<table>
<thead>
<tr>
<th>Time (MT)</th>
<th>Presentation</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noon – 12:05 pm</td>
<td>Welcome, Announcements, Introductions</td>
<td>Lachelle Smith, Director, ECHO Idaho</td>
</tr>
<tr>
<td>12:05 – 12:10 pm</td>
<td>Idaho Epidemiology Curves and Public Health Updates</td>
<td>Carolyn Buxton Bridges, MD FACP</td>
</tr>
<tr>
<td>12:10 – 12:40 pm</td>
<td>COVID-19 Epidemiology/Presentation in Kids</td>
<td>Jessica Duvall, MD</td>
</tr>
<tr>
<td></td>
<td>Perinatal Recommendations</td>
<td>Kim King, NP</td>
</tr>
<tr>
<td></td>
<td>Essential Outpatient Visits and Clinic Recommendations</td>
<td>Jessica Maddox, MD</td>
</tr>
<tr>
<td></td>
<td>COVID-19 Related Mental and Social Health Issues in Kids</td>
<td>Sara Swoboda, MD</td>
</tr>
<tr>
<td>12:40 – 12:55 pm</td>
<td>Q&amp;A</td>
<td>Jessica Duvall, MD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Kim King, NP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jessica Maddox, MD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sara Swoboda, MD</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Andrea Christopher, MD MPH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Megan Dunay, MD MPH</td>
</tr>
<tr>
<td>12:55 – 1:00 pm</td>
<td>Closing, Announcements, Call to Action</td>
<td>Megan Dunay, MD MPH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lachelle Smith, Director, ECHO Idaho</td>
</tr>
</tbody>
</table>
COVID-19: Pediatric Considerations

April 28, 2020

Jessica Duvall, MD
Kim King, NP
Jessica Maddox, MD
Sara Swoboda, MD
Carolyn Buxton Bridges, MD FACP
Andrea Christopher, MD MPH
Megan Dunay, MD MPH
Idaho Epidemiology Curves and Public Health Updates

Carolyn Buxton Bridges, MD, FACP
Governor’s Coronavirus Working Group, Former CDC Public Health Physician and Researcher
Case Counts and SARS-CoV-2 PCR Testing in Idaho

- Total lab-confirmed and probable cases: **1,917**
- Deaths: 58 (3.0%)
- At least 172 (9.0%) hospitalized
- At least 73 (4.2%) ICU, ~ 42% of hospitalized in ICU
- At least 239 (12.5%) HCP
- Number of people tested: 20,052

Cumulative number of people tested

<table>
<thead>
<tr>
<th>Date</th>
<th>IBL*</th>
<th>Commercial Laboratories**</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/30</td>
<td>1,567</td>
<td>4,145</td>
</tr>
<tr>
<td>4/6</td>
<td>2,263</td>
<td>8,983</td>
</tr>
<tr>
<td>4/13</td>
<td>2,828</td>
<td>12,284</td>
</tr>
<tr>
<td>4/20</td>
<td>3,211</td>
<td>14,351</td>
</tr>
<tr>
<td>4/23</td>
<td>3,329</td>
<td>15,762</td>
</tr>
<tr>
<td>4/27</td>
<td>3,440</td>
<td>16,612</td>
</tr>
</tbody>
</table>

Emergency Department Visits for COVID-like Illness, Idaho

https://coronavirus.idaho.gov
• Goals: Protect vulnerable, preserve healthcare capacity, safely open businesses

• Staged approach – timelines are estimates

• Epi/capacity criteria required to move to next stage – See website for details
  • Epidemiology data examples
    • Downward trend or <20/day on average over 14 days lab confirmed COVID-19 cases
    • Downward trend or <20/day on average over 14 days ED visits for suspected COVID-19 cases
  • Patient care and healthcare worker
    • No crisis standard of care required
    • At least 50 available (unused) ventilators, 50 ICU beds, and available 10-day supply of N95 masks, surgical masks, face shields, gowns, and gloves
    • Robust testing program for at-risk healthcare workers

- Continue social distancing and reducing number P2P contacts – limit number of persons each person/family has contact with
- Stay home if ill
- Early testing and identification of SARS-CoV-2 infected persons
  - CDC broadened list of symptoms – fever not required for testing
  - Isolate ill persons and household contacts at home
- Early notification of contacts (contact tracing)
  - Quarantine of exposed persons
  - PCR testing and notification of their contacts
- Discussions ongoing regarding overall testing strategy
Mental Health Concerns Among Teens, Youth Risk Behavior Surveillance, 2017
Kann K, et al. MMWR 2018;67 (SS-08)

• Suicide is the second leading cause of death in people 10-34 years old

• Questions asked of high school students across U.S. about the prior 12 months
  • 14.9% electronically bullied (20.3% in Idaho)
  • 31.5% felt sad or hopeless every day for 2 weeks or more (35% Idaho)
  • 17.2% had seriously considered attempting suicide (21% in Idaho)
  • 13.6% had made a suicide plan (18% in Idaho)
  • 7.4% had attempted suicide (9.7% in Idaho)
  • 2.4% had a suicide attempt that resulted in injury, poisoning or overdose (3.2% in Idaho)
Risk Factors for suicide attempt

