

SARS-CoV-2: Wastewater Surveillance in Alaska

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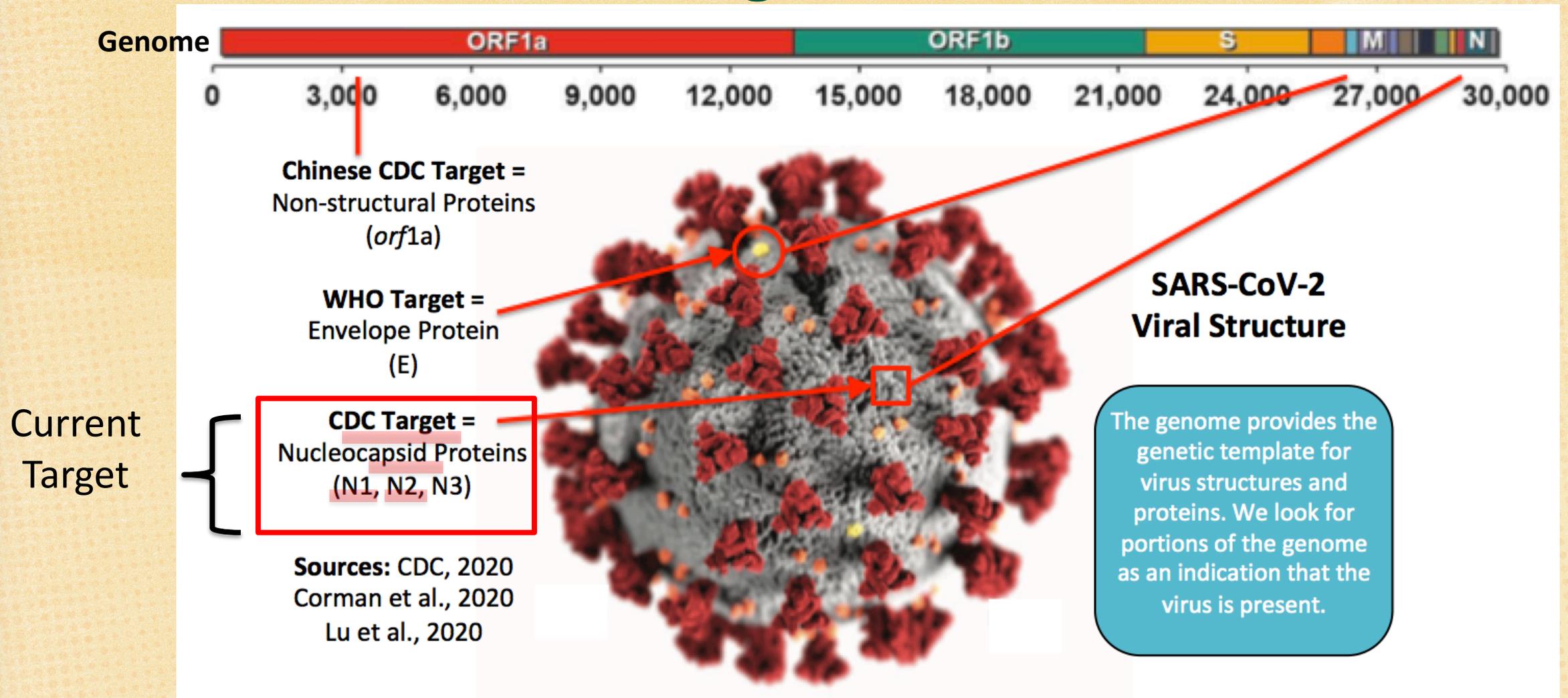
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AMAZING STORIES
BEING WRITTEN EVERY DAY.

