Pre-test

1. True or False: People under the age of 18 account for 22.4% of new COVID cases
2. True or False: Children cannot suffer from long-term effects of COVID-19 disease, such as “Long COVID” aka “Post-acute sequelae of SARS-CoV-2 infection.
3. True or False: Vaccinators in the US are administering an average of 2.02 million doses of COVID-19 vaccine, every day
4. True or False: The number one predictor of vaccine acceptance is a STRONG recommendation from a provider

About Dr. Bakke

- General Pediatrician in Fargo
- Mother of four
- Personal/professional experience with COVID
On March 14th of 2020, school children in ND went home, not knowing that it would be the last time many of them saw their friends and teachers, until that fall.

The COVID pandemic has taken a huge toll on kids.

Safe and effective vaccines are now available, which will allow young people to safely return to normal life.

Learning Objectives
1. Understand how COVID and the COVID pandemic is affecting young people
2. Learn about the vaccines to prevent SARS-CoV-2 infection and COVID-19 sequelae
3. Find out how to talk to parents and adolescent patients about COVID vaccines

Child COVID Cases on the Rise
- 3% of total cases to 22.4% of total cases, in one year
- Average of 13.8% of kids have had COVID
- 0.1% of cases result in death
- 1.2%-3.1% of hospitalizations
- 0.1-1.9% of all child COVID results in hospitalization
North Dakota Children and COVID

- As of April, 10,500 cases in ND under 19-years-old
- Youngest ND death was 17-year-old in October
- 8 MIS-C cases, more hospitalizations
- 12.95% of ND youth 12-17-years-old have tested positive
  - HIT estimated ~70-80%
  - Hospitalization 2.8 per 1000 cases
- 78% of cases 12-17yo were symptomatic
- 41% of cases were community spread, 36% household spread
  - Keep kids safe in school and activities. Keep kids safe in your household.
Adolescents Spread COVID at Rates Similar to Adults

- Implications for safe return to school practices
  - Mask usage
  - Social distancing
  - Contact tracing
  - Vaccination once available (the time is now!)
- Super-spreader events linked to school functions

“We Are Turning COVID-19 Into a Young Person’s Disease”
- The Atlantic

WHAT DOES COVID LOOK LIKE, IN KIDS?
Acute COVID Symptoms, in Children

Watch for:

- Fever or chills (most common)
- Cough (most common)
- Nasal congestion or runny nose
- New loss of taste or smell
- Sore throat
- Shortness of breath or difficulty breathing
- Diarrhea
- Nausea or vomiting
- Stomachache
- Headache
- Muscle or body aches
- Poor appetite or poor feeding, especially in babies under 1 year old
- Fever (temperature 100.4 °F or higher)
- Sore throat
- Worry about:
- Respiratory distress
- Mental status changes
- Dehydration
- Won’t eat or drink

“Long-COVID” in Children

- Lasts 8.2 months, on average
- 25% suffer constant symptoms
- 49% experience recovery/relapse
- Symptoms similar to adult long COVID:
  - Tiredness and weakness (87%)
  - Fatigue (80%)
  - Headache (79%)
  - Abdominal pain (76%)
  - Muscle and joint pain (61%)
  - Rash (52%)
  - Impaired memory (44%)
  - Lack of concentration (61%)
  - Difficulty in everyday tasks (40%)
  - Difficulty processing info (33%)
  - Short-term memory issues (33%)

Multisystem Inflammatory Syndrome in Children (MIS-C)

- 70% previously healthy
- 8 cases in ND
- 81 cases in MN
- 36 deaths in US
Other Possible Complications
- Pneumonia/respiratory failure
- Myocarditis

Other Consequences of the Pandemic
- School failure
- Increased obesity
- Mental health
- Protection from safe adults
- Missing milestones
- Social isolation

WHAT ABOUT COVID VACCINES, FOR YOUNG PEOPLE?
COVID Vaccines in the US

The biggest vaccination campaign in history is underway. More than 1.31 billion doses have been administered across 175 countries, according to data collected by Bloomberg. The latest rate was roughly 20.7 million doses a day.

In the U.S., 262 million doses have been given so far. In the last week, an average of 2.12 million doses per day were administered.

COVID Vaccine Safety in the US

- Vaccine Adverse Event Reporting System (VAERS)
  - Anyone can report, collects data signals to compare/monitor trends
- V-Safe
  - After vaccination health checker, developed for COVID vaccination
- Post-Licensure Rapid Immunization Safety Monitoring System (PRISM)
  -Uses data from the national health insurance plans, developed after H1N1
- Clinical Immunization Safety Assessment (CISA) Project
  - Clinical case reviews
- Vaccine Safety Data Link
  - Network of large health systems with comprehensive patient information

Patients report, monitored for signals/trends

Medical experts look at clinical data to determine if there is cause/effect
COVID VACCINES ARE LIKE A SNAPCHAT!

They send the message to your body to produce spike protein... then disappear!
Making a new vaccine is like building a house:
If you do it one step at a time, it would take several months.
If you have everyone come at once, it can get done in a week.
The process was no less safe than it is for any other vaccine.

