

FCSO COVID-19 Update

Monday, December 21, 2020

What we know – COVID in Alameda County

Guidance – Reopening Plan

Challenges

How we're planning

Light at the end of the tunnel?

More information/resources

How COVID spreads (supplemental)

Diana Newhart, MPH

Parent to 4 FCSO students (K, 2, 4, 6)

What we know: Cases in Alameda County



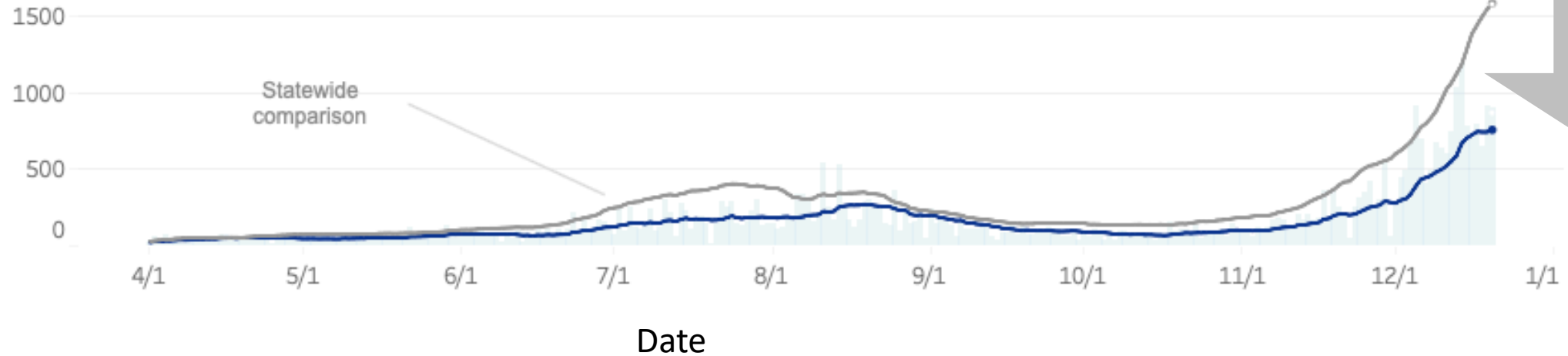
Total cases in Alameda

44,004 positive cases
895 new cases
2.1% increase from prior day total

Since January (total cases)

On December 20, 2020

New cases



- Alameda County
- Statewide average

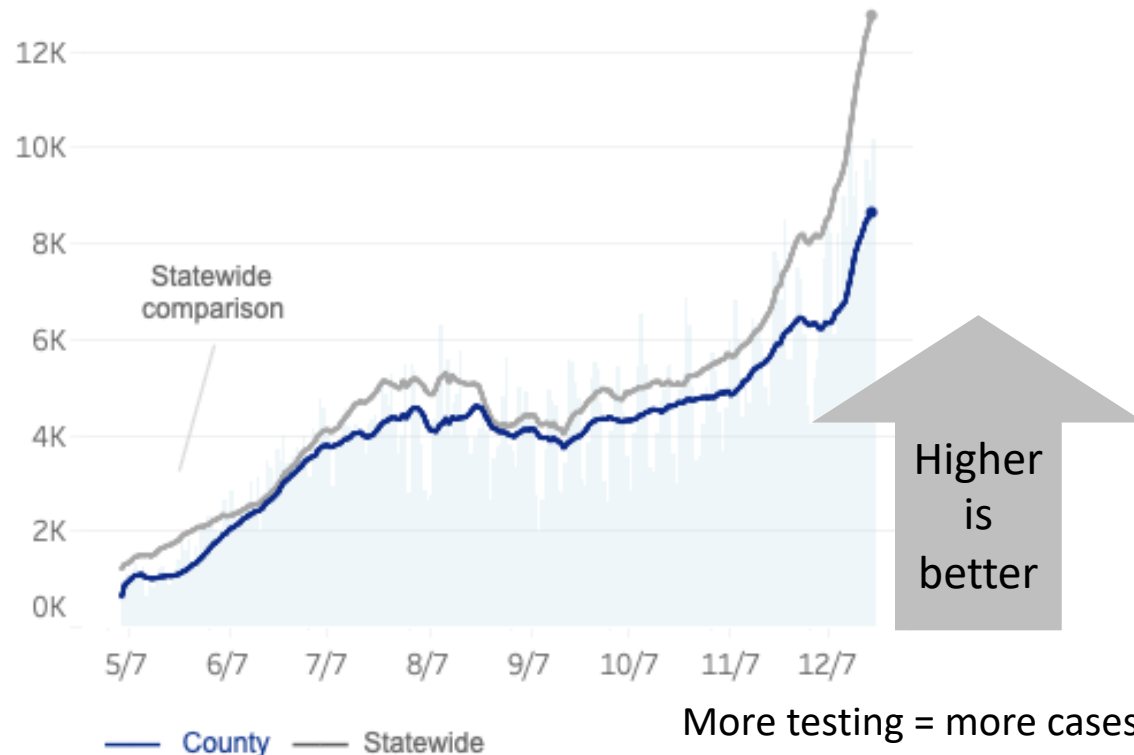
What we know: Testing & Positivity Rates



Total tests reported in Alameda

10,137 new tests reported
979,044 total tests reported
1.0% increase from prior day total

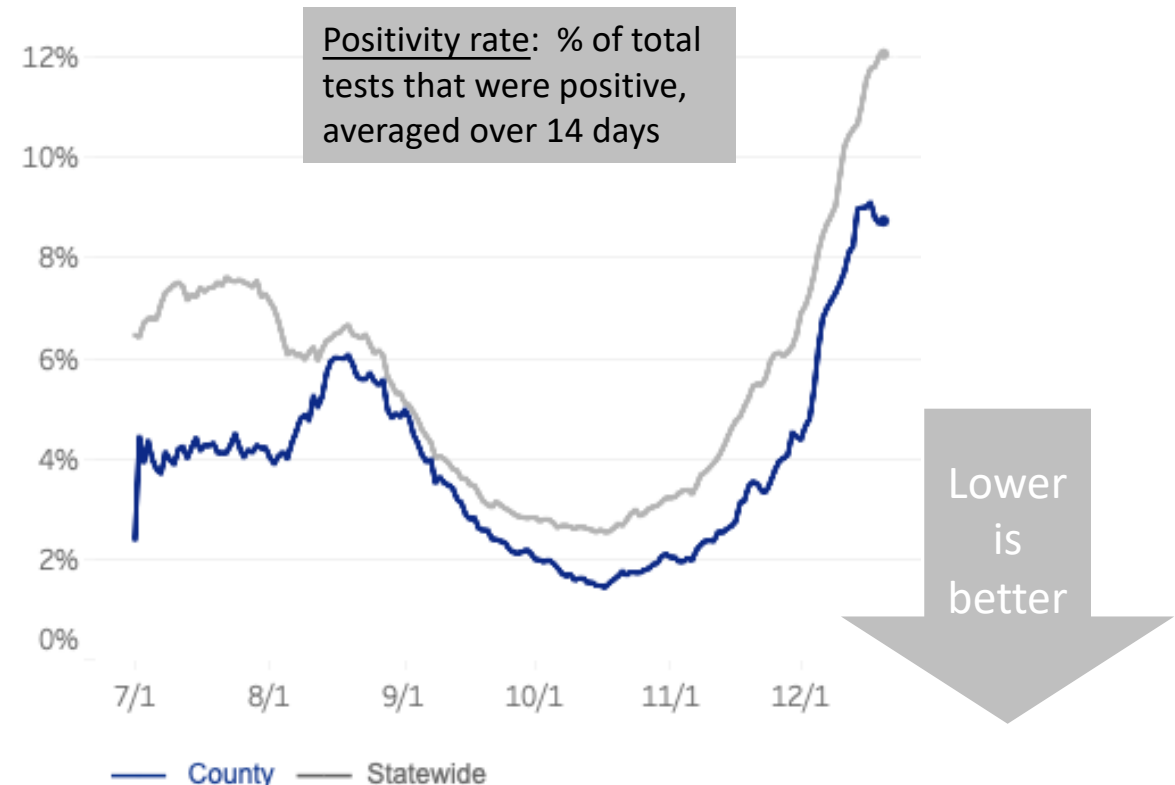
Total tests on Dec 20



More testing = more cases identified = stronger contact tracing = more spreading averted

Positivity rate in Alameda

8.7% test positivity (14-day average)
1.7% increase from 14 days ago



Link: [California COVID-19 Dashboard](#)

What we know: County Status



November 16, 2020

Governor Newsome placed Alameda county in the Purple Tier due to rapid increase of cases in the county.