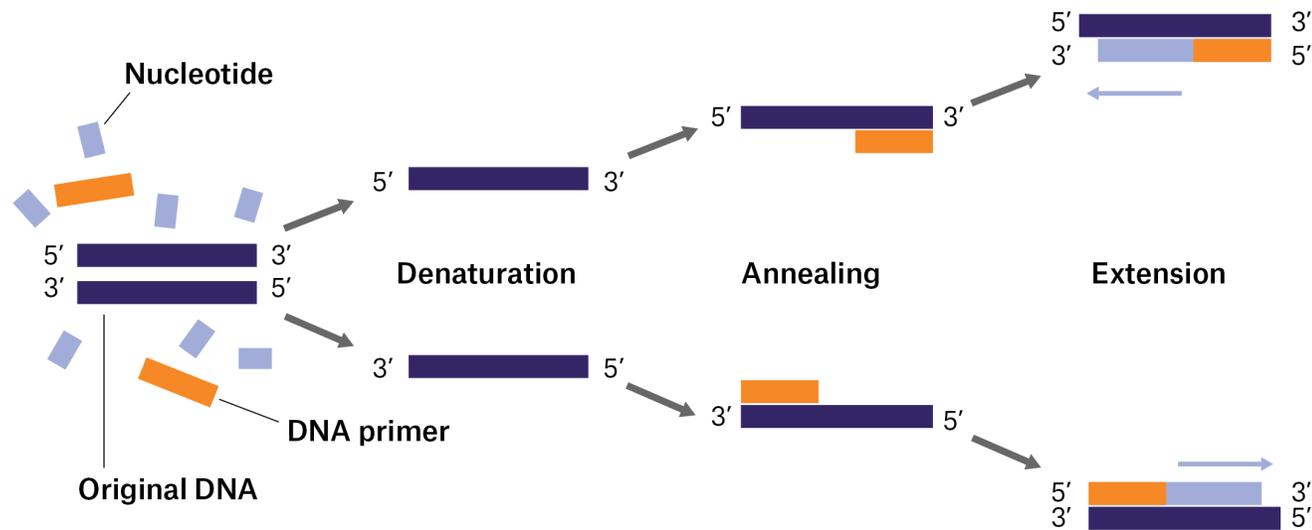
Timeline



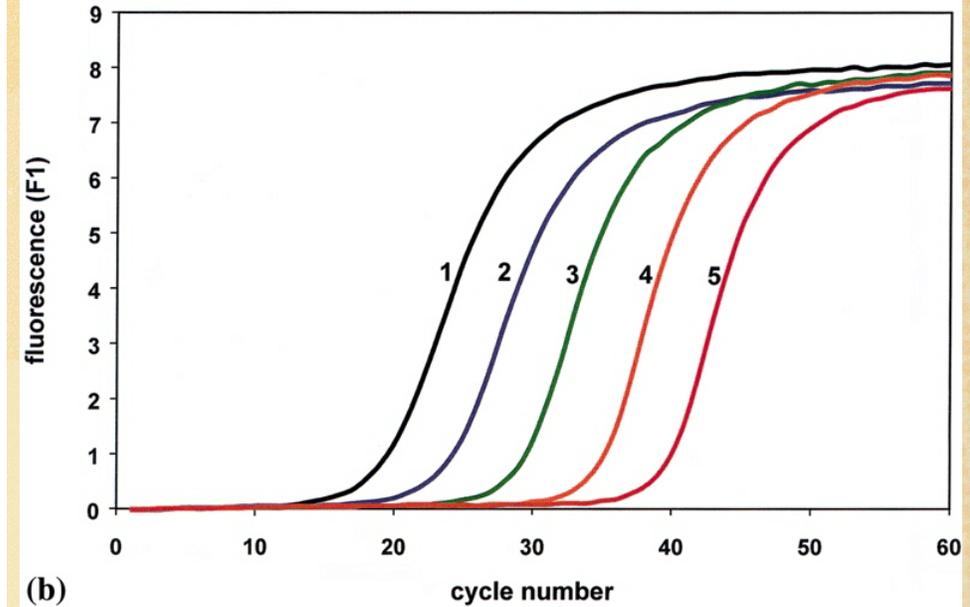
Molecular Targets for Surveillance



qRT-PCR

