



Changing the Way We Work

November 19, 2021: COVID-19 vaccination in children aged 5 to 11 years: Part 2

Panelists: Dr. Kate Miller, Dr. Joan Chan, Dr. Allison McGeer Co-hosts: Dr. Liz Muggah, Dr. David Kaplan | Moderator: Dr. Tara Kiran

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

[Post-session updates are noted.]

CHILDREN AND VACCINATION

• For a child who has had COVID infection, is there a minimum time that we should wait before vaccinating? Can they be vaccinated as soon as symptoms resolve?

That is correct, the same principles apply – as long as symptoms have resolved.

• There is growing evidence and a recommendation of spacing 1st and 2nd doses to at least 8 weeks? So, is this the same for kids? is the same for immunocompromised kids, or are they shortened interval?

The [recommended] interval is 8 weeks for children, including those who are immunocompromised.

How worried should we be about the kids 12+ that already got their doses 21 days apart?
 Do you think they will need boosters sooner similar to adults or do we think they have a good enough immune response to vaccines that it won't matter?

Don't know yet, but certainly their protection will last longer, and they may be ok.

What dose interval are they using in the U.S. for 5–11-year-olds?

21 days.

Have there been any large studies done in kids that are peer reviewed/published?

This is the NEJM published study with the full trial results, https://www.nejm.org/doi/full/10.1056/NEJMoa2116298, and more here on the science put out by the ACIP in the U.S. https://www.cdc.gov/mmwr/volumes/70/wr/mm7045e1.htm

• I'm getting questions from some parents/adults asking for data from studies. They do not seem to be satisfied with references to the government or public health. Any suggestions as to where I can direct them to?

You could provide them with the NEJM publication of trial results trial: https://www.nejm.org/doi/full/10.1056/NEJMoa2116298 [ADDITION: In-depth scientific data also in CDC/ACIP summary: https://www.cdc.gov/mmwr/volumes/70/wr/mm7045e1.htm]

Do we have to space out the flu shot and COVID vaccines?

NACI has said that for those >12 we can co-administer COVID vaccines with other vaccines. While we don't yet have the NACI statement on 5-11 we are hearing that they may suggest a 2-week spacing between vaccines (to better understand any AEFI) but that it won't be a reason to decline giving a child a vaccine if they have recently received another vaccine. [UPDATE: NACI recommendation (Nov. 19) is for children younger than 12 years to receive the COVID vaccine 14 days before or after another vaccine, as a precaution to help determine if a side effect that may arise is from the COVID-19 vaccine or another vaccine, notes: "There may be circumstances when a dose of a COVID-19 vaccine need to be given at the same time." MOH guidance notes potential circumstances for a shorter interval before or after COVID-19 vaccine and another vaccine:

- o when there is a risk of the individual being unable to complete an immunization series due to limited access to health services or being unlikely to return at a later date;
- o when an individual may not return to receive a seasonal influenza vaccine;
- o when another vaccine is required for post-exposure prophylaxis;
- when individuals require accelerated vaccination schedules prior to immunosuppressive therapy or transplant; and
- o at the clinical discretion of the healthcare provider]

Any data about kids with special needs and COVID vaccinations?

I don't believe there is data, but one would expect that because their morbidity is higher, their benefit will be higher. There are also, of course, increased challenges for access and addressing procedural fear.

• If an 11-year-old receives the 5-11-year-old first dose, what dose should they receive when they are 12 years old at the time of the second dose?

We are waiting for NACI recommendations. However, from a science perspective, either is fine.

[UPDATE: NACI recommendations (Nov. 19) is that a child who receives the pediatric dose then turns 12 by the time of their second dose may receive the adolescent/adult dose to complete the series. If the child who has turned 12 by the time of their second dose receives the pediatric dose (10 mcg), it's still considered a complete series.]

• I am hearing parents telling me "It affects my child's fertility", and I believe there can be menstrual irregularities in my 10–11-year-old daughter. any suggestions how to respond to this?

Here is a great potential response – and it comes directly from the DFCM Modules on COVID-19 vaccination which is a free module for family docs/primary care providers that I'd highly recommend (https://www.dfcm.utoronto.ca/covid19-vaccination-modules): "There have been reports of short-term menstrual cycle changes after the COVID-19 vaccine, but vaccines do not impact fertility, genes, or hormone levels. The mRNA in the Covid-19 vaccine is broken down by the body in 2 to 3 days and the spike protein may stay in the body for up to 2 to 3 weeks—but after that, the vaccine components are not in the body anymore."

[See also: COVID-19 Vaccines Myths and Facts from the Society of Obstetricians and Gynaecologists of Canada: https://sogc.org/common/Uploaded%20files/Covid%20Information/FAQ_Myth-Fact_17Sept2021.pdf]

 What is suggested around pre-COVID vaccine analgesic use in kids? Avoid acetaminophen and ibuprofen pre-vaccine? But ok to administer post if sore arm etc.?