Alameda County is here



December 20, 2020

Adjusted case rate: **19.8**

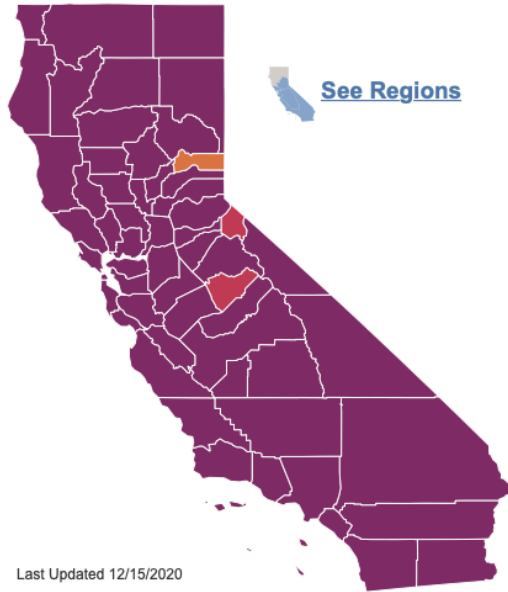
Positivity rate: **6%***

*7 day average

Effective December 7 –

Shelter in Place Order

[LINK](#) through Jan 7, 2021



County risk level	Adjusted case rate* 7-day average of daily COVID-19 cases per 100K with 7-day lag, adjusted for number of tests performed	Positivity rate** 7-day average of all COVID-19 tests performed that are positive	
		Entire county	Healthy equity quartile
WIDESPREAD Many non-essential indoor business operations are closed	More than 7.0 Daily new cases (per 100k)	More than 8.0% Positive tests	
SUBSTANTIAL Some non-essential indoor business operations are closed	4.0 – 7.0 Daily new cases (per 100k)	5.0 – 8.0% Positive tests	5.3 – 8.0% Positive tests
MODERATE Some indoor business operations are open with modifications	1.0 – 3.9 Daily new cases (per 100k)	2.0 – 4.9% Positive tests	2.2 – 5.2% Positive tests
MINIMAL Most indoor business operations are open with modifications	Less than 1.0 Daily new cases (per 100k)	Less than 2.0% Positive tests	Less than 2.2% Positive tests

*Small counties (those with a population less than 106,000) may be subject to alternate case assessment measures for purposes of tier assignment.

**Health equity metric is not applied for small counties. The health equity metric is used to move to a less restrictive tier.

Links: [November 16 Press Release](#)
[ZIP Code specific data Alameda County](#)
[December 3 Stay at Home Order](#)

While in Purple Tier...



- Schools that have already opened can remain open with measures in place
- Schools that have not yet reopened must remain closed until the county has been in the red tier for at least 14 days straight.
- All other requirements for school reopening will remain in effect
 - In order to reopen, county must be in red tier for at least 14 days straight,
AND
 - School must submit and have approved: a reopening plan based on guidance provided by the county,
AND
 - School must be ready with measures in place.

Bottom line: FCSO cannot reopen for the foreseeable future

Reopening Plan Guidance

Latest reopening plan guidance can be found on the Alameda County Office of Education (ACOE) website

- Updated weekly (approx.)
- Our school guidance will be modeled off of the checklist provided in this document.

Link: [ACOE Reopening Guidance](#)

December 1, 2020 – OUSD announced that they have finalized and submitted their reopening plan to ACOE with no expected reopening date due to county restrictions currently in place. [Link to plan](#)

COVID-19 School Guidance



Alameda County
School Reopening Plans



Compiled by the
Alameda County Superintendent of Schools
and
Alameda County Health Officer

Version 22, December 16, 2020

Reopening Plan Must Address...



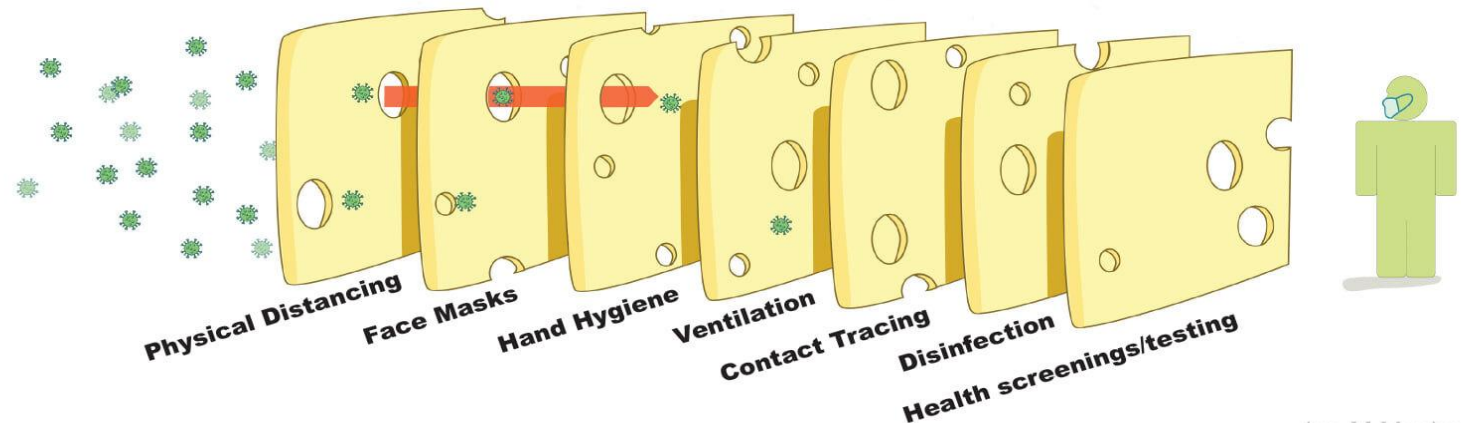
- 1. Hygiene practices** (hand washing, hand sanitizer, minimized sharing)
- 2. Face coverings** (masks, compliance in the classroom)
- 3. Cohorting and Social distancing** (isolated groups + 6 ft distance)
- 4. Entrance, Egress and Movement** (student movement on campus)
- 5. Cleaning, Disinfection and Ventilation** (frequency, windows, air filters)
- 6. Health screenings** (daily temperatures, monthly staff testing)
- 7. ID and Contact tracing** (if + individual, how to communicate, what to do if exposed)
- 8. Triggers for closure** (threshold is 5% of class = 1 person)
- 9. Education and Training** (staff and families)
- 10. Communication** (Clear lines of communication, consider HIPAA and FERPA)

Link: [NYT explanation](#)

Swiss Cheese Model

- Face coverings (masks)
- Hygiene
- Distancing
- Ventilation
- Disinfecting
- Testing
- Group size
- Contact tracing

