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We know the best strategy to prevent the spread of coronavirus is to stay home. We know that if we can not stay home, it is best to social distance at least six feet. We know that when social distancing is unachievable, the best way to stop the spread is for everyone to wear masks.

When we go back to schools — which many parents and students desperately need, as distance learning is not an option for them² — the high density of schools will make social distancing impossible. We need to prepare ourselves to wear masks at schools. All of us. Faculty, staff, students, volunteers, and even visitors. If we do not take this health precaution, we're risking the lives of teachers who are bravely returning to school because they know many students need to be back in school.

Emerging evidence indicates that most children do not get the virus as easily as adults, and do not get as ill when they do have the virus.<sup>3</sup> Most children. Are we okay with some children getting the virus and becoming seriously ill or dying when it could be prevented by wearing masks?

In 2017, there were almost 700,000 students in Oklahoma enrolled in pre-k through 12th grade.<sup>4</sup> Current statistics indicate general population infection rates are around 14%.<sup>5</sup> If 14% of the student population in Oklahoma gets infected, that's 98,000 infected kids. Of those infected kids, these are the chances they'll experience severe or critical illness<sup>6</sup>:

- 7% of 1-5 year olds
- 4% of 6-10 year olds
- 3% of 16+ year olds

If we average this chance out to 4.6%, that's 4,508 severely sick kids, some of whom may die. This does not include children who might become ill or die from the mysteriously related MIS-C disease. We are also still investigating the long-term effects for those who survive COVID-19.8

#### Science is a Process

At first, doctors thought the virus spread purely through the air, making masks trivial. We know more now. Further research has indicated that the virus is spread through respiratory droplets.10 With the size of droplets being much larger than air, masks are a necessary preventative measure to keep a person's sneeze, cough, or even breath (yes, there are droplets in your breath!) contained to themselves. In Israel, schools decided to open after determining the virus had been defeated-only reporting 10 cases per day. Even with these few cases, opening had detrimental effects leading to 1,500 new cases per day. In contrast, some countries have found success in reopening their schools, such as Vietnam and Denmark. What was the difference? Masks.10

Ideally, everyone would have a surgical-grade mask, but hospitals need those most right now.¹ Yet we are not hopeless or helpless. Even homemade face coverings greatly reduce the risk of transmission when worn properly (over the mouth and nose).9

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who should wear a mask at school? Every person who is two and older should be wearing a mask. This includes all students, teachers, staff, and guests. All humans on campus. The exception would be anyone who cannot remove their mask without assistance or those with severe breathing complications. (Note: children under two are still at risk for catching COVID-19; they don't have to wear masks because they likely can't put a mask on and take a mask off without help.)



When should people at schools wear a mask? Masks should be worn whenever a person cannot be at least six feet away from all other people. Masks should even be worn in the restroom, unless the restroom is ventilated very well and can reasonably be expected to have completely cycled fresh air into the room between uses. Understandably, people will have to pull their masks down to eat or drink. Inquire into your school's plan for this necessity.

How do I get a little kid to wear a mask? Show them that their heroes wear masks! Heroes with super powers have really cool masks. And everyday heroes wear masks, like firefighters, doctors, nurses, dentists, even welders building super cool things like motorcycles! Make it an age-appropriate health lesson. Let kids know how respiratory germs are spread and why masks that we make at home lower the risk of accidentally getting their friends and teachers sick.

- Scholastic resources
- National Science Teaching Association resources



Make it your first classroom craft. There are plenty of no-sew options for making masks. For older kids, the patterns are easy to cut, assemble, and sew, with or without a sewing machine. Ask students to bring an old t-shirt from home to turn into a couple of masks. Let students decorate their masks themselves or bring their own fabric. Watch them wear their creations with pride!

Here are just a few of the many great tutorials for mask projects you can find online:

- No-sew bandana-and-rubber-band mask
- o Gaiter style
- String-ties style

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How do I ensure every student has a mask? Some families may not be able to afford masks or may not believe in the health precaution of wearing a mask. Students from those families (and students sitting near those students) still deserve protection.

- Use state and/or federal emergency funds (money from CARES Act) to buy masks for your school.
- Many groups are willing to donate materials or time to make masks. If you know of a group that is great at turning out baby blankets every time there's a new infant in the community, ask them if they'd be willing to make masks for your school.
- Ask your PTA/PTO leaders to supply masks for your school, or to hold a fundraiser with the goal of supplying masks.
- Many community groups and businesses are proud of their local schools, and are happy to donate money, supplies, or time to help address school needs. But they won't know how to help if you don't ask.

We can do this, Oklahoma. We can stop the spread of COVID-19 by staying home when we can, social distancing when we can't, and wearing masks to protect the people around us. By making sure everyone is wearing a mask at school, we can do our absolute best to bring students and teachers back safely.



### Resources

Scholastic resources: https://classroommagazines.scholastic.com/support/coronavirus.html
National Science Teaching Association resources: https://learningcenter.nsta.org/mylibrary/collection.aspx?id=WVz33oELt20\_E

No-sew bandana-and-rubber-band mask: https://www.youtube.com/watch?v=7TasM4uRj74 Gaiter style: https://www.youtube.com/watch?v=te1HBOb3j88 String-ties style: https://www.nytimes.com/article/how-to-make-face-mask-coronavirus.html

#### References

<sup>1</sup> Centers for Disease Control and Prevention (CDC). How to Protect Yourself & Others. https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html

<sup>2</sup> The River Hudson Valley News. Remote Learning Doesn't Support Special Education Learners. https://therivernewsroom.com/remote-learning-special-education-coronavirus/

<sup>3</sup> CDC. School Decision-Making Tool for Parents, Caregivers, and Guardians. https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/decision-tool.html

 $^4\ Oklahoma\ State\ Department\ of\ Education.\ Student\ enrollment\ in\ Oklahoma\ public\ schools\ continues\ to\ increase\ in\ 2017.\ https://sde.ok.gov/newsblog/2017-12-13/student-enrollment-oklahoma-public-schools-continues-increase-2017$ 

Mayo Clinic. COVID-19 (coronavirus) in babies and children. https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/coronavirus-in-babies-and-children/art-20484405

 $^6$  Science Daily. Initial COVID-19 infection rate may be 80 times greater than originally reported. https://www.sciencedaily.com/releases/2020/06/200622141143.htm

Mayo Clinic. Multisystem inflammatory syndrome in children (MIS-C) and COVID-19. https://www.mayoclinic.org/diseases-conditions/coronavirus/in-depth/mis-c-in-children-covid-19/art-20486809

8 University of California San Francisco. We Thought It Was Just a Respiratory Virus. https://www.ucsf.edu/magazine/covid-body

9 National Library of Medicine. Testing the efficacy of homemade masks: would they protect in an influenza pandemic? https://pubmed.ncbi.nlm.nih.gov/24229526/

<sup>10</sup> American Institute of Physics. Visualizing the effectiveness of face masks in obstructing respiratory jets. https://aip.scitation.org/doi/10.1063/5.0016018

 $^{11}$  Vox. The key lesson from school openings abroad: Contain the virus. https://www.vox.com/2020/7/15/21324082/coronavirus-school-reopening-trump-children-safety

<sup>12</sup> PBS. Public bathrooms carry coronavirus risks. Here's how to be careful. https://www.pbs.org/newshour/health/public-bathrooms-carry-coronavirus-risks-heres-how-to-be-careful