Changing the Way We Work

October 7, 2022**: Flu Shots, COVID Boosters and Catch-up Immunizations**

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Curated answers from CoP panelists and co-hosts to in-session questions posed by participants, based on current guidance and information available at the time.

BIVALENT VACCINES | BOOSTER DOSES

- **Will we be getting the BA.5 bivalent vaccine in Canada? How effective is BA.1 bivalent?**

Yes, BA.5 bivalent vaccine coming in the next few weeks. Probably no difference between BA.1 and BA.5 bivalents. [**UPDATES**:

Pfizer new bivalent approved by Health Canada, Oct. 7:
https://www.cbc.ca/news/politics/pfizer-bivalent-COVID -vaccine-approved-1.6609699

Evidence on vaccine effectiveness, see session slides:
https://www.dfcm.utoronto.ca/sites/default/files/inline-files/Sept%2016_%202022%20COVID-19%20CoP%20Slides%20Final.pdf]

- **When will the BA.5 bivalent be available in Canada?**

We are still waiting for Health Canada authorization, but the Pfizer is likely to be authorized imminently and we expect supply in the next few weeks. [**UPDATE**: Pfizer new bivalent approved by Health Canada, Oct. 7: https://www.cbc.ca/news/politics/pfizer-bivalent-COVID -vaccine-approved-1.6609699]

- **Will Pfizer BA.4,5 vaccine be approved by Health Canada soon? What is the delay as U.S. already is giving them out?**

Pfizer submitted later to Canada and Health Canada MUST do its due diligence. [**UPDATE**: Pfizer new bivalent approved by Health Canada, Oct. 7:
https://www.cbc.ca/news/politics/pfizer-bivalent-COVID -vaccine-approved-1.6609699]

- **Should patients wait for the Pfizer BA.4/5 vaccine given it will be available in Canada shortly? | Does the U.S. bivalent COVID vaccine provide better protection than the Canadian one given coverage for BA 4 and BA 5?**

No, no significant difference – discussion and slides later in this session. [Session slides: https://www.dfcm.utoronto.ca/sites/default/files/inline-files/Sept%2016_%202022%20COVID-19%20CoP%20Slides%20Final.pdf]

- **What would happen to booster eligibility when the BA.5 vaccine is available...would someone who got a BA.1 booster (as 5th dose) be eligible for BA.5 after 3-6 months?**

Depends on what happens to evolution of the virus and severity of disease over time.

- **In someone who has not had any vaccines, can they start with the bivalent vaccine, or do they have to have 2 doses of the original vaccine first?**

They will need to start with the monovalent vaccine for their primary series. The bivalent vaccine is being offered as a booster.

- **Could you clarify if there are human trials for BA.4/5 compared to BA.1/2? Apparently, FDA approved BA.4/5 in USA without the human trials.**

I suggest viewing the recording for our last CoP available on our website (Sept. 16): https://www.dfcm.utoronto.ca/past-covid-19-community-practice-sessions

[See information on trials of bivalent vaccines, slides 74–79 from Sept. 16 session: https://www.dfcm.utoronto.ca/sites/default/files/inline-files/Sept%2016_%202022%20COVID-19%20CoP%20Slides%20Final.pdf]

- **Does the bivalent vaccine lower transmission compared to the original vaccine or like the original just lower the risk of serious disease? And if the latter, then what is the benefit of the bivalent over the original?**

It lowers serious disease, any disease AND transmission.

- **Booster after COVID -19 infection. 3-6 months is recommended. What is your opinion?**

At the moment, 3 months after infection, adults who are older and [others who are] at risk should get a bivalent booster.

- **How long to wait for booster after +ve COVID or contact with COVID +ve**

For someone who has had their primary series, they should wait a minimum of three months after COVID infection for their booster, but a six-month interval may provide a better immune response. Further info can be found in the MOH guidance on page 14: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf

- **How long does it take for the booster dose to take full effect? 2 or 3 weeks?**

Full effect 10-14 days, but there is a measurable effect in the first week.

- **Are booster doses authorized for every 3-6 months, without limit right now? Or is it limited to 5 doses?**

It is now 6 doses for immunocompromised. Whether the rest of us will need another booster in 3-6 months depends on what happens; we're still in the "learning as we go" phase.