The Swiss Cheese Model of COVID-19 Defense



Excellent article/graphic:

[El País: How Coronavirus Spreads through the Air](#)

Ian M Mackay
virologydownunder.com
Derived from @sketchplanator
Based on the Swiss cheese model of accident causation, by James t Reason, 1990
version 1.3
update: 12oct2020

Ideal School Environment — Based on guidelines



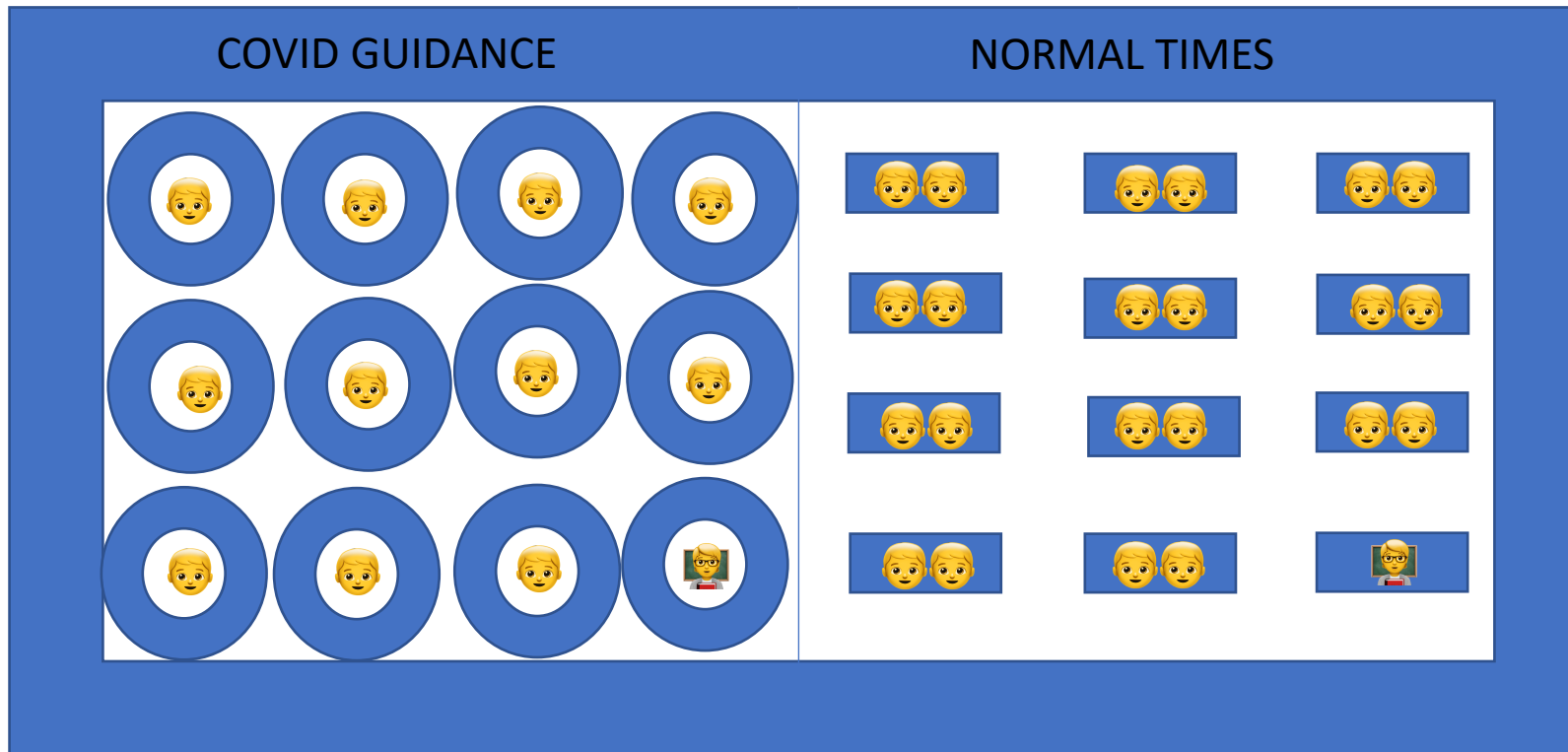
- Parents only send healthy children to school (Symptom screening)
 - No fever, cough, cold, etc.
- Each classroom = 1 cohort with same group of students and 1 teacher
- No mixing of cohorts*
 - No additional teachers or aides in the room that might mix with other groups
 - No recess with other cohorts
 - Lunch eaten in the classroom or outdoors
- Desks distanced to allow 6 feet between students and teacher
- Hand washing/ hand sanitizer before entering classroom
- Masks on all day indoors
 - Removed at lunch for eating, possible break during outdoor recess
- All windows open all the time to allow proper ventilation
- Testing teachers – 100% teachers tested every month
- Frequent cleaning of high touch surfaces

*Siblings and teacher/parents will naturally mix at home

- Space
- Hybrid and Virtual school
- Bilingual model = teacher sharing = increased risk
- All or nothing?
- Financial cost to implement necessary changes
- Equity vs. Equality
- Language acquisition

Challenges – Space

- There is not enough space in classrooms to accommodate all children for in person learning with mandated distance guidance (6 feet)



11 Students + 1 Teacher

22 Students + 1 Teacher

Proposed Hybrid Model



- Each class is divided into 2 groups (**Group A** and **Group B**)
- **Group A** attends school in person Monday – Tuesday (same hours as virtual school) while **Group B** kids are home with fully asynchronous work (available through Google Classroom)
- **Groups A** and **B** attend virtual class (as currently held) on Wednesday (mixture of live and asynchronous teaching)
- **Group B** attends school in person Thursday-Friday (same hours as virtual school) while **Group A** kids are home with fully asynchronous work (available through Google Classroom)

	Monday	Tuesday	Wednesday	Thursday	Friday
Group A	In school	In school	Virtual	Asynchronous	Asynchronous
Group B	Asynchronous	Asynchronous	Virtual	In school	In school

