (01): China, global, EVZD, reporting criteria, WHO  
<http://promedmail.org/post/20200213.6984084>

Novel coronavirus (42): China, global, COVID-19, SARS-CoV-2, WHO  
<http://promedmail.org/post/20200211.6979942>

Novel coronavirus (01): China (HU) WHO, phylogenetic tree  
<http://promedmail.org/post/20200112.6885385>

Undiagnosed pneumonia: China (HU) (10): genome available, Hong Kong surveill. <http://promedmail.org/post/20200111.6883998>

Undiagnosed pneumonia: China (01): (HU) wildlife sales, market closed, RFI <http://promedmail.org/post/20200102.6866757>

2019

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Undiagnosed pneumonia: China (HU): RFI

<http://promedmail.org/post/20191230.6864153>

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**Sent:** August 27, 2021 7:21 PM  
**To:** Strang, Robert  
**Subject:** The COVID-19 Brief: Herd immunity impossible without vaccinated kids; vaccine passports and mandates

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Latest on the coronavirus in Canada



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**August 27, 2021**

# THE COVID-19 BRIEF

## CORONAVIRUS UPDATE

*Your resource for cutting through fear and misinformation. Check your email for trusted reporting and analysis to help differentiate between fact and fiction.*

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**The outbreak by the numbers** (as of 5:00 p.m. EDT Friday, August 27, 2021):

- **Canada:** 1,484,112 cases | 27,052 active | 26,881 deceased
- **Globally:** 215,106,535 cases | 4,480,969 deceased

**Vaccine shipment forecasts** (as of 5:00 p.m. EDT Friday, August 27, 2021)

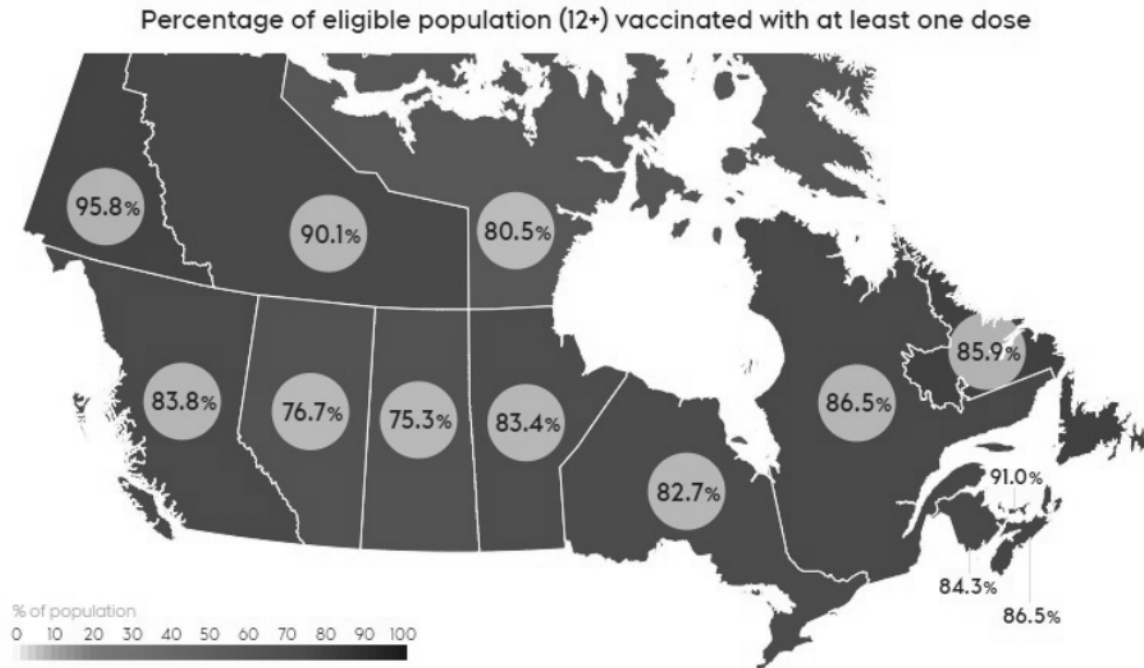
- Total vaccines distributed in Canada: 63,720,084

- No current shipment allocations

### Vaccinations by the numbers (as of 5:00 p.m. EDT Friday, August 27, 2021)

Map shows percentage of *eligible* population (12+) vaccinated with at least one dose; percentages table below are for *total* population.

