## COVID-19 and Schools

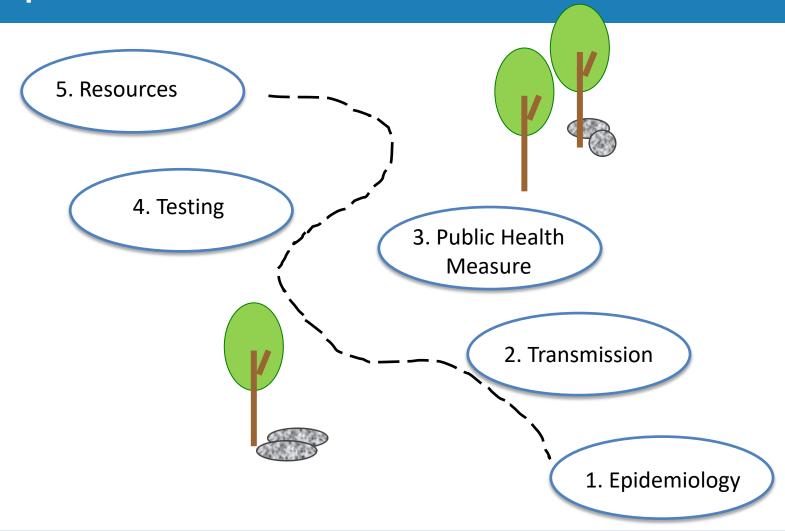


#### **Disease and Health Dimensions**

May 20, 2020

Shalini Desai, MD, MHSc WHE, Infodemics Pillar WHO Health Emergencies

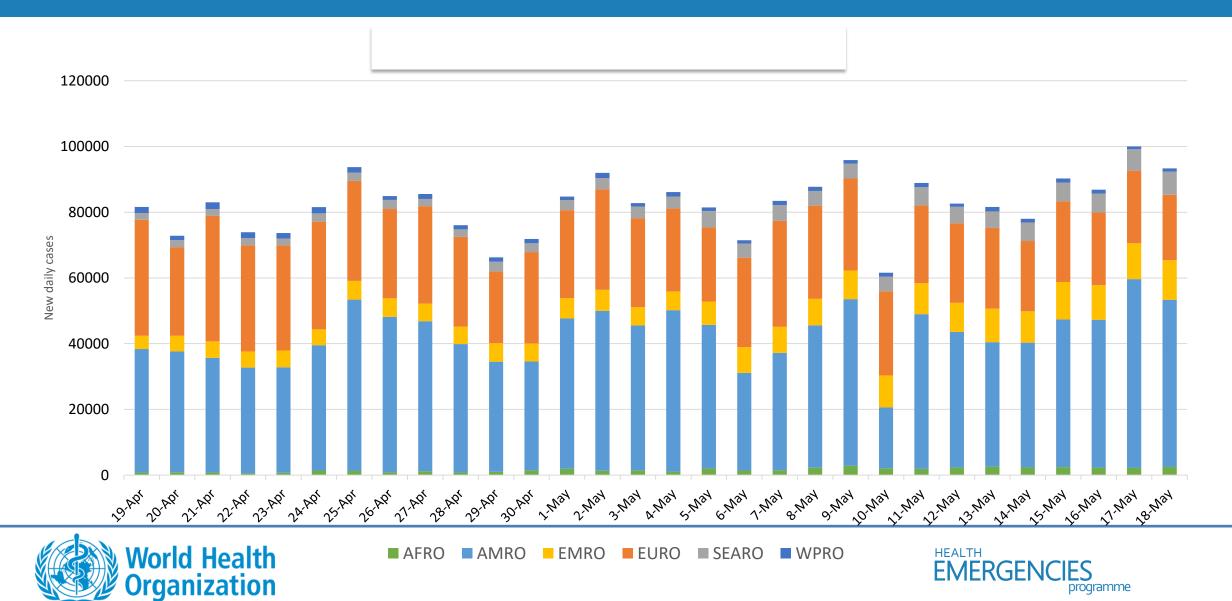
### Road Map





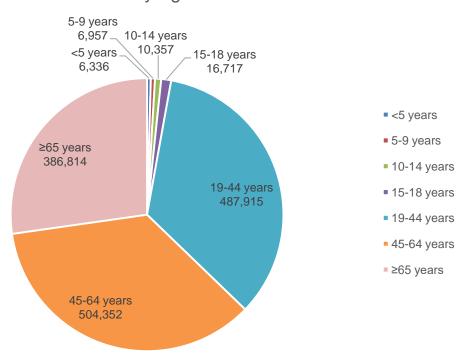


### New cases of COVID-19 by day, by WHO Region



# Epidemiology of COVID-19

#### Distribution by Age of COVID-19 Cases\*



#### Distribution of COVID-19 Cases in Pediatric Population

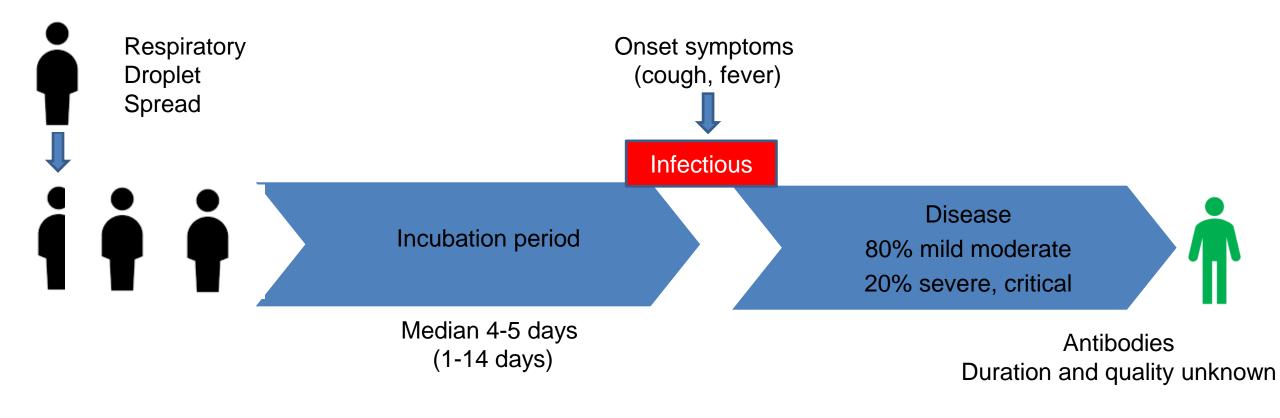
Age Group	Number of cases	Percentage of cases
Under 5 years	6336	0.45
5-9 years	6957	0.49
10-14 years	10357	0.73
15-18 years	16717	1.18





<sup>\*</sup>Data reported to WHO, as of May 4, 2020

### Transmission of COVID-19







## 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

Jackson C, Vynnycky E, Mangtani P. The relationship between school holidays and transmission of influenza in England and Wales. Am J Epidemiol 2016; 184: 644–51.

Danis et alCluster of coronavirus disease 2019 (Covid-19) in the French Alps, 2020. Clinical Infectious Diseases, ciaa424, <a href="https://doi.org/10.1093/cid/ciaa424">https://doi.org/10.1093/cid/ciaa424</a>

COVID-19 in Scholls – the NSW experience. <a href="http://ncirs.org.au/sites/default/files/2020-04/NCIRS%20NSW%20Schools%20COVID\_Summary\_FINAL%20public\_26%20April%202020.pdf">https://science.ab/scien