Challenges – Hybrid & Virtual

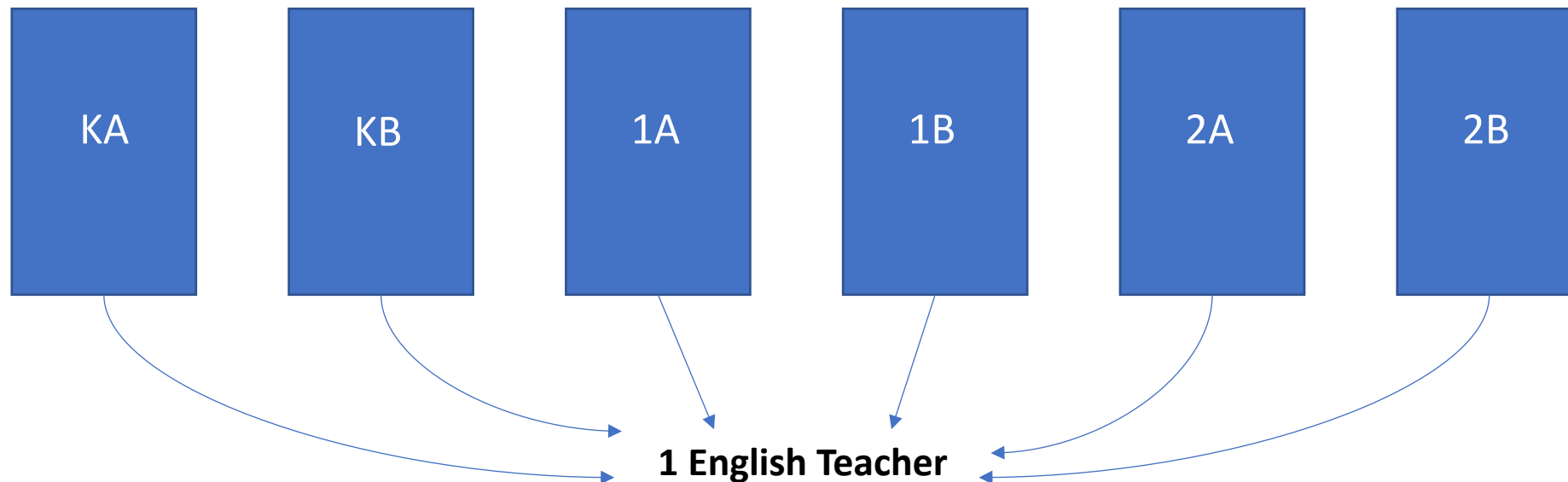


- Hybrid alleviates the space issue, but creates other challenges
 - Teachers' work increases - stress levels may be unmanageable
 - Children would have 2 days of completely asynchronous work (no live teaching)
 - Schedule is inconsistent during the week (working parents, teacher parents)
 - Risk for COVID-19 transmission exists (even with precautions, risk is not zero)
 - Outbreak leads to immediate closure = learning loss for kids if teacher is sick
 - Some data suggest Hybrid model is less safe than bringing back entire class
- Continued virtual teaching
 - Hardest on kids who struggle with virtual learning
 - Social Emotional connections not made
 - Screen fatigue
 - Parent involvement is high

Washington Post [article](#) about higher risk of hybrid model – August 14, 2020

Challenges - Bilingual model

- All classes have at least 2 teachers (French, English)
- Many grades share the same English teacher or all teachers (K-2, 3-5, 6-8)
- Best practice for a safe school environment is 1 teacher per class



Challenges – All or Nothing?



Does everyone need to agree to move forward for in person teaching?

- Teachers – Must have comfort with risk level, agree to testing schedule, be available to teach in person (childcare), risk profile (health issues)
- Parents – Work schedule, vulnerable family members in the home
- Students – Some kids are okay with virtual, some are really struggling
- Staff (administrators, janitors) – What risks are involved, contact with kids
- Volunteers – We *need* volunteers to temp check, recess monitors, lunch
 - Risk increases with the number of people that are added to a group

FCSO does NOT have the ability/finances to hire more teachers to provide both online and in person teaching options

Quick answer: Yes, everyone has to agree to take the risk during a pandemic

Challenges – Financial Costs



- FCSO is running a deficit already: \$300,000 +
- Safety plan costs – Unknown at this time, but possibly significant
- COVID safety related costs will include:
 - Cleaning costs – materials, labor, frequency
 - Air filtration – to ensure air circulation is adequate to reduce possible infectious doses of virus
 - PPE for staff, volunteers, + extra
- Long term consequences of over-spending now
 - Long term insolvency = closing of the school
 - District level decision

Note: A first look estimate of cost to provide adequate air filtration = \$1000-\$1500 per classroom x 17 classrooms + filters and maintenance = \$20,000 minimum (up to \$50,000)

Challenges – Equity vs. Equality



- Equity = system of justness and fairness
- Equality = all students are treated exactly the same
- Under normal circumstances, equity is simple – students with greatest needs are provided with special services (SPED, additional class aides for younger students)
- With COVID-19, equity is difficult to balance
 - Who has the most need for in person support? SPED, youngest cohorts (K – 2)
 - Who is least likely to be able to conform with guidelines? SPED, youngest cohorts (K– 2)
 - How do we resolve this issue? With imperfect solutions until we can be in person again safely

Challenges – Language Acquisition



- Non Francophone households are concerned that virtual learning is not enough to bring the level of French up to par
- English Language Learners (ELL) are not being exposed to English with enough frequency (recess time is off-screen)
- In-person with masks may not improve this (cannot see the teacher's mouth)
- Shortened school day, virtual and hybrid proposed, cuts the amount of exposure to a minimum
- With hybrid model – interaction is limited anyway (distancing, mask wearing, etc.)

- Step 1:** Update the FCSO Safety Plan. This is in progress and expected to be finalized by late December, 2020 or early January 2021
- Step 2:** Implement changes to school as required by Safety Plan. Jan-Feb 2021
- Step 3:** Write COVID-19 school reopening plan (Draft will be shared with staff/families prior to submission for approval) March 2021
- Step 4:** Survey staff/parents for approval of plan...if approved then...
- Step 5:** Submit plan to ACOE for review of completeness/ approval
- Step 6:** Make changes to school campuses to prepare for in-person learning
- Step 7:** Train and educate staff, parents, students
- Step 8:** Reopen school with safety measures in place/ monitor for COVID

IF there is consensus across all stakeholders, reopening date depends on county tier and campus readiness.

WARNING – State has the ability to shut everyone down at any point (based on rising cases across the state and/or county).

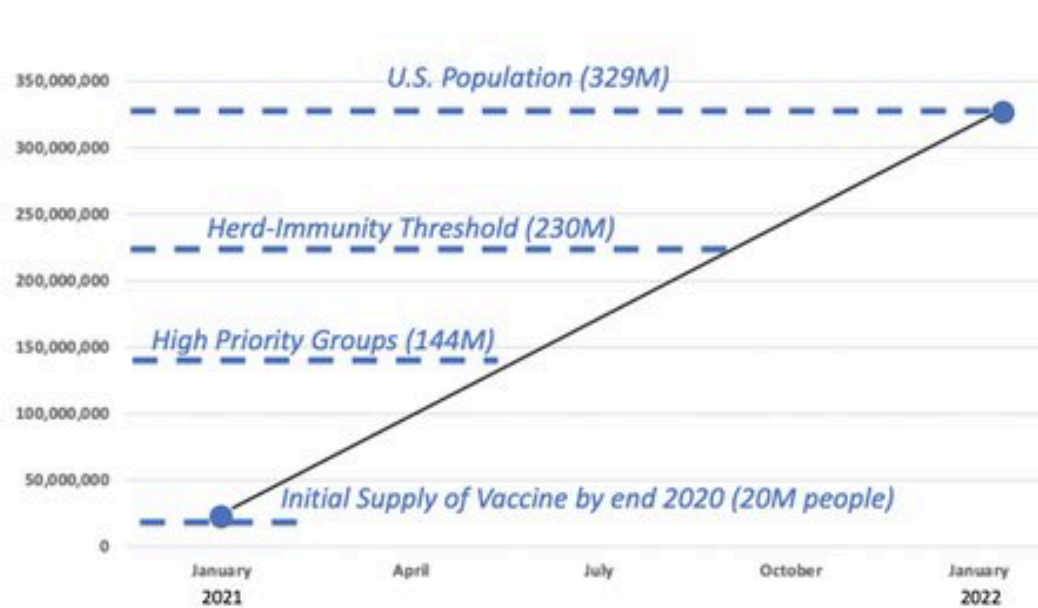
Light at the end of the tunnel?



- Since mid-November, 3 vaccine trials have posted preliminary evidence that their vaccines were effective against the spread of COVID-19
- Pfizer vaccine was approved on Friday, December 11 for emergency use by the FDA. Moderna vaccine endorsed by FDA panel Dec. 17 was approved for emergency use on Dec. 18.
- Healthcare workers and vulnerable populations are first in line to receive the vaccine
- Best guess for general public availability is February at earliest but most likely July or August 2021
- Vaccines are administered in 2 doses, 4 weeks apart. Full protection is expected 6 weeks after the 1st dose (assuming 2nd dose is given on time).