- **How many vaccines should a healthy adult get? Keep getting every 3 months+ as long as new ones are available?**

We still need to adapt as we go. This dose might be the last needed dose for may people if a new variant does not appear. It definitely won't last forever, but one or two more boosters might be needed

- **Am I understanding correctly that healthy 12-17-year-olds who have had two doses and a booster over 6 months ago are allowed a "fall booster" (4th dose)? Thanks!**

Yes! At this time, it would be a monovalent product [in most cases], but we expect that when the Pfizer bivalent is authorized it will be for ages 12 and up. [Youth aged 12 to 17 with moderately to severely immunocompromising conditions, or those who have biological or social risk factors, may also receive the bivalent vaccine – Vaccine Guidance: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf]

- **If someone did catch COVID, how long should they wait before getting the booster?**

For someone who has had their primary series, they may get their booster at minimum 3 months after infection, but a 6-month interval may provide better immune response. Further info on page 14 in the MOH guidance: https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf

- **Would a Novavax booster be adequate for those fearful of getting another mRNA vaccine?**

Yes. [MOH Vaccine Guidance https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID-19_vaccine_administration.pdf: *Novavax is not currently authorized for use as booster but may be given off-label with informed consent if the individual is not able or willing to receive a booster dose of an mRNA vaccine.*]

CHILDREN AND YOUTH

- **Are 5-11 eligible for the bivalent booster at 84+ days?**

Not at this time. The bivalent Moderna is only authorized for use in ages 18 and older, and the Pfizer when it is authorized will likely only be for ages 12 and older.

- **Why is original vaccine preferred over bivalent Moderna in 5-12 year olds?**

The original strain is currently the only product authorized by Health Canada as a primary series, the bivalents are only as boosters. And the bivalents are not authorized for use in children under the age of 18 currently, but even when the Pfizer product is authorized it will only be for 12 and older.

- **For [6 months to under 5 years], is there now a Pfizer option for primary series? And if they got Moderna for first dose, is it better to get second Moderna or switch to Pfizer for second dose?**

Yes, there is a Pfizer option now available. It is a 3-dose series as opposed to 2 doses for Moderna, which is potentially more difficult for patients to complete. Either product is recommended at this time and given the difference in dosing schedule, it is recommended to complete the series with a single product and not switch.

[Ontario news release, Sept. 25: https://news.ontario.ca/en/release/1002315/ontarians-18-eligible-for-bivalent-booster-starting-tomorrow]

- **Please review the doses of COVID -19 vaccines for kids under 5, vs kids 5-11, vs age 12-17, vs adults, for both Pfizer and Moderna vaccines. Thank you.**

You can find further information in the ministry guidance on COVID vaccines with a helpful table on page 3:
https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/vaccine/COVID -19_vaccine_administration.pdf

- **Regarding the bivalent Moderna vaccine, are there concerns about the increased risk of pericarditis/ myocarditis esp. in males 17-25yrs of age, and therefore, should this population avoid the Moderna bivalent vaccine? | Are there any different reactions to the Moderna bivalent vaccine? Are there reports myocarditis again in young males?**

Moderna does appear to have a slightly increased risk of myo/pericarditis compared to Pfizer in individuals under the age of 30 when receiving the primary series for COVID -19 vaccines. You can see numbers for Ontario in PHOs report here: https://www.publichealthontario.ca/-/media/Documents/nCoV/epi/covid-19-aefi-report.pdf?sc_lang=en

However, for booster doses this risk is significantly decreased and NACI has recommended the Pfizer preference only for individuals under 18 when getting their booster dose (i.e. if you didn't get myo/pericarditis from the primary series, there is no elevated risk from the booster).

- **Do vaccines STOP kids from getting COVID? Or do they just prevent serious illness/death?**

COVID vaccines DO reduce symptomatic transmission in all age groups, although this effect wanes quicker than protection against severe disease. At 2 weeks after completion of primary series or booster, its about 50% reduction in symptomatic transmission, but this drops to zero by 6 months from the last dose.

- **Are PHUs going to do the catch up on these school vaccines for those who missed during COVID and are now in high school?**

Yes, there are efforts to do so. If you call your local PHU they can let the parents know what the catchup plan is in that region.

VACCINE CO-ADMINISTRATION

- **Getting bivalent and flu shots together, will it be hard to distinguish which caused an adverse effect, if it did?**

Yes, but we now know enough about the adverse effects of each, so the benefits to people of being able to get vaccines together are greater than the risks (except for children less than 5 at the moment, where we still want to be able to separate which vaccine has caused adverse effects)

- **If the patient does not wish to get both flu and COVID vaccine together, what time interval to give the second one? | If we get flu and bivalent separately, what should be the interval between the two?**

It would be by patient preference. The sooner you get vaccinated, the sooner you get protection. | No need for separation of the flu and COVID vaccine for adults.