BNT162b2 (Pfizer) Vaccine and 12-15yo Study

- 2260 participants
- 1129 placebo
- 1131 vaccinated
- 18 cases
- 0 cases

- Geometric mean titre=1239.5 one month post vaccine
  "non-inferior" to GMT in 16-25yo GMT=705.1

- Vaccine well-tolerated in age group
  Side-effects similar to 16-25yo

- Participants will be monitored for 2 years after second dose
  Similar to 16+ trials
Any known risks, for mRNA vaccines?
- Anaphylaxis (rare)
- If there were more rare, possible side-effects, we are likely to have signals of that in VAERS data (as with viral vector vaccines)
- Most adverse events occur within 6 weeks of administration, trial participants are 6+ months out
- Common concerns:
  - Too new
  - What are long term effects
  - Will this cause infertility?

My child is low-risk...why should he/she get this vaccine?
- Low risk is not no risk (1 in 1000 children who catch COVID die)
- Less likely to get and spread COVID
- Prevent asymptomatic spread
- Choosing not to vaccinate is choosing to get COVID
- Most North Dakotans have some high-risk health condition
- Vaccinated population protects the most vulnerable, ex: Rubella, Pneumonia
- Exemption from quarantine
- May be required for future activities or attendance
- This is the ONLY WAY to herd immunity (24% of the population is under 18 years old)

YOU HAVE TWO OPTIONS...
We all know someone who could die if they contract COVID.

- Rubella vaccine protects unborn children
- Pneumococcal vaccine protects young infants and elderly adults

HOW DO I TALK TO PATIENTS AND PARENTS ABOUT COVID VACCINATION?

MAKE A STRONG RECOMMENDATION!
- Recommendation should end in a period, not a question mark
VACCINATE CAREGivers

- Offer COVID vaccine in the pediatric office
  - Similar to Influenza
  - Similar to Pertussis
- Recommendation from Doctor
  - #1 Predictor of vaccination

CHAMPION VACCINATION, IN YOUR CLINIC

Lead
- Lead by example

Prepare
- Prepare your team for conversations

Share
- Share educational materials

Make it VITAL
- Make COVID-19 prevention (vaccination) a vital sign

TALKING TO PATIENTS

1. Have empathy
2. Acknowledge personal situations
3. State facts as objectively as possible
4. Focus on benefits of vaccination
5. Emphasize value of vaccination
6. Use your personal experiences
7. Remain open to discussion
8. Be direct
Young people are relying on us to help end the pandemic!

Post-test

- TRUE: People under the age of 18 account for 22.4% of new COVID cases.
- Children make up about 25% of the population, and are often asymptomatic. Kids get and spread COVID at similar rates to adults.
- FAKE: Children cannot suffer from "Long COVID" aka "Post-acute sequelae of SARS-CoV-2 infection.
- TRUE: Children can and DO suffer from "Long COVID" symptoms for weeks or months after infection.
- TRUE: Vaccinators in the US are administering an average of 2.02 million doses of COVID-19 vaccine every day.
- YOU are doing an outstanding job of getting the vaccine into arms! With over 240 MILLION doses given in the US, we are more and more sure of the safety and effectiveness of these vaccines.
- TRUE: The number one predictor of vaccine acceptance is a STRONG recommendation, from a provider.
- Parents and patients want to hear from YOU, their doctor and nurse! Please lead by example, share your personal commitment to vaccination.

QUESTIONS?

Thank You!
References


News Media/Websites:


North Dakota Immunization Program

North Dakota Immunization Program Staff

<table>
<thead>
<tr>
<th>Role/Title</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Dakota Immunization Program Manager</td>
<td>701.218.4136</td>
<td><a href="mailto:ndimmunization@nd.gov">ndimmunization@nd.gov</a></td>
</tr>
<tr>
<td>VFC/QI Coordinator (West)</td>
<td>701.218.1645</td>
<td><a href="mailto:jmclaren2@nd.gov">jmclaren2@nd.gov</a></td>
</tr>
<tr>
<td>VFC/QI Coordinator (East)</td>
<td>701.218.1646</td>
<td><a href="mailto:phein@nd.gov">phein@nd.gov</a></td>
</tr>
<tr>
<td>NDIIS Coordinator (East)</td>
<td>701.218.1647</td>
<td><a href="mailto:lbanks@nd.gov">lbanks@nd.gov</a></td>
</tr>
<tr>
<td>Vaccine Information Coordinator</td>
<td>701.218.1648</td>
<td><a href="mailto:mmoecker@nd.gov">mmoecker@nd.gov</a></td>
</tr>
<tr>
<td>NDIIS Data Quality Coordinator</td>
<td>701.218.1649</td>
<td><a href="mailto:mmoehl@nd.gov">mmoehl@nd.gov</a></td>
</tr>
<tr>
<td>NDIIS Data Quality Coordinator</td>
<td>701.218.1650</td>
<td><a href="mailto:mmoehl@nd.gov">mmoehl@nd.gov</a></td>
</tr>
<tr>
<td>CDC Public Health Advisor</td>
<td>701.218.1651</td>
<td><a href="mailto:mmoehl@nd.gov">mmoehl@nd.gov</a></td>
</tr>
</tbody>
</table>

Post-Test

Post-test
- Successfully complete the five-question post-test to receive your certificate
- Credit for this session will not expire until June 9, 2021.

This presentation will be posted to our website: www.health.nd.gov/immunize