### Eligible population (12+) in Canada: 83.03% first dose | 75.15% fully vaccinated



- **World:** 5,130,003,995 doses given | 33% first dose | 25% fully vaccinated
- **Canada:** 73% have received at least one dose | 66.1% fully vaccinated
- **British Columbia:** 75.2% at least one dose | 67.8% fully vaccinated
- **Alberta:** 65.3% at least one dose | 58.2% fully vaccinated
- **Saskatchewan:** 66% at least one dose | 58.5% fully vaccinated
- **Manitoba:** 71.1% at least one dose | 65.8% fully vaccinated
- **Ontario:** 73.1% at least one dose | 67% fully vaccinated
- **Quebec:** 75.5% at least one dose | 67.9% fully vaccinated
- **New Brunswick:** 74.8% at least one dose | 66.1% fully vaccinated
- **Nova Scotia:** 76.9% at least one dose | 69.7% fully vaccinated
- **Prince Edward Island:** 80.1% at least one dose | 70.1% fully vaccinated
- **Newfoundland and Labrador:** 79.6% one dose | 68.5% fully vaccinated
- **Yukon:** 78.8% at least one dose | 75.2% fully vaccinated
- **Northwest Territories:** 75.7% at least one dose | 71.1% fully vaccinated
- **Nunavut:** 59.7% at least one dose | 52.4% fully vaccinated



## **Here's what's been happening in Canada**

**Herd immunity unreachable without vaccinated kids.** With more than 10 million Canadians unvaccinated against COVID-19, half of them children who are ineligible, infectious disease experts warn that masking, physical distancing, testing and other public health protocols must continue in order to prevent the fourth wave from getting out of control and straining the health-care system again. At the same time, Public Health Ontario says achieving herd immunity will not even be possible without vaccinating children under 12.

**A passport by any other name...B.C.'s** vaccine passport system is coming and those who are not vaccinated, including for medical or religious reasons, will not get an exemption. In **Alberta**, residents will soon be able to get their proof of vaccination record in a "more convenient" card-sized form. The province, however, stresses this is not a vaccine passport and that it is up to Albertans on how they will use it.

According to a top doctor in **Ontario**, regional health units within the province will implement their own proof of vaccination certificate in September if the province does not roll out a province-wide system. The Ford government has long resisted calls for a vaccine passport, but sources have told CTV News that they are now considering one amid rising cases.

**Quebec's** own version will come into effect next Wednesday, becoming the first province to require proof of vaccination on a province-wide scale for non-essential enclosed public spaces. Some cybersecurity experts who have looked at the Quebec system's design have also said that it could serve as a model for the entire country. A Toronto company has also built a similar app to the one being used in Quebec that would allow businesses in jurisdictions with no passport mandate to vet their own customers.

- The latest on what provinces have to say about vaccine passports
- Liberals promise funding for provinces that develop vaccine passports

**Private sector, others getting tough on vaccinations.** Last week, Canada's five largest banks announced vaccination requirements for employees. This week, we saw another round of businesses and organizations announcing tough new vaccine mandates. The **University Health Network in Toronto** (which includes Princess Margaret hospital), several major Canadian long-term care operators, and **Air Canada** were among those mandating that employees be fully vaccinated or face

consequences including termination or being placed on an unpaid leave of absence. And the **Toronto Blue Jays** are also requiring vaccinations or negative COVID-19 tests for all fans aged 12 and up.

**Fourth wave snapshot across Canada.** A quick glance at CTVNews.ca's case tracker shows cases are rising across most regions in Canada, but especially sharply in B.C., Alberta, and Saskatchewan. In Alberta, for example, hospitalizations and ICU counts are hitting two and a half month highs. B.C. officials meanwhile, are also offering hundreds of residents an additional shot after determining they received an "invalid" dose because they were stored in the wrong kind of freezer. In Saskatchewan, where the seven-day average for new cases are at levels not seen since around mid-May and hospitalizations have doubled since all public health measures were dropped in July, the health minister is pushing back against reinstating restrictions or enforcing vaccine requirements.

**Ontario** reported nearly 800 new cases on Friday, the highest daily case count since early July, while the positivity rate has climbed to three per cent. Earlier this week, a member of the province's COVID-19 science table resigned, alleging that politics seemed to be influencing public health recommendations and that modelling data was projecting a "grim fall." An outbreak at a basketball tournament attended by teams from all over the province and across Canada has prompted health officials to ask those who attended the event -- some 7,000 people -- get tested "immediately".

**Quebec** is also seeing an increase in hospitalizations and ICU cases, and a case in the province is garnering some attention: an unvaccinated nurse working in the emergency room at a hospital has tested positive for COVID-19, along with a patient with whom she had contact. The province has already announced that health-care workers must be vaccinated by mid-October. Separately, the province is also recommending all employers delay their plans to bring workers back into the office due to the rise in cases.

Cases remain comparatively low in **Atlantic Canada**, but provinces are also exercising caution, with Nova Scotia tightening it's border again with **New Brunswick** and **P.E.I.** stating it will maintain some public safety measures until mid-October.