I'm seen mixed answers re: avoiding vs ok to give post analgesic; what I've seen more frequently recommended is topical anesthetic like EMLA patches. [ADDED REFERENCE: "Prophylactic oral analgesics or antipyretics, such as acetaminophen or ibuprofen, should not be routinely used before or at the time of vaccination, but may be considered for the management of pain or fever after vaccination. Families may also be introduced to the CARD system for help in coping with fear and anxiety around injections." -- Canadian Pediatric Society.]

 What do we do in the case of a child whose parents are divorced and share custody and disagree re vaccination?

These are tough situations. Here is the guidance from CMPA on this topic:

[UPDATED CMPA REFERENCE] When there is a dispute between the parents, the physician should make reasonable attempts to obtain a consensus in the child's best interests. If consensus cannot be achieved, the vaccine should not be administered. Physicians may contact the CMPA for further advice in these situations. Depending on the circumstances, it may be necessary to contact the public guardian, child services, or to apply to the court (or an administrative body) for direction. https://www.cmpa-acpm.ca/en/covid19/vaccination

 Can a 7-year-old refuse a vaccine due to needle anxiety if their parent is consenting for them? At what age does the 7-year-old decision override the parents?

There is no age of consent in Ontario. We know that 5-11 don't have the same capacity to consent and will in most cases require parental consent. Assent should be sought and indication for strong dissent should be taken seriously. Hopefully with some of the tactics put in place to support those with vaccine anxiety (quieter spaces, numbing cream) and the preparation we can do with parents and their kids to be ready for the vaccine.

 Are there any data yet (from US) on rate of myocarditis/pericarditis after booster doses of mRNA vaccines?

We are waiting for the data from the U.S.

• I have a 16-year-old who has Crohn's and is on immunosuppressant medication. It has been over 2 months since his Pfizer vaccine, and he was turned away for his 3rd dose/booster. Is this 3rd dose/booster recommendation only for adults?

My understanding is that they would qualify – it needs to be 56 days after second dose so that could be the issue. I recommend getting in touch with your public health unit.

THIRD DOSES | BOOSTERS

• Are patients that are at higher risk (i.e., immunocompromised) receiving higher doses of Moderna booster, meaning the full dose?

Yes [Eligible immunocompromised should receive the full dose of Moderna. Here is a summary from the OCFP: https://www.ontariofamilyphysicians.ca/tools-resources/covid-19-resources/covid-19-vaccine-third-dose.pdf]

 Of those that are doubly vaccinated, who are getting these breakthrough COVID infections (broken down by agents they were vaccinated with)? i.e., Double AZ vaccinated, double Pfizer, double Moderna? Mixes?

Summary of COVID-19 vaccine effectiveness against Delta variant in Ontario, Canada – https://cdn.who.int/media/docs/default-source/blue-print/covid-19-vaccine-effectiveness-against-delta sharifa-nasreen.pdf?sfvrsn=3a1dccf7 9

• How frequently do you anticipate adults will need booster doses going forward? Do you think it will be every six months or will that spread out?

No way to know – yet. It may be that you just need three doses for primary immunization (think tetanus), and you are protected for life. Or it may be annual. Antibody levels after third dose are higher than after second, but how long they or protection will last is not yet known.

When will Moderna be available for booster?

Moderna is available for boosters in my PHU already and I think it's available overall. It's the same bottle/vial as before, you just give a half dose. ["Either Moderna or Pfizer vaccines may be used as a third or booster dose (regardless of which COVID-19 vaccine was used in the primary series)" — COVID-19 Vaccine Third Dose Recommendations, MOH, Nov. 12, 2021]

Do we know when booster doses will be expanded to other groups. Specifically, I am
concerned about increased in-person classes beginning for university students as of
January 10. As the mom of one of these kids, (my daughter is more than 6 months from
second dose) I'd love for her to get a booster asap. I can see a huge spike coming from
this age group and increased interactions happening.

What we know is that MOH has said that booster doses will gradually roll out all those >12yrs in January 2022, with a 6-month (>168 days) interval from second dose.

Any benefit of getting a third Moderna booster after two Pfizer shots?

Either Moderna or Pfizer are good for third dose.

Why are the booster not modified for the delta variant?

[EDITED] Because the boosters [when tested] against variants did not produce higher levels of antibodies. Current vaccines were just as [effective for antibody production].

• Is a third dose going to become a mandatory recommendation vs a booster that's available?

Right now, the government considers two doses as fully vaccinated.

What dose Moderna for age 70+ living in community?

Moderna: Full dose (100 mcg) is recommended for residents in congregate living settings, adults 70 years of age and older, and all eligible immunocompromised individuals. Half dose (50 mcg) is recommended for all other individuals less than 70 years of age.

 How long should someone who is fully vaccinated and got infected with COVID wait before getting 3rd/booster dose?

Same interval as for others, 168 days (6 months), and following the eligibility criteria from the province.