Links: [CA draft of COVID-19 Vaccination Plan](#)
[New York Times Vaccine Tracker](#)
[Pfizer Vaccine Press Release](#)
[Moderna Vaccine Press Release](#)
[AstraZeneca Press Release](#)

U.S. Vaccine Availability and Eligible Groups



Some Useful Numbers to Gauge Vaccine Timing (Ariadne estimates)

- Healthcare workers & first responders: 19.3M
- Patients with one or more comorbidities: 92M
- Patients over 65 with no comorbidities: 1.3M
- Over 65 in congregate settings: 2.3M
- Essential workers not fitting other categories: 22M
- Homeless: 6.7M
- Incarcerated: 0.7M

Total: ~144M

Number of people in U.S.: 329M

Herd immunity threshold (~70% of total population): 230M

← Teachers are in this category

@bob_wachter

— Dr. Bob Wachter, chair of the Department of Medicine at UCSF, shared Tuesday a timeline for when the U.S. population will be vaccinated against COVID-19 in coming months.

Dr. Bob Wachter / UCSF

Additional articles/ resources:

[When and How You'll Get a Vaccine](#) – The Daily Podcast from the New York Times Nov. 30

[Why School Districts are Bringing Younger Children Back First](#) – NYT Nov. 30

[Schoolchildren Seem Unlikely to Fuel Coronavirus Surges](#) – NYT Oct. 22

[Teaching in the Pandemic: 'This is Not Sustainable'](#) – NYT Nov. 30

[Positive Test Rate of 11 Percent? France's Schools Remain Open](#) – NYT Nov. 30

[New York City's 3% Problem](#) – The Daily Podcast from the NYT Nov. 23

[The COVID Tracking Project](#) - For all the data nerds out there

[Surging Virus Exposes California's Weak Spot: A Lack of Hospital Beds and Staff](#) – NYT Dec. 1

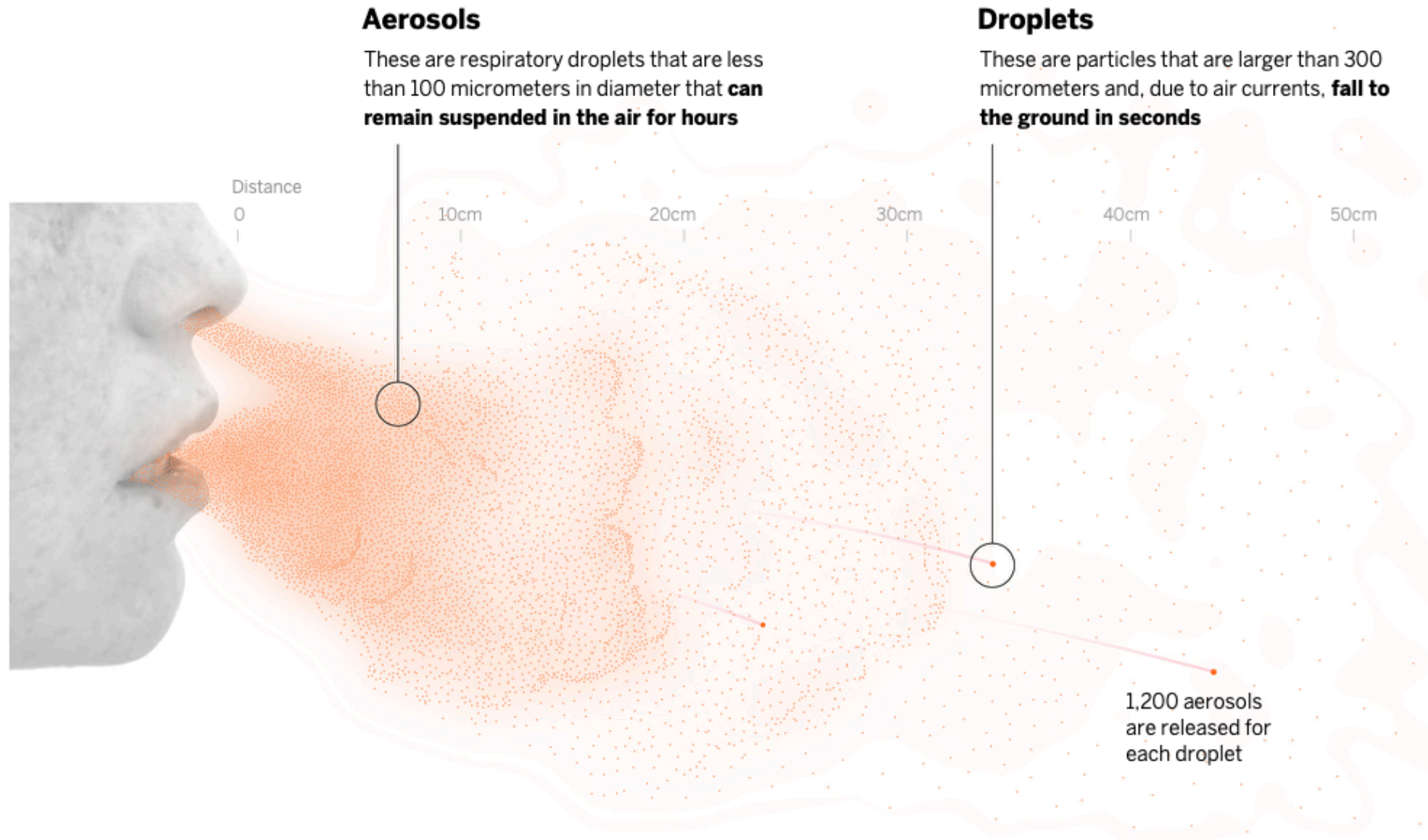
[When Will it Be Like 2019 Again?](#) – NYT Dec. 16

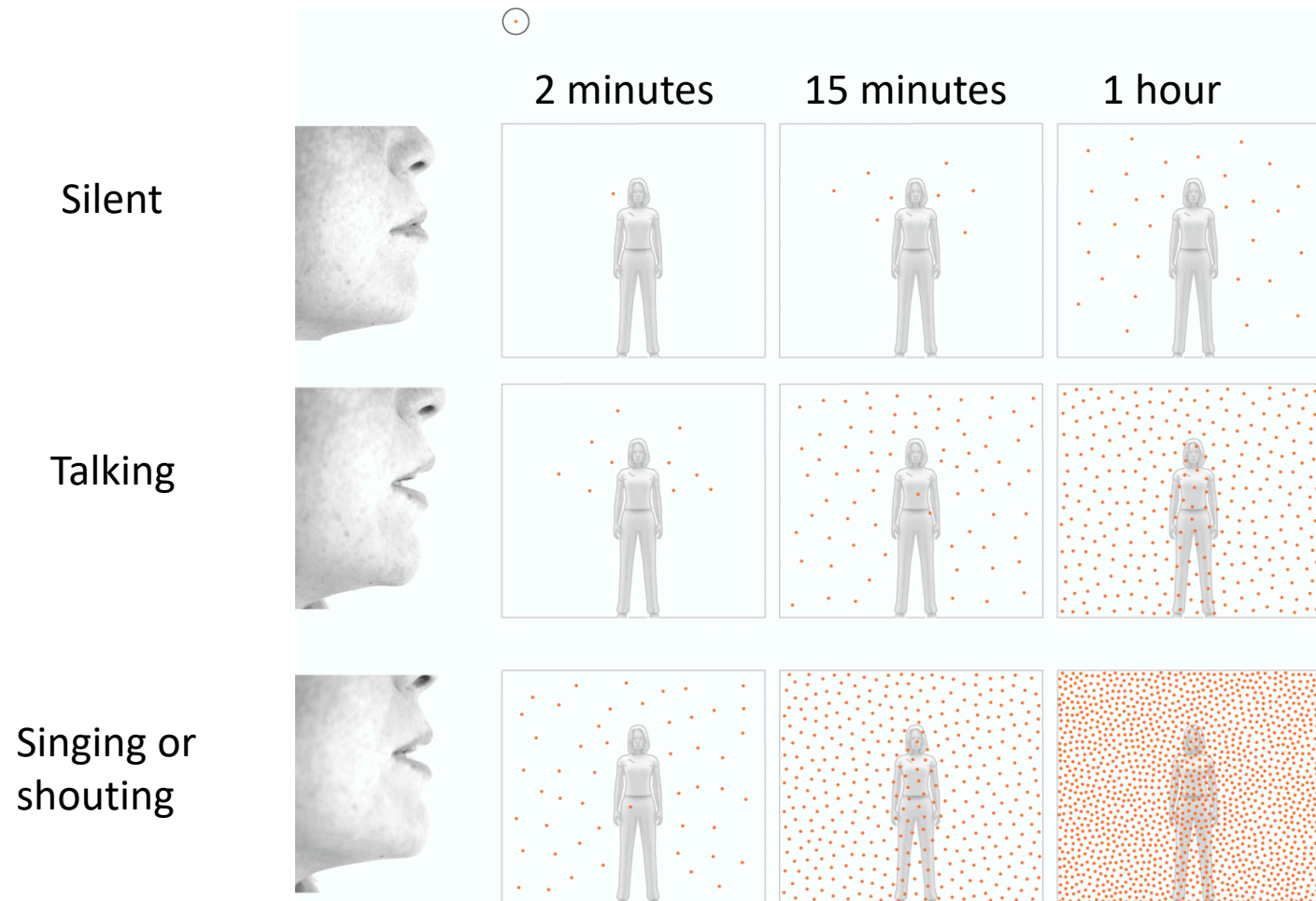
[Covid is Having a Devastating Impact on Children](#) – NBC News Dec. 15