- Family history of suicide
- Family history of child maltreatment
- Previous suicide attempt(s)
- History of mental disorders, particularly clinical depression
- History of alcohol and substance abuse
- Feelings of hopelessness
- Impulsive or aggressive tendencies
- Cultural and religious beliefs (e.g., belief that suicide is noble resolution of a personal dilemma)
- Local epidemics of suicide
- Isolation, a feeling of being cut off from other people
- Barriers to accessing mental health treatment
- Loss (relational, social, work, or financial)
- Physical illness
- Easy access to lethal methods
- Unwillingness to seek help because of the stigma attached to mental health and substance abuse disorders or to suicidal thoughts

https://www.cdc.gov/violenceprevention/suicide/fastfact.html
Youth Activities Included in Rebound Idaho

Step 1

• Youth activities yet to be fully defined, but will include day camps, sports, scouts, music and other activities

• BUT must continue to
  • Reduce contacts – e.g. don’t carpool, limit spectators
  • Socially distance where possible
  • Stay at home if ill, etc.
  • Reduce risk for adult leaders and families

• Further guidance is pending
COVID-19 Epidemiology/Presentation in Kids

Jessica Duvall, MD, Pediatric Hospitalist, St. Alphonsus
Kim King, NP, Pediatric Outpatient, St. Luke’s
Jessica Maddox, MD, Pediatric Hospitalist, St. Alphonsus
Sara Swoboda, MD, Pediatric Outpatient, St. Luke’s
EPIDEMIOLOGY IN KIDS

April 26: ~1.9% (12,791) CoVID Cases are <18 y/o

MMWR 4/10/20: COVID IN US CHILDREN, 2/2-4/2
-1.7% (2572) of cases were <18 y/o
-~23% of kids had at least 1 underlying condition*:
  -Chronic Lung Disease (incl asthma), CV Disease, Immunosuppression

HOSPITALIZATION
-5.7-20% of kids with CoVID were hospitalized
-0.58%–2.0% admitted to an ICU
-Rates much lower than adults

RISK FACTORS FOR HOSPITALIZATION
-Age <1 year old
  -15-62% were <1 y/o
  -4.1-14% were 1-17 y/o
-Medical Complexity (limited data)

IDAHO
-57 cases are <18 (out of 1897) – as of 4/26/20
-No known deaths

*Of the 345 positive cases that reported this
COVID PRESENTATION IN CHILDREN

-Only 11% of the pediatric cases had data on signs and symptoms

-Fever and cough, are the most common symptoms experienced by kids, but not as commonly as adults

-Kids also commonly experience myalgias, sore throat and headaches

-Likely lots of kids are asymptomatic: 53 (68%) of the 78 cases reported not to have fever, cough, or SOB had no symptoms reported, but could not be classified as asymptomatic due to incomplete info

TABLE. Signs and symptoms among 291 pediatric (age <18 years) and 10,944 adult (age 18–64 years) patients* with laboratory-confirmed COVID-19 — United States, February 12–April 2, 2020

<table>
<thead>
<tr>
<th>Sign/Symptom</th>
<th>No. (%) with sign/symptom</th>
<th>Pediatric</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fever, cough, or shortness of breath‡</td>
<td>213 (73)</td>
<td>10,167 (93)</td>
<td></td>
</tr>
<tr>
<td>Fever§</td>
<td>163 (56)</td>
<td>7,794 (71)</td>
<td></td>
</tr>
<tr>
<td>Cough</td>
<td>158 (54)</td>
<td>8,775 (80)</td>
<td></td>
</tr>
<tr>
<td>Shortness of breath</td>
<td>39 (13)</td>
<td>4,674 (43)</td>
<td></td>
</tr>
<tr>
<td>Myalgia</td>
<td>66 (23)</td>
<td>6,713 (61)</td>
<td></td>
</tr>
<tr>
<td>Runny nose¶</td>
<td>21 (7.2)</td>
<td>757 (6.9)</td>
<td></td>
</tr>
<tr>
<td>Sore throat</td>
<td>71 (24)</td>
<td>3,795 (35)</td>
<td></td>
</tr>
<tr>
<td>Headache</td>
<td>81 (28)</td>
<td>6,335 (58)</td>
<td></td>
</tr>
<tr>
<td>Nausea/Vomiting</td>
<td>31 (11)</td>
<td>1,746 (16)</td>
<td></td>
</tr>
<tr>
<td>Abdominal pain¶</td>
<td>17 (5.8)</td>
<td>1,329 (12)</td>
<td></td>
</tr>
<tr>
<td>Diarrhea</td>
<td>37 (13)</td>
<td>3,353 (31)</td>
<td></td>
</tr>
</tbody>
</table>