• If you get a third booster, are you still eligible for the delta/beta booster in September? I cannot find an answer. And the delta/beta booster is being trialed on people with two doses, not three. So, will its approval only be for people that have had only two shots?

Although a variety of different vaccines covering variants are in studies, there is no evidence so far that these vaccines are better than what we have. I think we can be confident that if people need a delta booster in Canada, they will get one.

• If an immunosuppressed person just got their third dose, are they now merely caught up to non-immunosuppressed people and are thus due for a "booster" in six months?

Good question. We don't yet have guidance on this.

• What is the evidence for homologous vs heterologous vaccine for the mRNA booster doses? Should we mix or continue with same one for optimum immunogenicity?

It doesn't matter. If you are older or immunocompromised, you get higher antibody levels with Moderna, but differences are not as great for younger healthier people, and myocarditis risk is lower for Pfizer.

• I also want to know the breakdown of those breakthrough. Are they individuals more than 6 months since a specific vaccine, those with underlying health problems? The percentage of fully vaccinated in hospital/in ICU seems to be climbing at an alarming rate.

Breakthrough leading to hospitalization is more common in immunosuppressed, frail over 80 years, people with multiple comorbidities, and those longer post initial vaccination. Milder breakthrough occurs in a broader group of people.

Why are some seniors being sent appointments 5 months after 2nd doses?

I believe for seniors the guidance is for 6 months as the "recommended" interval, not required so ok if it's a bit sooner based on availability of vaccine in a community (some vaccines are expiring end of month and don't want to waste).

• Was Israel using 1/2 dose Moderna for 3rd dose as we are here?

Israel uses Pfizer.

TESTING

 Has anyone else had an issue getting rapid test kits through the Ministry program? I applied for the kits weeks ago and have received none! If you are having trouble, reach out to your regional testing lead. List of contacts available here: https://www.ontariofamilyphysicians.ca/tools-resources/covid-19-resources/clinical-care-office-readiness/oh-regional-testing-leads oct-2021.pdf

Can you please comment on swabbing buccal testing vs nasopharyngeal?

Combined Oral (Buccal) and Deep Nasal Swab is acceptable for non-hospitalized patients with respiratory symptoms or asymptomatic persons. PHO guidance here: https://www.publichealthontario.ca/en/laboratory-services/kit-test-ordering-instructions/oral-buccal-deep-nasal

OTHER

How we address vaccine hesitancy in healthcare providers?

[See following question and this resource with tips] https://theconversation.com/health-workers-are-among-the-covid-vaccine-hesitant-heres-how-we-can-support-them-safely-168838]

 Is there an exceptionally good educational video that you can recommend for health care staff that refuse to get vaccinated

I don't personally have one go to and my thought is that there isn't one best video, and it looks like conversations (often many!) with trusted source makes the difference. You may want to check out this great set of modules from DFCM which has video clips from our past sessions on a range of topics around vaccines questions. https://www.dfcm.utoronto.ca/covid19-vaccination-modules

Additional resource: https://theconversation.com/health-workers-are-among-the-covid-vaccine-hesitant-heres-how-we-can-support-them-safely-168838]

Please tell us about Pfizer's Covid pill

It is a viral protease inhibitor given with ritonavir. May have some drug interactions, and the only data we have so far are from the company press release, so hard to judge. Don't know what supply issues might be either. Early delivery of treatment will be critical (<3 days better than <5), which will be a challenge. But it does look promising.

• I have some patients who very much want Johnson and Johnson - I know it's in Canada but Will it come to Ontario?

It has come to Ontario - only for patients with mRNA allergy (in Ontario).

What is the evidence for long COVID in people who have been fully vaccinated?

Varied. Remember that long COVID risk decreases automatically because COVID decreases a lot if you get vaccinated. But if you get a breakthrough infection, there are some studies that say no difference in risk of longer-term symptoms, and others that say that the risk declines by as much as 50%. Long COVID is a heterogeneous group of disorders to hard to interpret data.

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

- After the 3rd dose, what is the level protection?
- As of yesterday, the U.S. had vaccinated 2.5 million children in 5-11 age group. What rate of myocarditis is seen so far?
- Is there a third dose indication for children and youth who are immunosuppressed (thinking of a 14-year-old boy, IBD, new to biologic agent started after doses 1,2)?
- What is the evidence for the 3rd dose of vaccine preventing COVID 19 disease as opposed to just boosting antibodies?
- Are we seeing whether the vaccine side effects are worse after the booster dose?
- How do you approach consent to receive vaccine in kids i.e., what if a child would like to receive, but a parent declines or child says parent approves, but is unable to be present due to work obligations?
- Is there data on long COVID in children?
- We have seen some teen girls' menstrual cycle is affected by the vaccine. How do we address that? I have one girl who has become amenorrhea since her vaccine and another one had heavy and prolonged periods following her 1st and 2nd dose.