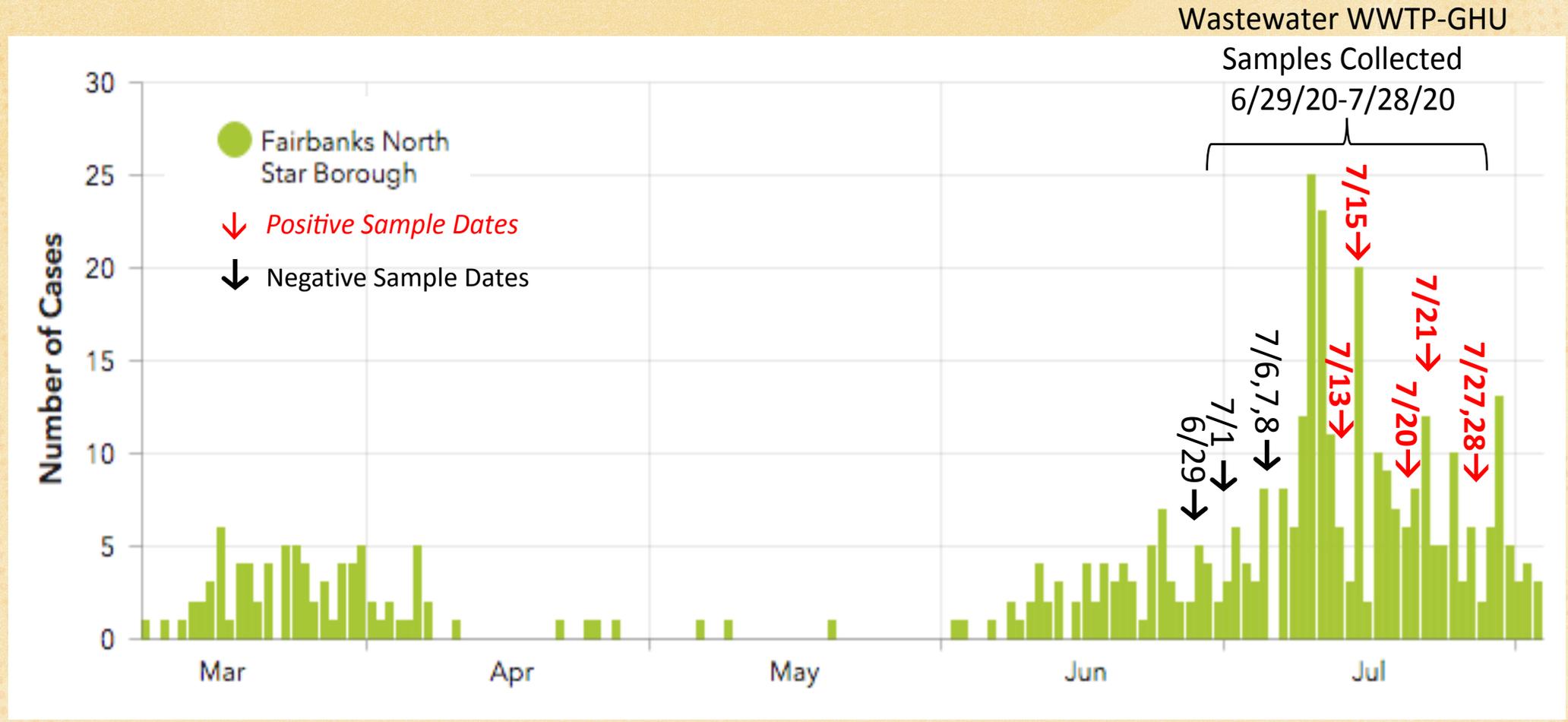


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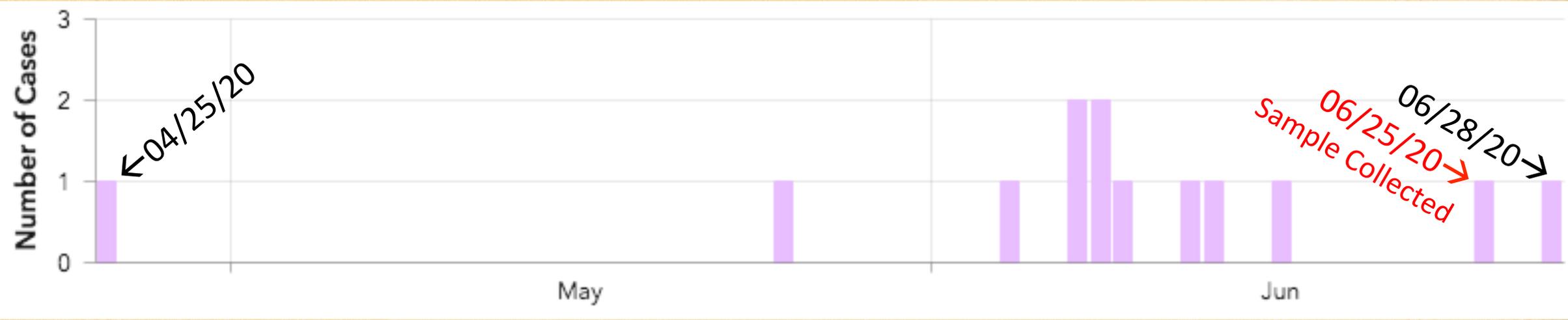
Fairbanks, Alaska