- **Health Canada states you can give the COVID vaccine and the flu shot together in adults but not in children under 5. As we give multiple other vaccines concurrently to kids<5 years old, what is the rationale for separating the flu and COVID shots in this age group?**

This is a recommendation from NACI based on an overabundance of caution since we don't have direct data on coadministration of COVID vaccines and other vaccines in this age group and primarily so that AEFIs can be monitored with greater ease (i.e., not confuse which vaccine prompted the AEFI). Vaccination should not be delayed because of this, either COVID or routine series, but if possible to schedule with the 2 weeks interval between it helps for AEFi monitoring.

- **Thanks Dan! Timing of Prevnar? Before Pneumovax if over 65? | Can you talk about Prevnar 20? What are the recommendations?**

Give PCV13 first, then PCV-23, eight weeks later. | Health Canada guidance is not yet out on this.

VACCINE HESITANCY | VACCINE FATIGUE

- **We have heard people delaying getting their vaccines multiple times because they were infected in the winter Omicron wave and then again in the summer. These people tend to be harder to persuade to get boosted or complete their series because in addition to hearing they have "some protection" and "should wait 6 months", they also had a mild illness (sometimes twice), recovered fully and don't**

see the disease as much of a threat. So how should primary care counsel patients about getting the vaccine?

Agreed, there is a lot of vaccine fatigue/confusion. we need to continue to encourage vaccination post infection (and booster) given the benefits to the individual continue to be demonstrated to increase their protection from future severe infection. you can talk about that COVID cases are not going down, indeed starting to go up here and in Europe.

- **I had over 90-95% uptake in the first 2 COVID doses, but so many people had COVID in Dec/Jan and then Mar/April, that if they had milder illness, they never bothered to get a third, no matter how hard I encouraged. And sadly, many have had COVID 2-3x now. Again, if they were lucky enough to have mild to moderate illness, it's a hard sell to get a booster.**

Agreed. We are moving to the same problems with have with people taking influenza seriously.

- **Risk of subarachnoid bleed and vaccines – please comment. Thanks.**

No risk.

CASE AND CONTACT MANAGEMENT | PPE

- **Should a person be isolated who is exposed to COVID-positive patient in household? What is the isolation period for COVID patients now?**

Current guidance for a household or close contact is 10 days of self-monitoring and isolation with the onset of any COVID symptoms. It is also recommended that the household contact should continue to wear a mask as much as possible (see page 22 in the guidance linked below) and avoidance of non-essential visits to highest risk settings (e.g. hospitals, LTC homes, immunocompromised patients) for a total of 10 days.

https://www.health.gov.on.ca/en/pro/programs/publichealth/coronavirus/docs/contact_mngmt/management_cases_contacts.pdf

- **Is it still felt that after 10 days following onset of symptoms, that any positive rapid test could be ignored regarding possibility of transmission, or should one wait for a negative test?**

After 10 days, you can ignore a positive rapid test unless the positive person is severely immunocompromised and still symptomatic.

- **Can you speak about PPE (adding (i.e. yellow gown, face shields to protect skin) generally when seeing asymptomatic patients who at any time may be asymptomatic shedding in office (given COVID circulating, Influenza, Monkeypox circulating, and other diseases popping up like Ebola). Already wearing glasses & N95 mask. Thanks :)**

Face shield might be better than glasses, hand hygiene is important, gowns likely not worth anything.

- **Is wearing proper face masks still required/recommended in doors, in health clinics?**

Yes.

[From CPSO COVID-19 FAQs for Physicians: *Although mask mandates have been lifted, the Chief Medical Officer of Health continues to recommend that all physicians, staff, and visitors continue to wear masks in all health care settings. Physicians or health care facilities can continue to implement masking policies that ask all staff, patients, and other visitors to wear a mask when in the office.* https://www.cpso.on.ca/Physicians/Your-Practice/Physician-Advisory-Services/COVID-19-FAQs-for-Physicians*]*

- **Do you know if there will be a renewed recommendation for indoor masking in schools in addition to promoting vaccination? It would seem that this would be a prudent measure to minimize spread of both COVID and the other respiratory viruses we are seeing.**

The CMOH has always said he may re-institute masking. It would likely depend on hospital capacity concerns.

