

Restarting In-Person Instruction in Somerville

Minimizing risk amid uncertainty during the SARS-CoV-2 pandemic

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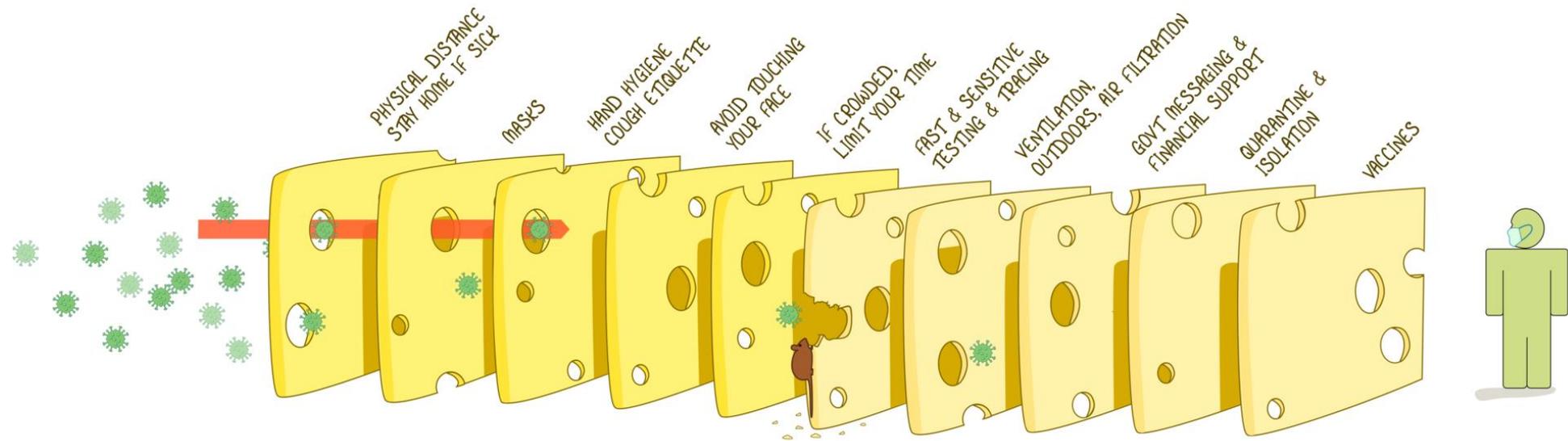
What are the potential risks?

- COVID-19 among students (severe illness is extremely rare)
- COVID-19 among teachers and other workers in school buildings
- Students (with no or mild symptoms) bring the coronavirus home to parents, grandparents, and others
- If illness and quarantines create teacher/staff shortages, absences may create unsafe conditions

Mitigating risks

THE SWISS CHEESE RESPIRATORY VIRUS PANDEMIC DEFENCE

RECOGNISING THAT NO SINGLE INTERVENTION IS PERFECT AT PREVENTING SPREAD



EACH INTERVENTION (LAYER) HAS IMPERFECTIONS (HOLES).
MULTIPLE LAYERS IMPROVE SUCCESS.

Mitigating risks

- Measures
 - Masks
 - Weekly and biweekly universal pooled testing (!!!)
 - Physical distancing in classroom and other spaces
 - Quarantine procedures
 - Investments in ventilation, air filtration, air purification, humidifiers
- One omission: community spread
 - More infections in the community -> more infections at school
 - This is out of the school system's direct control

Mitigating risks

- How much do these measures help reduce in-building spread?
 - Probably a lot, but this is a new area of research. There are few studies and they often rely on messy data
- What about spread that happens out of the building?
 - In-person instruction may mean students, workers, parents mix more with the community. There are arguments for and against this perspective.

Suggestions for consideration

- Determine which quarantine protocols to use for close contacts of staff and students who test positive. Stick to them.
- Investigate transmission in addition to contact tracing
 - We want to know if the transmission likely occurred in school. If it did, why and what can be learned from it?
- Focus on changing environments rather than just changing behaviors
 - Behavior changes are best supported by changes to environment. There are also concerns about racial inequity if approaches are punitive

What would trigger a shift to fully virtual instruction?

- Somerville should prepare for the possibility that the next few months will be worse than the first wave
- It would be best to predefine triggers, possibly including
 - Teacher and staff absences (due to quarantine and illness). What level would no longer be safe? No longer fulfill the educational mission?
 - Frequency of classes being quarantined and frequency of suspected in-building transmission
 - Community factors
 - Metrics for incidence rates, whether the health care system is over capacity