COVID-19 and Schools

Disease and Health Dimensions

May 20, 2020

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Road Map

1. Epidemiology
2. Transmission
3. Public Health Measure
4. Testing
5. Resources
New cases of COVID-19 by day, by WHO Region
Epidemiology of COVID-19

Distribution of COVID-19 Cases in Pediatric Population

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Number of cases</th>
<th>Percentage of cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5 years</td>
<td>6336</td>
<td>0.45</td>
</tr>
<tr>
<td>5-9 years</td>
<td>6957</td>
<td>0.49</td>
</tr>
<tr>
<td>10-14 years</td>
<td>10357</td>
<td>0.73</td>
</tr>
<tr>
<td>15-18 years</td>
<td>16717</td>
<td>1.18</td>
</tr>
</tbody>
</table>

*Data reported to WHO, as of May 4, 2020*
Transmission of COVID-19

- Respiratory Droplet Spread
- Onset symptoms (cough, fever)
- Infectious
- Incubation period: Median 4-5 days (1-14 days)
- Disease:
  - 80% mild moderate
  - 20% severe, critical
- Antibodies:
  - Duration and quality unknown

*based on literature reviews April 22, 2020
Transmission in school settings

• School closures are based on evidence and assumptions from influenza outbreaks
  • reduction in social contacts between students, interrupt the transmission

• Role of children in transmission of COVID-19 is unclear

• Very few studies involving educational institutions
  • Data shows little transmission in school setting
  • Related to social events linked to school or university life rather than transmission within classrooms

Public Health Measures to reduce transmission

• Measures should be used in combination

• Personal protective measures
• Environmental measures
• Physical distancing measures
• Travel-related measures

• WHO recommends that all suspected cases be identified, tested, isolated and cared for, and their contacts identified, traced, and quarantined.
Contact Tracing

- **Purpose**: to break chains of transmission
  - For COVID-19 requires:
    - Identifying persons who may have been exposed
    - Quarantine
    - Following them for 14 days from the last point of exposure
  - **GOAL**: to prevent onward transmission

Testing considerations:

- Timing of testing is important
- Ab Testing: Quality and quantity of antibodies unknown
Summary

- COVID-19 can infect children
- Illness in children is usually mild
- Children seem less likely to transmit infection
- Public health measures can help decrease transmission
- Contact tracing helps decrease transmission
- Testing – still a lot to be learned

- Research ongoing to help provide further data to inform best practices
Additional Resources

• EPI WIN web page
https://www.who.int/teams/risk-communication/epi-win-updates

• Public Health measures

• Annex on schools