- **What are your recommendations for care when patients refuse to wear a mask?**

These situations are quite difficult. It's recommended that we continue to strongly encourage masking and use measures such as scheduling the patient at the end of the day, rooming the patient as quickly as possible, or consider a virtual visit if appropriate. Further information may be found here: https://www.ontariofamilyphysicians.ca/news-features/family-medicine-news/~253-Masking-Policies-Treatments-and-More-Updates

[More information in CPSO COVID-19 FAQs for Physicians – *What if a patient refuses to wear a mask?* https://www.cpso.on.ca/Physicians/Your-Practice/Physician-Advisory-Services/COVID-19-FAQs-for-Physicians]

EVUSHELD | PAXLOVID

- **Is there any guidance re: COVID vaccines and Evusheld spacing?**

If you have recently gotten a COVID -19 vaccine, the wait is 2 weeks before getting Evusheld. [Evusheld information for healthcare providers: https://www.ontariohealth.ca/sites/ontariohealth/files/2022-05/Information%20for%20health%20care%20providers%20-%20Evusheld.pdf]

- **What is the minimum age for Evusheld?**

The minimum age is 12 years, minimum weight 40 kg. [Evusheld information for healthcare providers: https://www.ontariohealth.ca/sites/ontariohealth/files/2022-05/Information%20for%20health%20care%20providers%20-%20Evusheld.pdf]

- **If a high-risk patient is travelling in November to Qatar and asking to take a prescription of Paxlovid with him in case he develops symptoms, can it be prescribed for him?**

No, they can't. Paxlovid is prescribed only if you are infected with COVID

- **Can we prescribe Paxlovid even if a patient does not meet the Government of Ontario criteria? (e.g. Because they've had 3-4 doses of vaccine)**

The guidance around Paxlovid is a recommendation based on the available evidence but the ultimate decision rests with the clinician. Any physician or NP can prescribe Paxlovid if they deem it appropriate for their patient.

[Paxlovid can be considered for high-risk individuals who have received 3 or more vaccine doses. We understand the guidance on Paxlovid is being reviewed and updated. See session recording, at 50:40 mark: https://www.youtube.com/watch?v=OT5CcwzW7y0]

INFLUENZA

- **Each year, we have delays in getting High Dose flu shots in our offices through our health unit – should we be telling over 65 to get first available flu vaccine and not wait for high dose?**

Because there is adjuvanted vaccine this year, we can hope that it will come sooner and either high dose or adjuvanted better than standard dose. There is still very little flu activity, so ok to wait for now.

- **Is there any guidance regarding antivirals for persons co-infected with influenza and COVID -19?**

Would not be different than recommendations for individual infections.

MONKEYPOX

- **Thx Dr. Dan. Can Dr. McGeer comment: Given Monkeypox can cause encephalitis or death [in rare instances], should it still be category B, when it was originally category A agent? Even though it has not been studied/documented yet (like COVID in 2020) for aerosol transmission, is it a possible?**

Yes, encephalitis is sufficiently rare that category B is fine. So far, no evidence of aerosol transmission AT ALL with monkeypox.

- **When do you think healthcare workers will be vaccinated against monkeypox given it is direct contact and potential for aerosol transmission? (I read "Those who didn't receive a single dose of the vaccine were 14 times more likely to be infected than those who had. Given Monkeypox can cause rarely encephalitis or death, should it still be category B, when it was originally category A agent? I am concerned because is it putting family doctors at risk? Thanks again. :)**

The monkeypox outbreak in Canada has been well contained and cases are now very rare, even in the high risk gbMSM population. There has been no documentation of aerosol transmission with monkeypox in the current outbreak, transmission is overwhelmingly direct physical contact with lesions (mitigated completely by PPE) or contact with fomites. Fomite transmission is very rare and has only been documented in individuals who are handling intimate objects (e.g. bedding, clothing etc.) of ill individuals. Accordingly, NACI is not recommending that health care providers receive monkeypox vaccination, but emphasizes the need for appropriate PPE use with patients who are being evaluated for monkeypox.

OTHER

- **In the U.S., they are saying COVID is 3 times worse than flu; in Canada you are saying 2 times worse? Why? Is it because we have better immunity due to better immunization?**

Yes, exactly. Our vaccination rates in Canada are higher and that makes COVID less severe.