[Schools for Health: Risk Reduction Strategies for Reopening Schools](#) – Harvard T.H. Chan School for Public Health

I include these to show the vast difference of viewpoints and policies that have been implemented throughout the world with regard to the pandemic and the current impacts the virus is having on children in particular

How COVID spreads



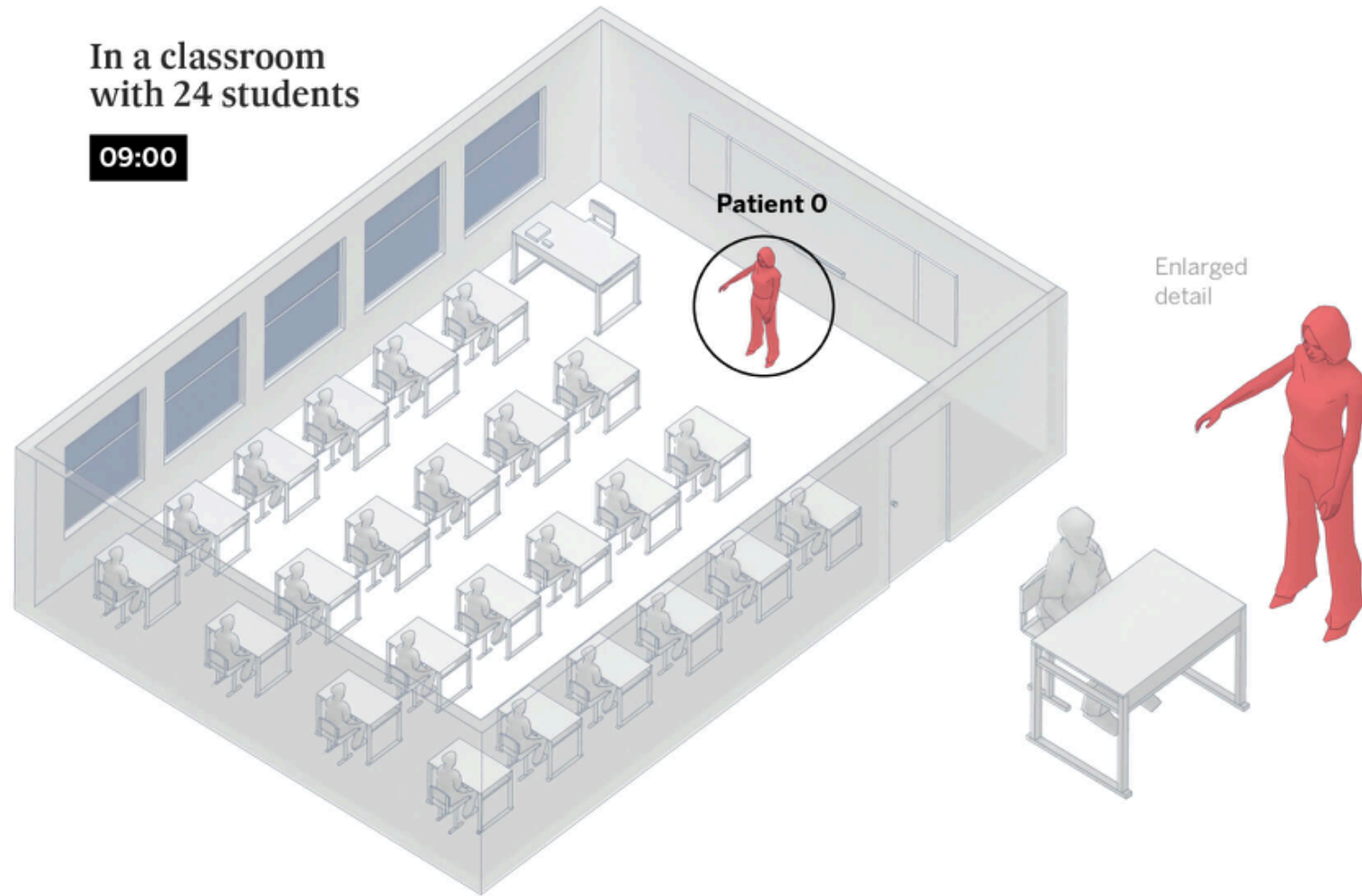


We emit **10 times** the number of particles when we are talking than we do when silent

We emit **50 times** the number of particles when we are singing or shouting than we do when silent

In the worst case scenario, shouting or singing in a closed space for an hour – a person with Covid-19 releases 1,500 infectious doses

