

The Seattle Flu Study: A Community Based Study of Influenza



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Seattle Flu Study

Seattle Flu Study Components:

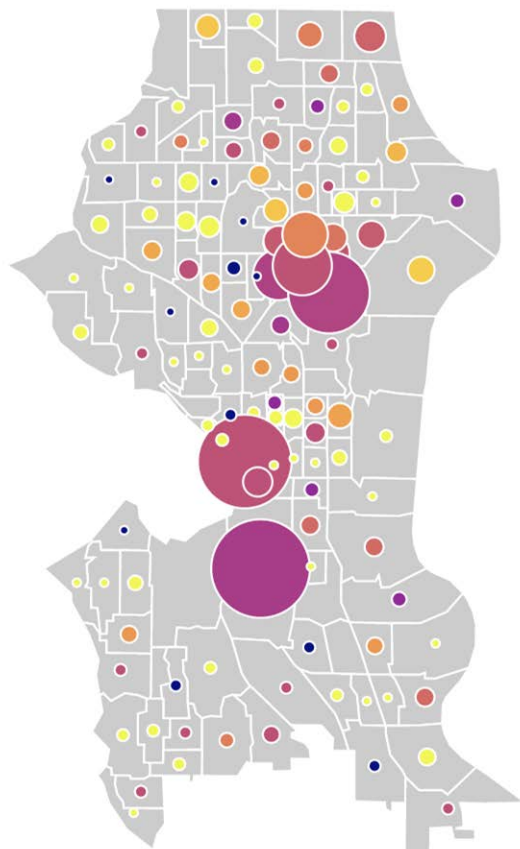
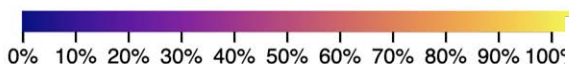
- Analysis of residual hospital respiratory samples
- Recruitment in clinics and at clinical sites
- Recruitment in community kiosks
- Household recruitment through public schools
- Influenza studies with self-testing and home diagnostics
- Self-swab recruitment via the web: “Swab & Send”
 - Delivery and pickup of swab within 4 hours
- Detection of influenza and other respiratory viruses with strain sequencing (including SARS-CoV-2, 2020)
- Informatics- incidence visualization
- Realtime tracking of viral evolution



