COVID and Child Health Committee: Montana AAP

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Outline

1. State of the pandemic
2. Public health measures
3. Effects of coronavirus on kids
4. COVID and school transmission
5. Distance learning effects on child health
6. School sports guidance from MT AAP
7. Vaccine: Frequently asked questions
Good news and bad news

• We are in the highest surge we have yet seen, and Montana ICU capacity is at or near its limit in many places
• We have a lot more information on how the virus is transmitted, as compared to the spring
• We have at least two highly effective vaccines that will be distributed soon
COVID-19 cases and deaths, Montana vs US. Put in some graphs closer to the date, to be more up to date.

Prevention & risks

**What we know works:** Universally wearing masks with those outside of your household, maintaining 3-6 feet of distance, frequent hand washing, improving ventilation / using outdoor spaces

**What we know about kids:** Unlike influenza A, in which transmission in schools very much drives community spread [i.e. what happens to our grandparents], COVID transmission seems to be occurring mostly outside of schools, and younger students transmit the virus less often. Teens seem to transmit the virus at similar rates to adults.

**Where transmission is occurring:** Household contacts; gatherings, including private in-home events; bars and restaurants; workplaces
Social distancing measures

Case study: France
Strict national lockdown in late October, with travel restrictions
Essential businesses and schools remained open throughout

TOTAL REPORTED  | ON DEC. 3 | 14-DAY CHANGE
---|---|---
Cases  | 2.2 million+ | 12,696 | -61%
Deaths | 54,140 | 324 | -24%

14-day change trends use 7-day averages.

Mask mandates: Kansas data

Counties adopting the governor’s mask mandate had reductions in COVID cases, while counties opting out experienced continued rise.

Source: CDC, https://www.cdc.gov/mmwr/volumes/69/wr/mm6947e2.htm, accessed 12/12/2020
COVID in children

Most often asymptomatic or mild symptoms

Occurs at a lower rate within elementary and middle school aged children than within the community as a whole

- Children comprise 22% of the population but only 7% of all COVID cases

Specific concerns:

- MIS-C: Multisystem inflammatory response to coronavirus
- Myocarditis: Heart inflammation after the initial illness
COVID in schools: Considerations

Schools are comprised of students and staff
- Adult personnel are at increased risk of acquiring and transmitting COVID

Must consider expectations:
- COVID in the school setting will largely mirror COVID in the community
- Unreasonable to expect that schools will avoid COVID cases
- Reasonable to expect that once COVID is introduced into a school that transmission within the school will be minimal

School environments represent unique opportunities to control a number of variables, allowing for optimization of safety practices
COVID in schools: Considerations

Data regarding schools is imperfect because there is not a consistent approach nationwide

COVID-19 School Response Dashboard – A comprehensive approach to gathering data on schools and mitigation measures

- Data source: Schools opting in to share data, and also using states’ reporting when comprehensive data is available
- Goals: Overview of risks, variation with community rates, role of mitigation and opening plans.
## Data on schools

### Most Recent Data: November 9th to November 22nd

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Enrolled Students</td>
<td>8,768,972</td>
</tr>
<tr>
<td>In Person Students</td>
<td>4,567,205</td>
</tr>
<tr>
<td>Staff in Building</td>
<td>1,307,191</td>
</tr>
<tr>
<td>Student Case Rate (Daily Per 100,000)</td>
<td>19</td>
</tr>
<tr>
<td>Staff Case Rate (Daily Per 100,000)</td>
<td>44</td>
</tr>
<tr>
<td>Community Case Rate (Matched Areas)</td>
<td>32</td>
</tr>
<tr>
<td>Student Infection Rate (Avg. for 2 Week Period)</td>
<td>0.26%</td>
</tr>
<tr>
<td>Staff Infection Rate (Avg for 2 Week Periods)</td>
<td>0.61%</td>
</tr>
<tr>
<td>Community Test Positivity Rate (Avg by Period)</td>
<td>8.75%</td>
</tr>
</tbody>
</table>

Data on Schools

Data on Schools

In Person Density
(Note: Student Data Not Reported for Remote Learning)

Effects of remote learning in kids

- Absence from consistent in person education affects equity, education, child health and development
  - Disrupts access to school meals, mental health support, psychosocial support
  - Increases anxiety due to loss of peer interactions and disruption of consistency and routine
  - Remote learning worsens disparity in education

- School closures related to COVID have led to 1 out of 3 elementary students losing skills in reading and writing

- Being out of school increases the risk of food insecurity, teenage pregnancy, violence, child abuse and school drop outs
School sports guidance from MT AAP

- Thoughtful consideration needs to be given to student participation in school sponsored athletic events, particularly those that are played indoors
- Increased risk of COVID-19 transmission with contact sports and indoor venues
- If sports are played, strongly consider eliminating competition with other teams, particularly with teams from a different geographic area
- Some recommend postponing winter sports season until community rates are lower
- If sports are played, strongly encourage following the latest recommendations from the National AAP regarding mask use
  - Consistent mask use for all athletes at all times except when this poses a safety risk (swimming, wrestling, gymnastics, competitive cheerleading)
SARS-CoV-2 Vaccines

- Expected full FDA approval of Pfizer and Moderna mRNA-based vaccines, with Pfizer currently authorized for emergency use; other vaccines in development

- Pfizer vaccine arriving in Montana now, initially to 10 largest hospitals

- Prioritizing distribution: Health care workers, long term care residents, teachers and other essential workers, at-risk individuals

- Approved for age 16 and up; children age 12 and up just now added to study groups
Vaccine FAQ

Was this vaccine rushed?
- Funding was secured and bureaucratic hurdles were removed. Mass production was started before results available, in case they were positive. However, safety steps were the same as any vaccine. Pfizer and Moderna trials encompass 76,000+ people, with first doses given in May.

Does this vaccine alter my genes / DNA?
- No, this vaccine uses an mRNA to cause a single protein from the coronavirus to be transcribed using cell machinery. It goes nowhere near the DNA in the nucleus of a cell.

Can this vaccine give me COVID?
- No, this vaccine uses an mRNA and that creates only one small piece of the COVID virus.

Does this vaccine cause infertility?
- No, this is an internet-based rumor with no scientific validity.
Vaccine FAQ

Does this vaccine have severe side effects?
- In the trial, there were no severe side effects noted in the Pfizer data. Arm pain was common at the injection site, and in about half there were mild symptoms like headache, muscle aches, fatigue or fever that lasts a day or two. This represents the immune system responding and building defense against the virus protein.

When can I get the vaccine?
- The exact timeline is unclear at this point. It is not estimated that the vaccine will be widely available for low risk groups until September 2021.

Can I stop wearing a mask when I get the vaccine?
- Not until the virus levels in the state are low enough that masking isn’t recommended. We know the virus prevents severe COVID, but we don’t know yet whether you can still transmit it to others if you are exposed and have no / mild symptoms.
Vaccine FAQ

Can I get this if I am pregnant or nursing?
- Talk to your doctor. No pregnant or nursing women were included in trials. But based on how the vaccine works, there is no reason to think it’s not safe -- and pregnant women are at risk of severe COVID.

Can I get the vaccine if I have severe allergies?
- Again, talk to your doctor. Per guidance, you should NOT get the vaccine only if you have an allergy to a vaccine component.

Are there preservatives / mercury / thimerosal in the vaccine?
- Nope!
Questions?