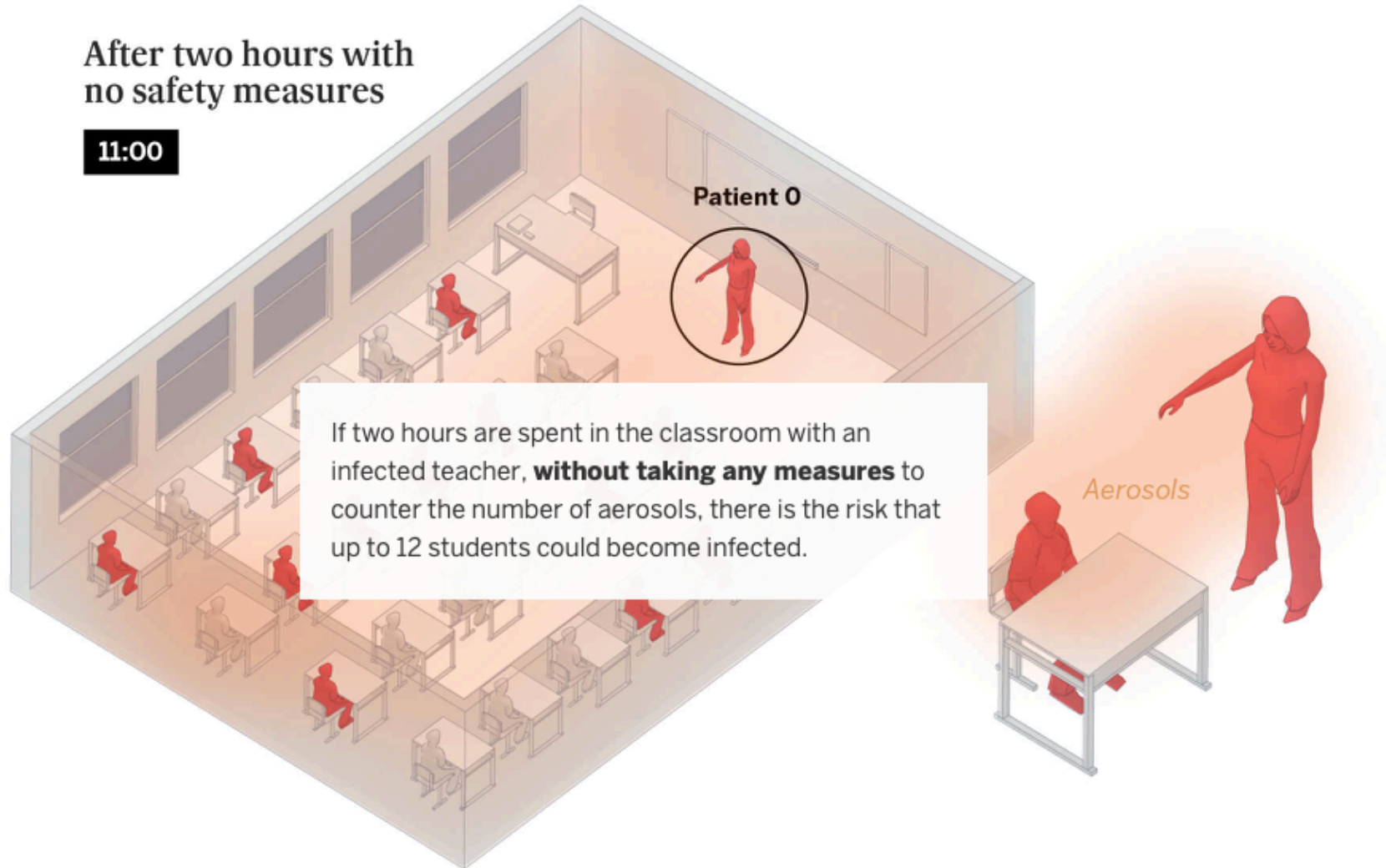
Simulation of spread in a classroom



No safety measures

After two hours with
no safety measures

11:00

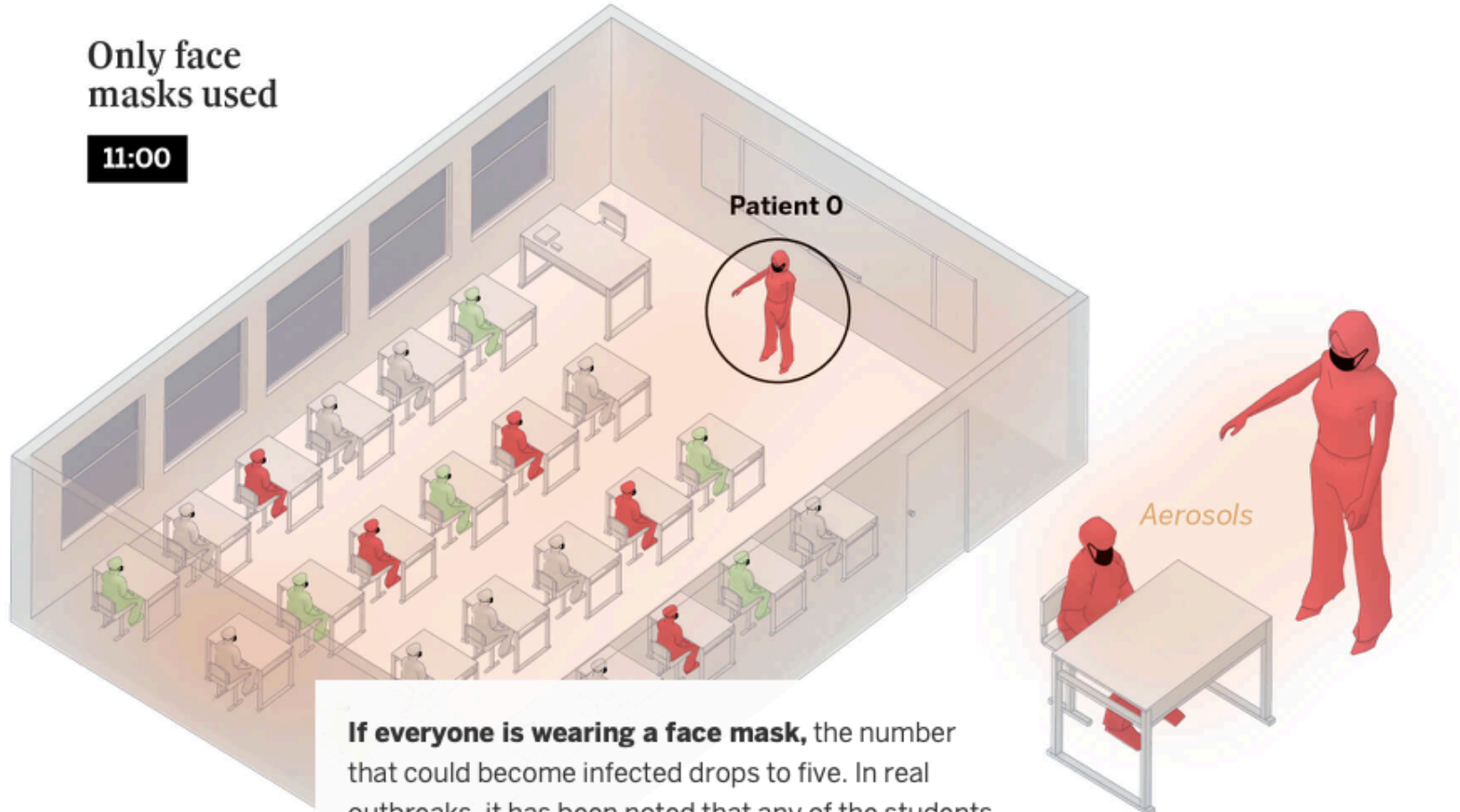


If two hours are spent in the classroom with an infected teacher, **without taking any measures** to counter the number of aerosols, there is the risk that up to 12 students could become infected.