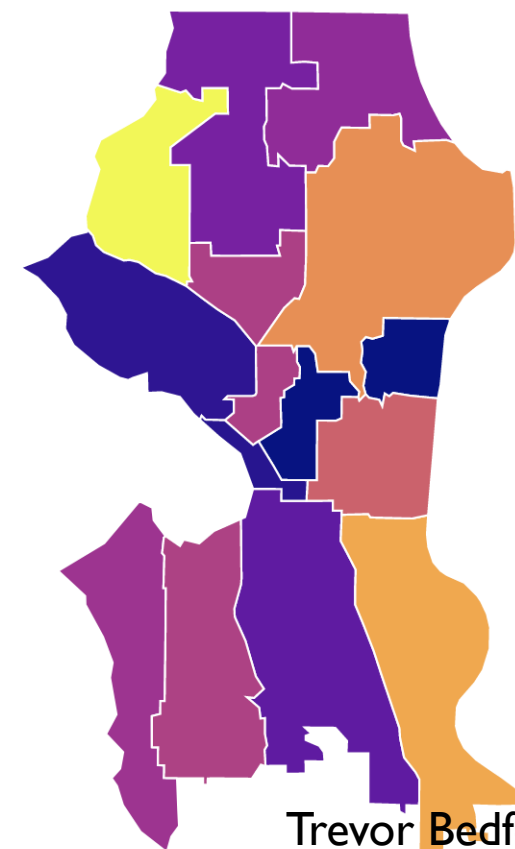
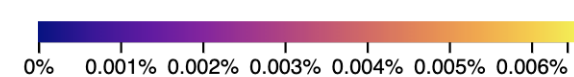
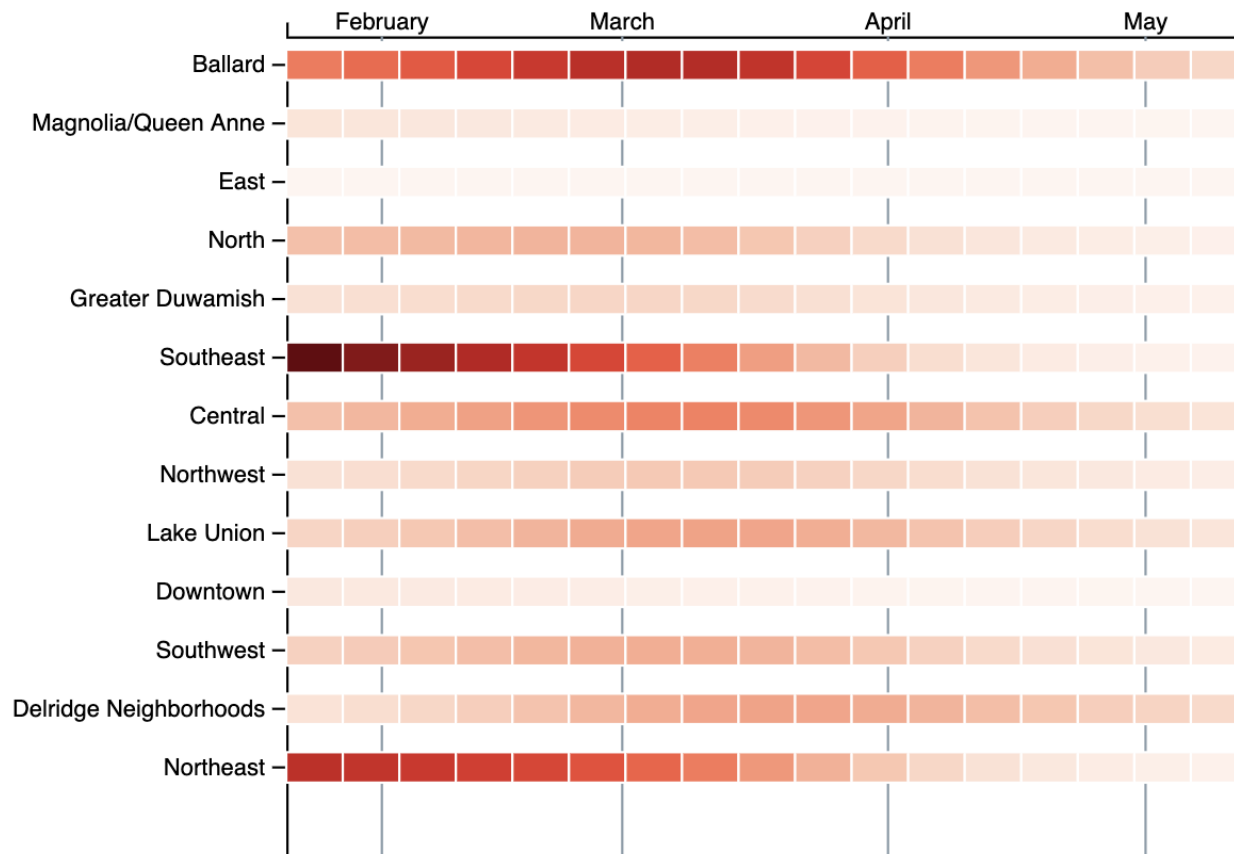
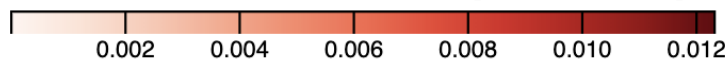
Informatics – Incidence Visualization

Custom web app for interactive visualization of spatiotemporal incidence data + metadata

Raw case counts (circle size)
/ vaccination status (color)