- **Why is the government vaccinating with Moderna in people older than 65 and not with Pfizer?**

Because Moderna is actually a better vaccine than Pfizer in older adults. Higher antibodies and better protection (not dramatically better, but better).

- **Please comment on Novavax COVID vaccine availability and Omicron coverage.**

Novavax is still available in Ontario for both the primary series and the booster, although mRNA products remain recommended as they have higher effectiveness. There is very limited data on Novavax specifically against Omicron but it appears to offer reasonable protection, although again slightly less than the mRNA products.

- **Any more evidence on the benefit of vaccination in preventing long COVID?**

There is a 50% reduction in risk with vaccination (primary series).

- **Is long COVID more or less likely to develop after a second COVID infection?**

Increasing age, being female, poor pre-pandemic general and mental health, asthma, and obesity were associated with a higher risk of developing long COVID.

The study with multiple COVID infections was only done in veterans. Non peer reviewed - "published" in June 2022. 90% men. https://assets.researchsquare.com/files/rs-1749502/v1/499445df-ebaf-4ab3-b30f-3028dff81fca.pdf?c=1655499468

- **What's going on with COVID cases right now? It feels like there is quite a bit of respiratory infection around – is it all COVID or is it other pathogens?**

It is a mix. Some COVID, but also the usual fall entero/rhinoviruses, and some RSV.

- **Thailand is first country to approve manufacturing of the COVID nasal spray – please provide comments on this?**

It will be very interesting to see, but remember that nasal spray vaccines for influenza actually don't work as well as standard inactivated vaccines for adults. We just have to wait and see.

- **If, as physicians, we are supposed to avoid giving antibiotics unless they are actually indicated due to the risk of antibiotic resistance, then why are we recommending leaky COVID vaccines to so many age groups (leaky because people still get and spread COVID despite vaccination)? We risk promotion of emergence of new resistant variants. Why not follow the lead of Sweden, Denmark, UK, etc. and restrict who is eligible? Thank you.**

Vaccines and antivirals are different than antibiotics. The danger of antibiotics in selecting for antibiotic resistance is almost all the effect of the antibiotics not on the pathogen you are treating, but on all of your other bacterial flora. Vaccines do not select for resistance.

- **Off topic - should Prevnar 20 be recommended to those at risk including over 65?**

NACI has not yet come out with recommendations on the best use of the PCV-15 or PCV-20 vaccines, these are expected in the near future and the publicly funded program will be updated with these products made available once that happens. But likely given the broader coverage the PCV-20 will be recommended

- **If the risk of COVID illness severity and complications is low in those under the age of 50, and vaccines also come with the risk of serious side effects like myocarditis, what are the absolute risk reductions in these age groups? Do we have NNT and NNH for various age groups to properly inform patients of their risk benefit? Also what is the risk benefit in older populations with heart disease? Do we have specific data?**

The recommendations from NACI take all of these into consideration. Fall booster is definitively significantly greater benefit than risk for anyone over 12 years of age

Myocarditis risk is not associated in anyway with underlying heart disease, and COVID is more severe in people with heart disease. Risk benefit strongly favours vaccine in people with heart disease.

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These additional questions were answered live during the session. To view responses, please refer to the session recording.

- How can we talk about Inuit need in this area?
- COVID death rate is 2x the influenza death rate, but what is the COVID hospitalization and death rate among people who are fully vaccinated (3 doses) compared to influenza?

- Although six months from last booster is being pushed to get longer term protection, does it make sense for anyone who has not yet been exposed to COVID to go asap at 84 day mark for the bivalent booster and risk less longer term immunity knowing cases are rising. (Person reasons….I have an appt at 9:30 am for my fifth shot having not yet had COVID ….)
- ok, so let's revisit the vaccine issue. My understanding is that vaccines stop serious illness and death but NOT getting the illness. Is this correct?
- Will there be any update on Paxlovid guidance? We have patients who are vaxxed x 5 that are older adults who ask about Paxlovid eligibility.
- How do we counsel patients who have to decide between bivalent Moderna booster now, yet Pfizer is coming in November? If they get bivalent moderna, what is the timeline of getting Pfizer down the road? Thanks
- We were recommending avoiding Moderna under 30 yo because of myocarditis risk but now the bivalent is recommended 18+. How safe is the bivalent in those under 30? Is there not still a higher myocarditis risk and is the bivalent benefit enough to overcome the risk?
- Are nasal flu shots going to become available?