With face masks

Only face masks used

11:00

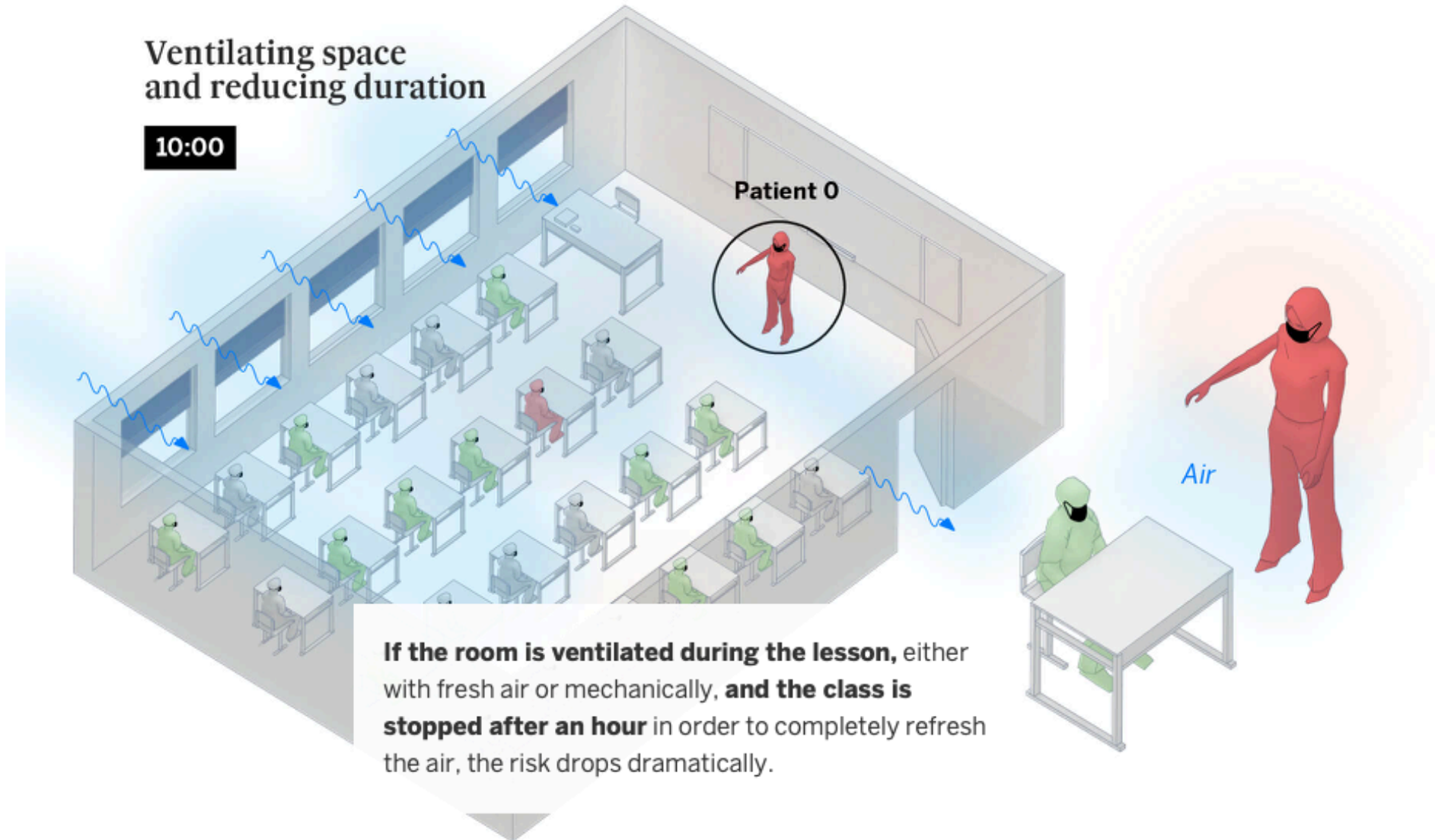


If everyone is wearing a face mask, the number that could become infected drops to five. In real outbreaks, it has been noted that any of the students could become infected irrespective of their proximity to the teacher as the aerosols are distributed randomly around the unventilated room.

With face masks and ventilation

Ventilating space
and reducing duration

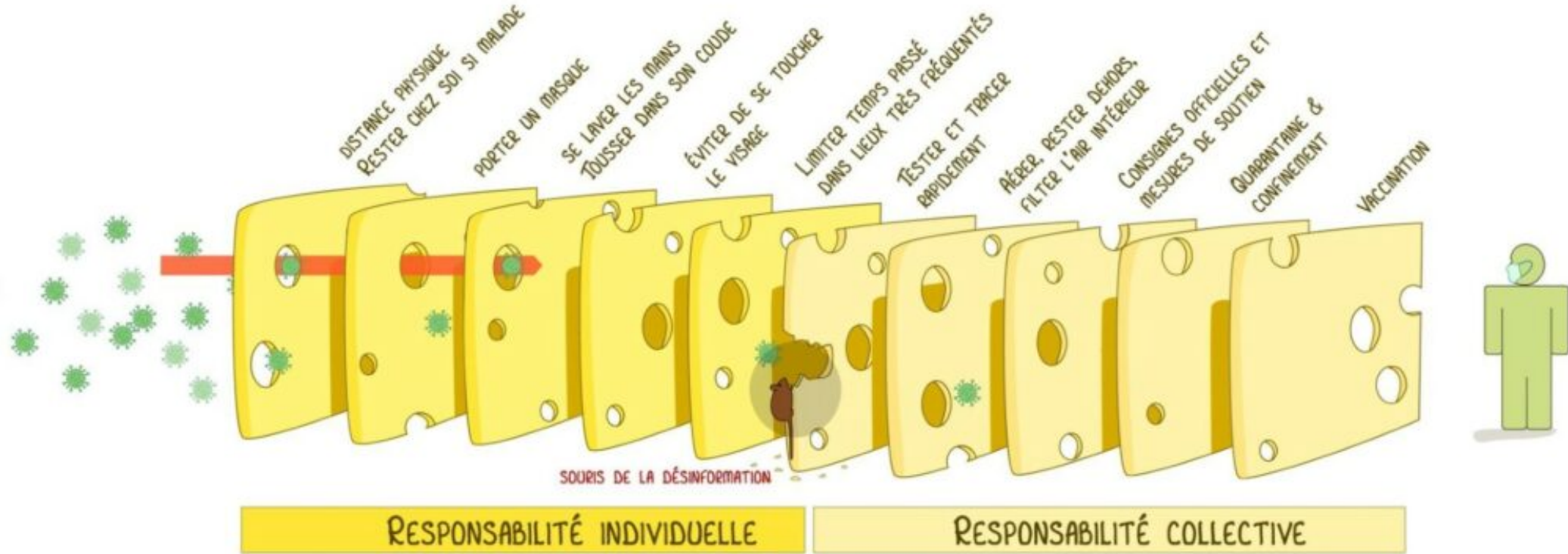
10:00



If the room is ventilated during the lesson, either with fresh air or mechanically, and the class is stopped after an hour in order to completely refresh the air, the risk drops dramatically.

Modèle de l'emmental

MODÈLE DE L'EMMENTAL : SE DÉFENDRE FACE À UNE PANDÉMIE VIRALE RESPIRATOIRE
OU POURQUOI UN SEUL TYPE D'INTERVENTION NE SUFFIT PAS À ARRÊTER LA CONTAGION



CHAQUE INTERVENTION (TRANCHE D'EMMENTAL) A SES LIMITES (TROUS).
CONJUGER LES INTERVENTIONS RÉDUIT LES RISQUES
LA DÉSINFORMATION LIMITE L'EFFICACITÉ GLOBALE.

IAN M. THACEY
VIRALOGYDOWNUNDER.COM
WITH THANKS TO JODY LANARD, KATHERINE ARDEN & THE UNI OF QLD
BASED ON THE SWISS CHEESE MODEL OF ACCIDENT CAUSATION, BY JAMES T REASON, 1990
VERSION 3.0 - TRAD FR @NACL2
UPDATE: 24OCT2020

- Guidance is changing CONSTANTLY for all sectors based on new evidence – information shared here will become outdated with time
 - Please refer to links on slides 2-3 for updated County numbers
- The information shared in these slides are only the guidelines that are required for reopening (including the challenges we will face in making the decision to reopen). FCSO has not written a reopening plan yet and many details are unknown.
- FCSO will continue to follow the trends, collect as much new, research-driven and evidence-based information around school reopening in the coming months
- In the meantime – please follow state and county guidelines to stay home when possible, do not mix with other groups in person outside your immediate family and consider whether you might decide to get the vaccine when it becomes available to you based on scientific evidence and risk assessment