Modeled spatio/temporal incidence



First Case of 2019 Novel Coronavirus in the United States

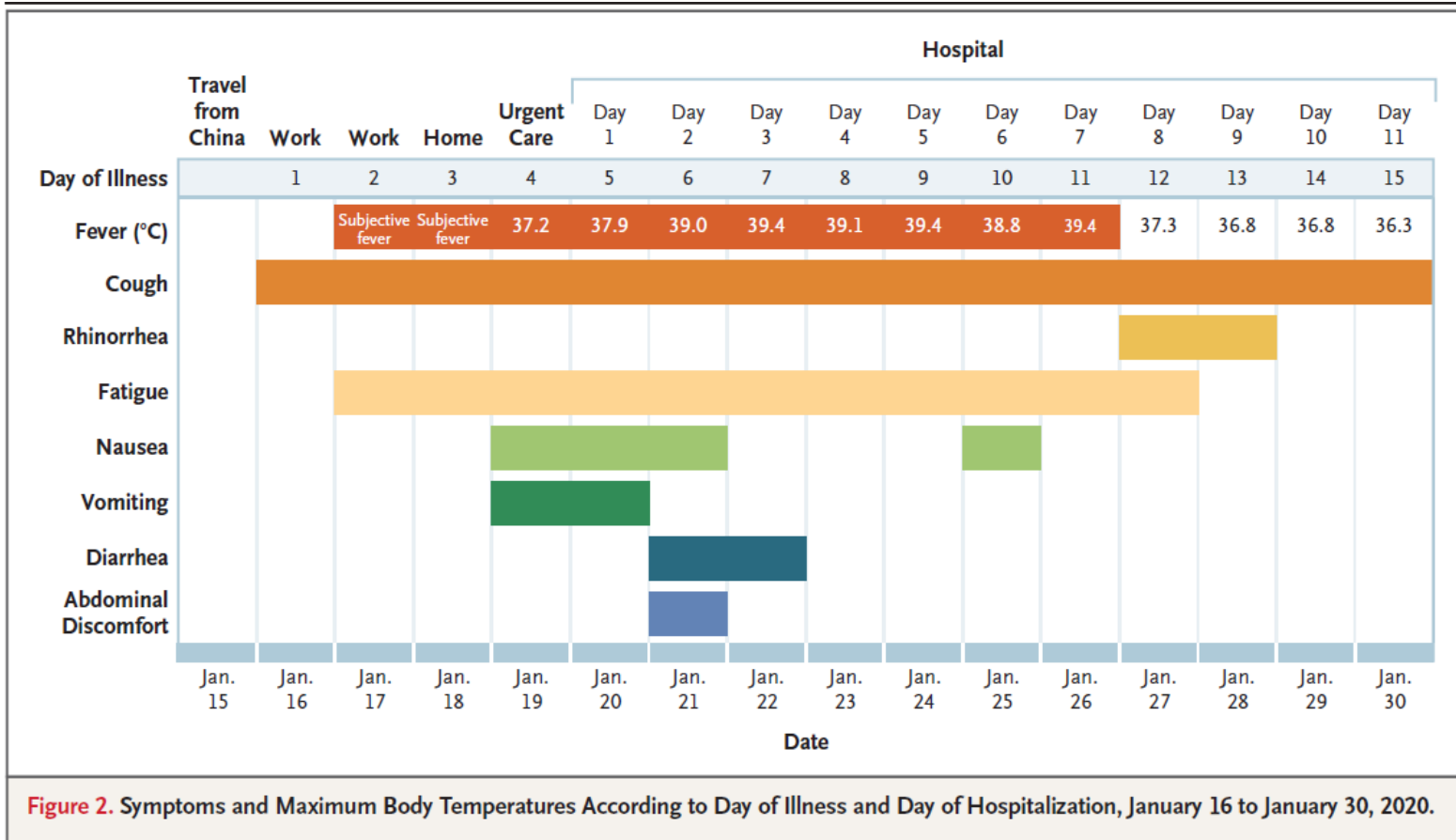
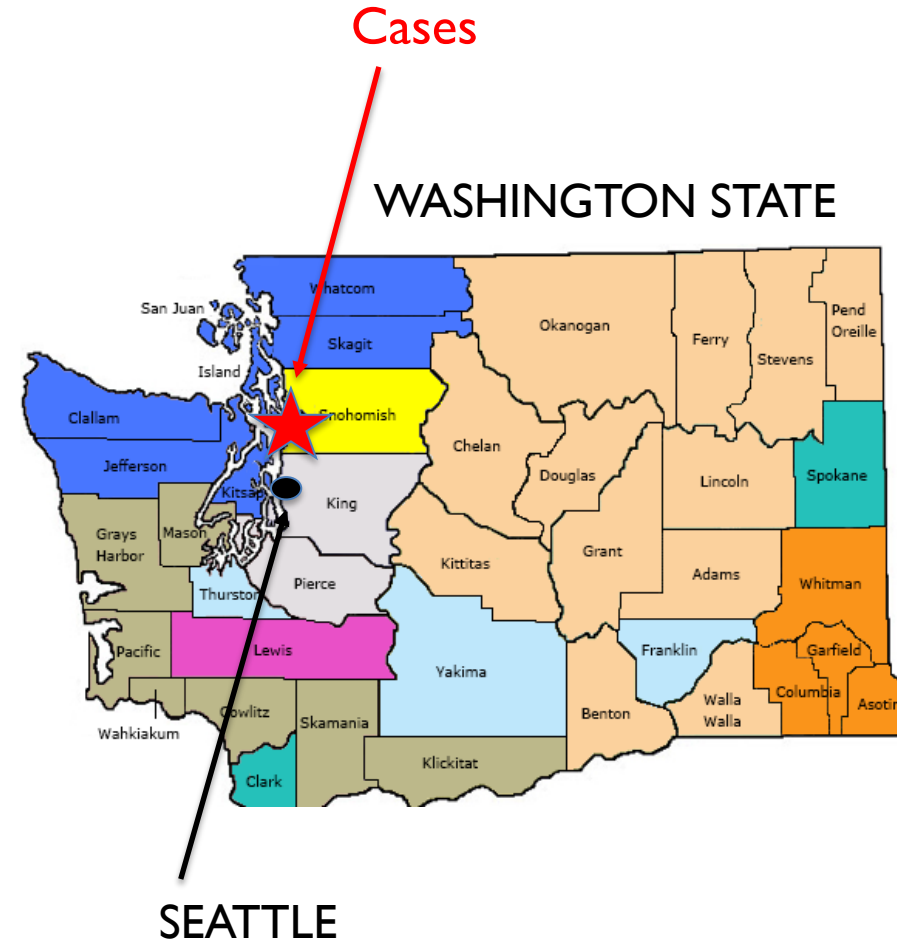