**Masks are back.** For some of us, mask mandates never went away, but in parts of Canada where masks have been off for a while, officials are requiring them again as infections rise. B.C. is reinstating the safety measure again for indoor public spaces, including students in Grade 4 and higher. Earlier this month, the province's Human Rights Tribunal dismissed a complaint from a woman who declined to put on a mask at a jewelry store, after she did not provide sufficient information to make her case. **Quebec** and **Manitoba** are also making masks mandatory again, but **Alberta** and **Saskatchewan** have signalled they will not be following their neighbours' lead.





## The latest headlines...

**In vaccines.** Health Canada has now authorized **Moderna** for use in older children, saying the vaccine is "safe and effective" for children between the ages of 12 and 17.

Some of the concerns among those who are hesitant about the vaccine are reports of **breakthrough cases**. We spoke with experts, including Dr. Isaac Bogoch, to help explain what it means and the science between these rare cases. Speaking of breakthrough cases, a fully vaccinated Ontario woman shares her story of how she and her son were "crammed like sardines" inside the Toronto airport and have now become infected.

- COVID-19 vaccines can unlock enhanced immunity in former SARS patients: study
- Japan suspends 1.63M doses of Moderna over contamination
- WHO begins shipping Chinese vaccines despite some misgivings
- Israel's vaccine boosters show signs of taming Delta
- Drop in vaccine efficacy against Delta seen in U.S. nursing homes

**In fact-checking.** The latest disturbing trend in so-called "alternative" COVID-19 treatments involve ivermectin, a drug commonly used to treat or prevent parasites for livestock. The FDA issued a plea for Americans to stop taking the de-wormer drug following "multiple reports of patients who have required medical support and hospitalized after self-medicating with ivermectin intended for horses." An Arkansas doctor is being investigated for prescribing ivermectin thousands of times for COVID-19, despite the FDA warning.

**In research and data.** Trial data for an antibody therapy from AstraZeneca raised the prospect of a new treatment to prevent COVID-19 beyond vaccines, giving hope in particular for people who respond poorly to immunization shots. The U.K. drug regulator has also approved an antibody cocktail developed by Regeneron and Roche to prevent and treat infections.

- What is functional neurological disorder and is it connected to COVID-19 vaccines?
- High-efficiency masks up to six times better at filtering aerosols: Canadian study

- [Alberta seeing pandemic spikes in excessive drinking, patients with liver damage](#)
- [Experts on WHO team say search for COVID-19 origins has stalled](#)
- [Large pandemics are statistically more likely than originally thought: study](#)

**From around the world.** Canada is among the latest countries added to the **United Kingdom's** [green travel list](#), meaning Canadian travellers will no longer have to quarantine upon arriving in the country.

The **United States** is projected to see nearly [100,000 more COVID-19 deaths](#) between now and Dec. 1, according to the country's most closely watched forecasting model.

**Hawaii** is being [hit hard](#) by the pandemic, with hospitals overflowing with the sick, and the governor urging tourists to stay away. In **Florida**, a judge ruled that school districts in the state can legally require their students to wear masks, [overriding an executive order](#) by the governor which banned such mandates. Former U.S. President Donald Trump was booed by supporters while speaking at a rally in **Alabama** after he [recommended](#) getting the COVID-19 vaccine.

- [COVID-19 vaccination triples in Africa but still low: WHO](#)
- [Paralympics opens under shadow of COVID-19, but athletes excited to compete](#)

## **How it affects you**

**Ask the doctor.** With back to school just around the corner, many parents of teenaged children, especially boys, may be wondering whether to give their child a second COVID-19 vaccine shot or whether one shot is enough when balanced against the rare, but potential risk of an inflammation of the heart. Here's [what experts have to say](#).

- [Will the pandemic eliminate presenteeism from the workplace?](#)
- [Canadian travellers fined \\$5,700 each for getting wrong COVID-19 test](#)

## **One last thing...**

Some recent headlines have seen some employers struggling to hire staff back to work, blaming federal income support programs for their troubles. This week, a couple of stories offer a counterpoint to that narrative. Workers say it's [low wages and instability](#) that are to blame for labour shortages, particularly in the restaurant industry. With so many stories about professionals reassessing their priorities during the pandemic and quitting well-paying desk jobs, it's not a surprise those in demanding, low-paying jobs are also doing the same. This [first-person account](#) gives voice to why they are not going back to their old job.

Thank you as always for reading and have a great weekend,  
*Solarina Ho, CTVNews.ca writer*

Have feedback about the newsletter? Send [your comments here](#).



For more news on the coronavirus in Canada:

- [Vaccine tracker: How many people have received shots?](#)
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