Confirmed COVID-19 Cases in Fairbanks North Star Borough, Alaska



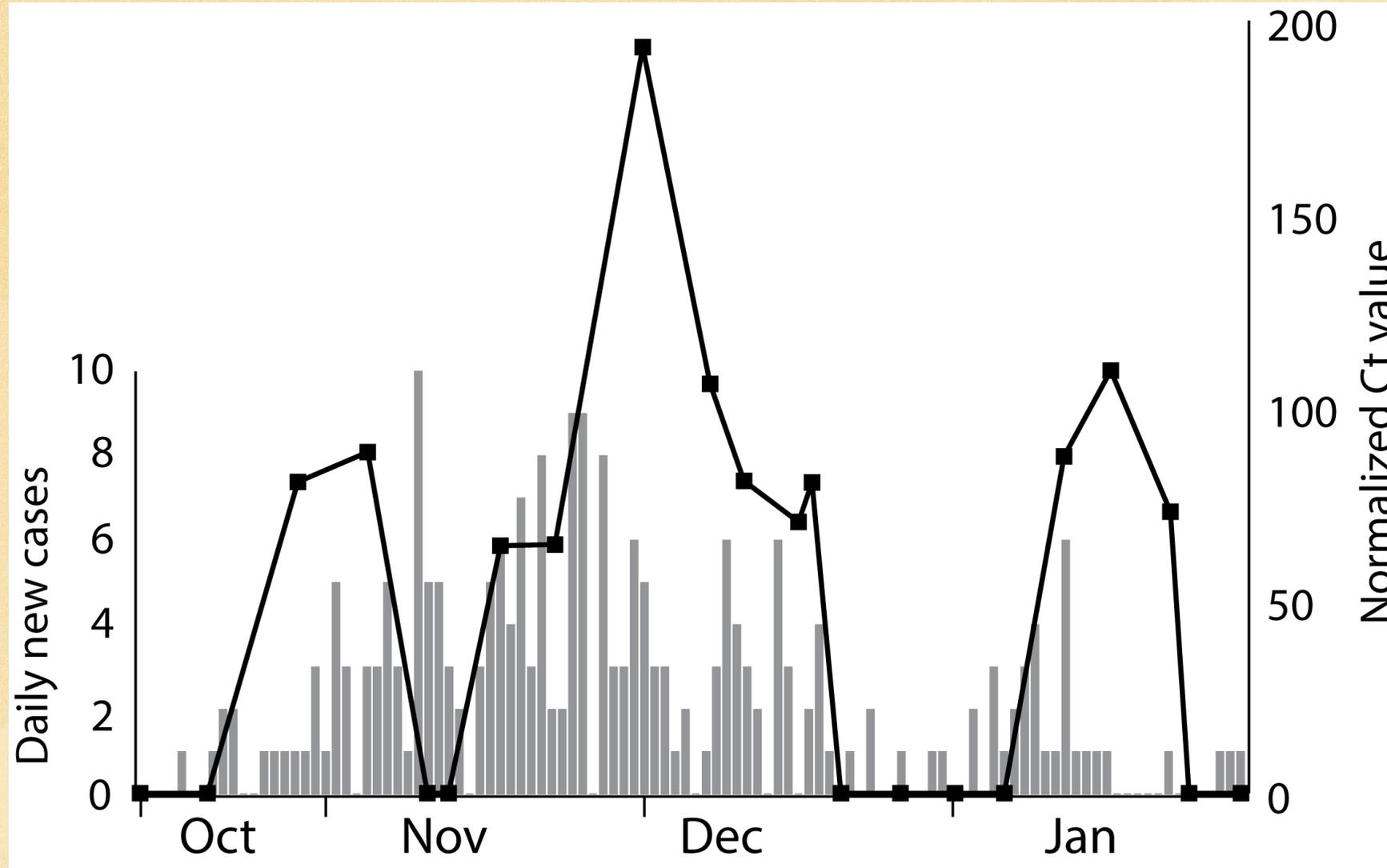
Sitka, Alaska

At the time of sampling total of 13 cases with 2 active cases.



Detection limits is dependent on facility.

Sitka, Alaska

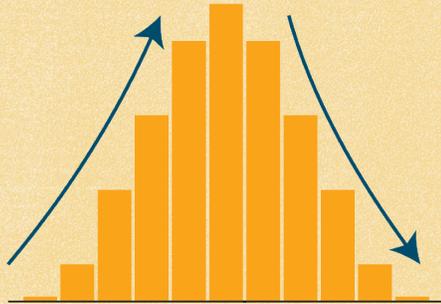


Challenges

Qualitative?



Initial Onset or Second Wave



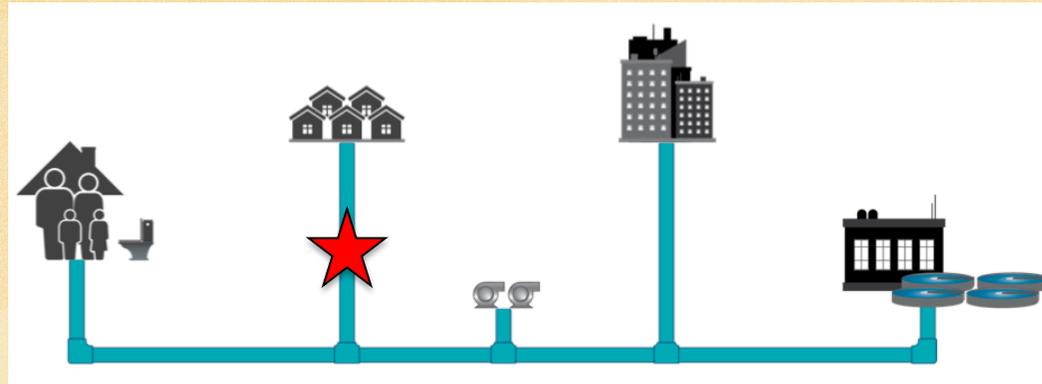
Time to Relax Mitigation Measures?

Semi-Quantitative?

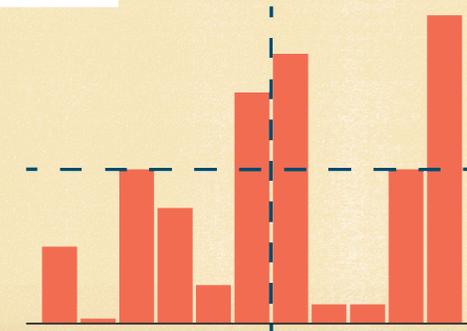
Quantitative?



EARLY WARNING SIGN



Hot Spots?



Trigger Thresholds Policy making?

Moving Forward

- Advanced Instrumentation in Microbiome Studies (AIMS) Core Facility
- Turn around time
 - 24hrs
- Sequencing
 - SARS-CoV-2
 - Other pathogens





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