*Cases were included in the denominator if they had a known symptom status for fever, cough, shortness of breath, nausea/vomiting, and diarrhea. Total number of patients by age group: <18 years (N = 2,572), 18–64 years (N = 113,985).
‡ Includes all cases with one or more of these symptoms.
§ Patients were included if they had information for either measured or subjective fever variables and were considered to have a fever if “yes” was indicated for either variable.
¶ Runny nose and abdominal pain were less frequently completed than other symptoms; therefore, percentages with these symptoms are likely underestimates.
INFANTS BORN TO COVID-19 MOMS

• **What we Know:**
  – Low rates of peripartum transmission
  – Inconclusive data about in utero transmission
  – Neonates CAN acquire SARS-CoV-2 after birth

• **Deliveries:**
  – Airborne PPE if mom is COVID Positive or PUI

• **Postnatal Care:**
  – Droplet PPE unless doing aerosolizing procedures, then Airborne
  – Separate infants from COVID moms as able
    • If not, keep 6 ft away/use isolette; masks & gown/PPE
  – Bathe as soon as possible after birth

• **Testing:**
  – 24 hrs & 48 hrs

• **Discharge:**
  – Mask/6 ft until afebrile x 72 hrs & 7 days since 1st symptom
  – Close follow-up of infant
BREASTFEEDING & COVID-19 MOMS

• AAP Guidelines
  – Studies to date have not detected virus in breastmilk (Lancet. 2020 Mar 7: 395)
  – Covid-19+ moms encouraged to express breast milk after appropriate breast and hand hygiene
  – Not infected caregivers may feed breastmilk to infants
  – Covid-19+ moms requesting to directly breastfeed should comply with strict preventive precautions including mask and meticulous breast and hand hygiene
PRIMARY CARE FOR PEDIATRIC PATIENTS

• **AAP Guidelines for well child care:**
  - Use telehealth when appropriate.
  - Prioritize in-person visits for newborns, children under 2, vaccines.
  - Do NOT delay vaccines or newborn screening.
  - Do not delay subspeciality referrals.

• **Clinic Risk Mitigation:**
  - Screen all visits before families arrive.
  - Schedule newborn and well care in the mornings, sick in the afternoon.
  - Separate entrance for sick patients.
  - Encourage one caretaker at visit, no siblings.
  - Limit waiting room exposure.

• **Telehealth in pediatrics:**
  - Adolescent confidentiality.

• **High-risk pediatric populations during social distancing:**
  - Children with developmental and behavioral needs.
  - Foster children and children at risk of maltreatment.
  - Children with medical complexities.
MENTAL HEALTH IN KIDS

• Anxiety

• Depression

• Resources and coping strategies

• At risk populations - Child Abuse
Cases/Questions From the Field

Jessica Duvall, MD, Pediatric Hospitalist, St. Alphonsus
Kim King, NP, Pediatric Outpatient, St. Luke’s
Jessica Maddox, MD, Pediatric Hospitalist, St. Alphonsus
Sara Swoboda, MD, Pediatric Outpatient, St. Luke’s

Andrea Christopher, MD MPH, Internist, Boise VA; Associate Program Director for UW Boise Internal Medicine Residency
Megan Dunay, MD MPH, Geriatrician, Boise VA and Medical Director for Geriatrics and Extended Care for VA Pacific Northwest Region
CASE ONE: URGENT CARE

- 9 y/o, No Significant Past Medical History
- c/o SOB, Cough, Abdominal Pain
  - SOB at rest and while running, chest pain
  - “Difficult to breathe, Heavy on chest, Lungs are full”
  - “Concerned for COVID”
- No fever, no N/V/D, No Sore throat, No Myalgias
- T98.6 F, HR 118, BP 112/75, 100% RA
- Next Steps? Questions?
CASE ONE: OUTCOME

- Exam was normal
- Mask placed on patient for COVID precautions → Patient reports he can breathe again, feels better
- Repeat vitals (after mask): HR 93, 98.6, 100% RA
- Ultimate Diagnosis: Anxiety
CASE TWO: FAMILY MATERNITY CENTER

- G3P2 → 3 presents in labor at 38 weeks
- Normal pregnancy, normal prenatal studies
- Mom healthy, no symptoms concerning for COVID (no recent fever, cough, GI symptoms, sore throat, etc)
- Uncomplicated Vaginal Delivery
- Mom spikes fever after delivery, develops mild respiratory distress
- Questions? What do you do for baby?
CASE TWO: OUTCOME

• Concern for maternal COVID – Maternal test pending
• Infant treated as PUI – sent to NICU into isolation room
  • Bathed ASAP
  • COVID Test sent at 12 HOL → NEG
  • Vital signs closely monitored
  • Fed EBM by FOB and RNs, everyone wearing mask, gown, gloves
• Repeat test sent at 48 HOL, prior to discharge
• Maternal test returns negative
References


More to come...

Friday, May 1 at 1 pm MT – Behavioral Health in the Time of COVID-19

After this week, sessions will now be held once per week on Tuesdays at noon MT