IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF IOWA

THE ARC OF IOWA et al.,

Plaintiffs,

v.

KIM REYNOLDS et al.,

Defendants.

Case No. 4:21-cv-264

SUPPLEMENTAL DECLARATION OF DR. MEGAN SRINIVAS

I, Dr. Megan Srinivas, declare as follows under penalty of perjury pursuant to 28 U.S.C. § 1746:

1. I provide this supplemental affidavit in further support of Plaintiffs' Motion for Temporary Injunctive Relief.
2. Following this Court's decision granting the temporary restraining order, approximately 24 Iowa school districts have adopted universal mask mandates.[1]
3. As of September 26, 2021, the following school districts have adopted mask mandates:
    a. The Des Moines Independent Community School District has implemented a mask mandate that includes all students in grades k-12. [2]
    b. The Decorah Community School District has implemented a mask mandate that includes all students in grades k-6.[3]

[1] *COVID-19 in Our Schools: Which Districts Have Mandated Masks after the ACLU injunction*, Iowa COVID-19 Tracker, https://iowacovid19tracker.org/covid-19-in-our-schools/ (last visited Sept. 24, 2021).
[2] *Des Moines Public Schools Will Reinstate Mask Mandate*, Des Moines Public Schools (Sept. 14, 2021), https://www.dmschools.org/news_release/des-moines-public-schools-will-re-instate-mask-mandate/ (last accessed Sept. 23, 2021).
[3] *Mask mandate in Decorah Schools starts next Monday,* Decorah News (Sept. 20, 2021), https://decorahnews.com/news/2967/mask-mandate-in-decorah-schools-starts-next-monday/#:~:text=The%20Decorah%20Community%20School%20District,starting%20next%20Monday%2C%20the%2027th. (last accessed Sept. 23, 2021).

c. The Iowa City Community School District has implemented a mask mandate that includes all students in grades k-12.[4]

d. The Linn-Marr Community School District has implemented a mask mandate that includes all students in grades k-6.[5]

e. The Davenport Community School District has implemented a mask mandate that includes all students in grades k-12.[6]

f. The Waterloo Community School District has implemented a one-week mask mandate that includes all students in grades k-6.[7]

g. The Ankeny Community School District has implemented a mask mandate that includes all students in grades k-12.[8]

h. The Johnston Community School District has implemented a mask mandate that includes all students in grades k-12.[9]

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[4] Kate Payne, *Iowa City School Board Unanimously Approves Mask Mandate*, Iowa Public Radio (Sept. 14, 2021), https://www.iowapublicradio.org/ipr-news/2021-09-14/iowa-city-school-board-unanimously-approves-mask-mandate?utm_source=social&utm_medium=Twitter&utm_campaign=IPR_Socials_Shares (last accessed Sept. 23, 2021).

[5] Michael Howell, *Linn-Mar school board passes new mask requirement*, CBS 2 Iowa (Sept. 16, 2021), https://cbs2iowa.com/news/local/linn-mar-school-board-passes-new-mask-requirement (last accessed Sept. 23, 2021).

[6] KWQC Staff, *Davenport Community Schools instituting mask mandate, begins Monday*, KWQC (Sept. 16, 2021), https://www.kwqc.com/2021/09/16/davenport-community-schools-instituting-mask-mandate-begins-monday/ (last accessed Sept. 23, 2021).

[7] Daniel Perreault, *Cedar Falls, Waterloo schools issue week-long mask mandate for some students*, KWWL Television Inc. (Sept. 17, 2021), https://kwwl.com/2021/09/17/cedar-falls-waterloo-schools-issue-week-long-mask-mandate-for-some-students/ (last accessed Sept. 23, 2021)

[8] *Tension-filled Ankeny School Board meeting ends with mask mandate set to begin Thursday*, KCCI (Sept. 22, 2021), https://www.kcrg.com/2021/09/22/tension-filled-ankeny-school-board-meeting-ends-with-mask-mandate-set-begin-thursday/ (last accessed Sept. 23, 2021).

[9] *Johnston School Board approves mask mandate with 4-3 vote*, KCCI (Sept. 21, 2021), https://www.kcci.com/article/johnston-school-board-approves-mask-mandate-with-4-3-vote/37682986# (last accessed Sept. 23, 2021).

i. The Cedar Rapids Community School District has implemented a mask mandate that includes all students in grades k-12.[10]

j. The Ames Community School District has implemented a mask mandate that includes all students in grades k-12.[11]

k. The Urbandale Community School District has implemented a mask mandate that includes all students in grades k-12.[12]

l. The West Burlington Community School District has implemented a mask mandate that includes all students in grades k-12.[13]

m. The West Des Moines Community School District has implemented a mask mandate that includes all students in grades k-12.[14]

n. The Grinnell-Newburg Community School District has implemented a mask mandate that includes all students in grades k-12.[15]

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[10] *Cedar Rapids Community School District to Reinstate Mask Mandate,* KCRG (Sept. 14, 2021), https://www.kcrg.com/2021/09/14/cedar-rapids-community-school-district-reinstate-mask-mandate/ (last accessed Sept. 23, 2021).