#### Public Health Measures to reduce

#### trancmiccian

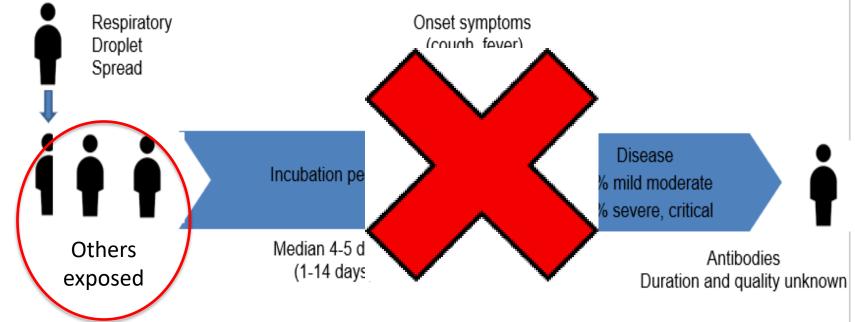
- Measures should be used in combination
- Personal protective measures
- Environmental measures
- Physical distancing measures
- Travel-related measures
- WHO recommends that all suspected cases be identified, tested, isolated and cared for, and their contacts identified, traced, and quarantined.





## **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

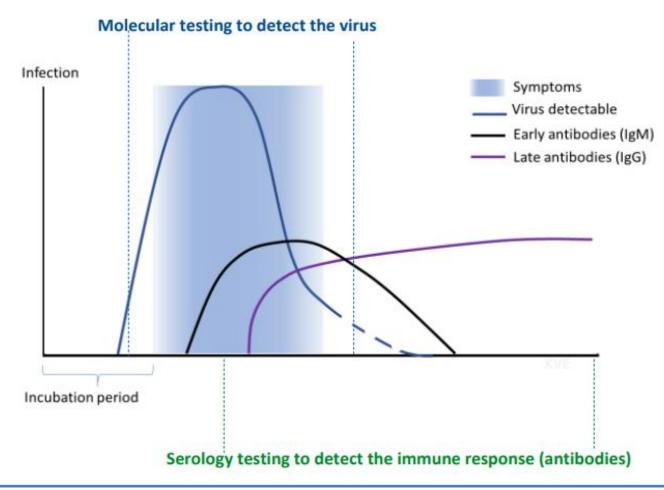


Contact tracing in the context of COVID-19. <a href="https://www.who.int/publications-detail/contact-tracing-in-the-context-of-covid-19">https://www.who.int/publications-detail/contact-tracing-in-the-context-of-covid-19</a>





## 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
 <a href="https://www.who.int/teams/risk-communication/epi-win-updates">https://www.who.int/teams/risk-communication/epi-win-updates</a>

• Public Health measures

https://apps.who.int/iris/bitstream/handle/1 0665/331773/WHO-2019-nCoV-Adjusting PH measures-2020.1eng.pdf?sequence=1&isAllowed=y

Annex on schools
 <a href="https://www.who.int/publications-detail/considerations-for-school-related-public-health-measures-in-the-context-of-covid-19">https://www.who.int/publications-detail/considerations-for-school-related-public-health-measures-in-the-context-of-covid-19</a>