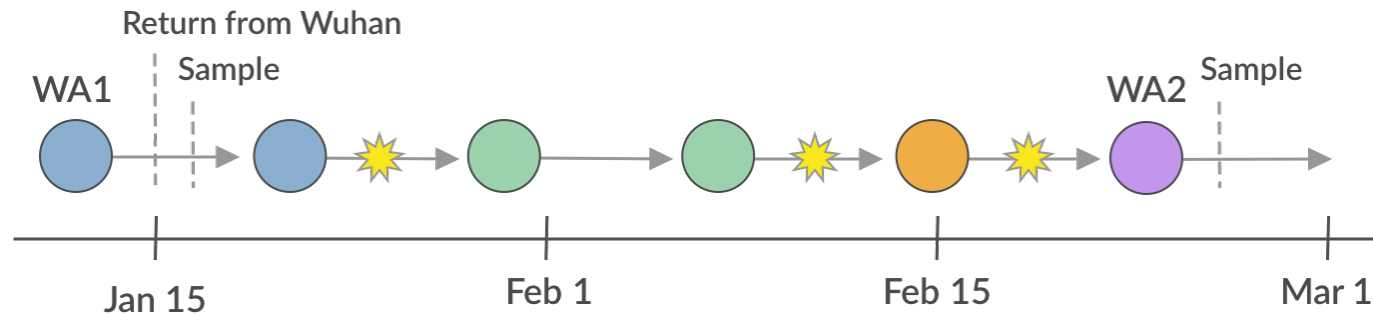
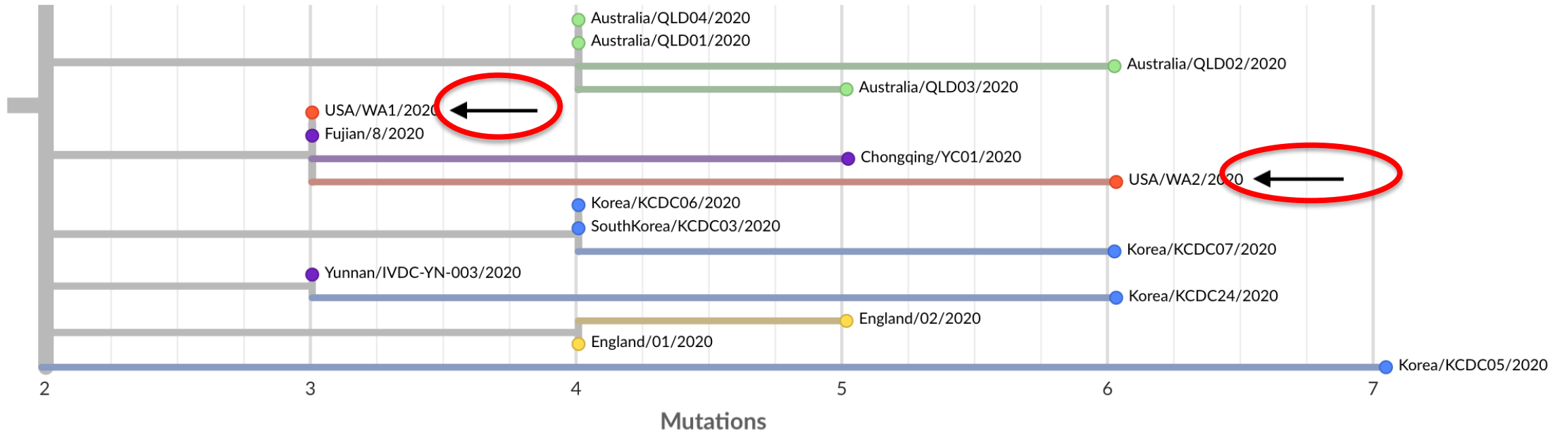


Figure 2. Symptoms and Maximum Body Temperatures According to Day of Illness and Day of Hospitalization, January 16 to January 30, 2020.



Following Coronavirus in WA State



Pediatric cases of COVID-19 in Korea as of March 2:
 Total of 201 cases (4.8% of total cases)
 Younger than 10 years: only 16%
 No Fatalities
 Age range 45 days- 19 years

Report on the Epidemiological Features of Coronavirus Disease 2019 (COVID-19) Outbreak in the Republic of Korea from January 19 to March 2, 2020

Korean Society of Infectious Diseases, Korean Society of Pediatric Infectious Diseases, Korean Society of Epidemiology, Korean Society for Antimicrobial Therapy, Korean Society for Healthcare-associated Infection Control and Prevention, and Korea Centers for Disease Control and Prevention

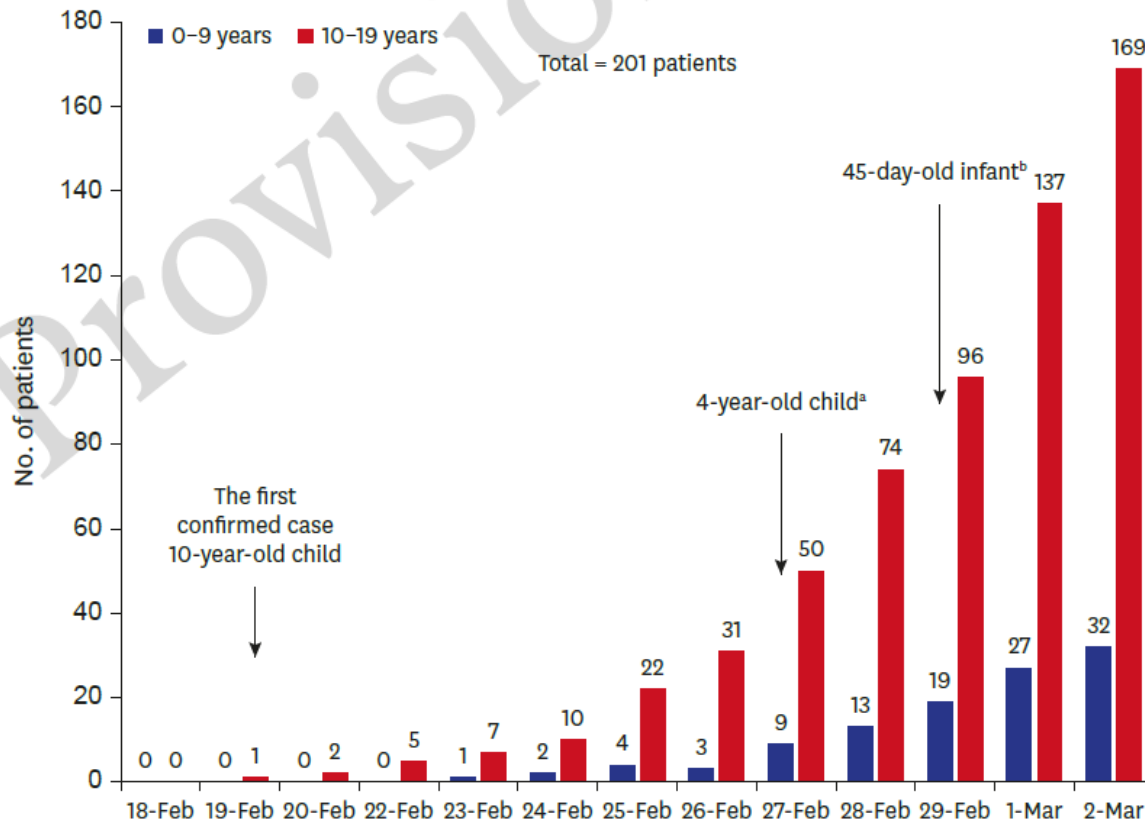


Fig. 3. Cumulative pediatric cases in the Republic of Korea as of March 2, 2020.
^aThe child was presumed to have been infected by a familial exposure. He attended the daycare center one day before the symptom onset; ^bThe youngest pediatric case as of March 2, 2020.

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QUESTIONS

Who do you test?

The real question is, how many tests are available to you?

We are testing all inpatients at admission, all pre-transplant recipients, symptomatic contacts of known persons, and symptomatic HCW. For research purposes, we are testing households and asymptomatics as well as symptomatic people.

What are the symptoms in children?

Symptoms are generally mild and cannot be differentiated from Flu or RSV- our patients had fever, fatigues, cough, rhinorrhea. In Korea they commented that many have a sore throat early on.

What specimen type to use – NP, midnasal, throat, sputum?

Sputum may be best but is difficult. NP is recommended by CDC but is potentially aerosol generating. We have had two pediatric patients with SARS-CoV-2 detected; both were from mid-turbinate swab with high viral load – higher than NP in some older patients. We are using mid-turbinate swabs OR self swabbing with midturbinate swabs (Copan swabs with stopper in place).