[11] Phillip Sitter, *Ames Schools to Reimpose Mask Mandate Friday Following Federal Court Order*, Ames Tribune (Sept. 15, 2021), https://www.amestrib.com/story/news/education/2021/09/15/ames-school-district-covid-mask-mandate-after-court-ruling-iowa-ban/8338670002/ (last accessed Sept. 23, 2021).

[12] Taj Simmons, *Urbandale School Board Votes 4-3 in Favor of Requiring Masks for Students and Staff Members*, WHO 13 Des Moines (Sept. 15, 2021), https://who13.com/news/coronavirus/iowa-impacts/urbandale-school-board-votes-4-3-in-favor-of-requiring-masks-for-students-and-staff-members/ (last accessed Sept. 23, 2021).

[13] Brad Vidmar, *Inside the West Burlington School Board Meeting that Ended with a Reinstated Mask Policy*, The Hawk Eye (Sept. 14, 2021), https://www.thehawkeye.com/story/news/2021/09/14/covid-19-iowa-west-burlington-schools-reinstitute-face-mask-mandate-federal-judge/8342256002/ (last accessed Sept. 23, 2021).

[14] Sarah Kay LeBlanc, *West Des Moines Joins Urbandale and Des Moines Schools in Mandating Masks*, Des Moines Register (Sept. 16, 2021), https://www.desmoinesregister.com/story/news/education/2021/09/16/west-des-moines-school-board-meeting-iowa-mask-mandate-covid-19-urbandale-ia/8327009002/ (last accessed Sept. 23, 2021).

[15] Janet Stutz, *Superintendent's Weekly Update: September 17, 2021*, Grinnell-Newberg Community Schools (Sept. 17, 2021), https://www.grinnell-k12.org/vnews/display.v/ART/57c7ad7563677 (last accessed Sept. 23, 2021).

o. The Muscatine Community School District has implemented a mask mandate that includes all students in grades k-6.[16]

p. The Cedar Falls Community School District has implemented a one-week mask mandate that includes all students in grades k-6.[17]

q. The Burlington Community School District has implemented a mask mandate that includes all students in grades k-12.[18]

r. The Fort Dodge Community School District has implemented a mask mandate that includes all students in grades k-4.[19]

s. The Fairfield Community School District has implemented a mask mandate that includes all students in grades k-12.[20]

t. The Marshalltown Community School District has implemented a mask mandate that includes all students in grades k-12.[21]

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[16] David Hotle, *Muscatine Schools Latest to Enact Mask Mandate*, The Dispatch-Argus (Sept. 17, 2021), https://qconline.com/muscatine/news/local/muscatine-schools-latest-to-enact-mask-mandate/article_f060f99c-7ebd-525d-9888-1fd252d7a221.html?utm_campaign=snd-autopilot&utm_medium=social&utm_source=undefined_Dispatch_Argus (last accessed Sept. 23, 2021).

[17] Daniel Perreault, *Cedar Falls, Waterloo Schools Issue Week-Long Mask Mandate for Some Students*, KWWL (Sept. 17, 2021), https://kwwl.com/2021/09/17/cedar-falls-waterloo-schools-issue-week-long-mask-mandate-for-some-students/ (last accessed Sept. 23, 2021).

[18] Marci Clark, *First Week of Mask Mandate at Muscatine and Burlington Schools*, KWQC (Sept. 22, 2021), https://www.kwqc.com/2021/09/22/first-week-mask-mandate-muscatine-burlington-schools/ (last accessed Sept. 23, 2021).

[19] Todd Magel, *Mask Mandate Back for Many Fort Dodge Students*, KCCI (Sept. 20, 2021), https://www.kcci.com/article/mask-mandate-back-for-many-fort-dodge-students/37669547# (last accessed Sept. 23, 2021).

[20] James Jennings, *Fairfield Schools Again Require Face Masks*, Southeast Iowa Union (Sept. 22, 2021), https://www.southeastiowaunion.com/news/fairfield-schools-again-require-face-masks/ (last accessed Sept. 23, 2021).

[21] *Updated MCSD Face Mask Policy*, Marshalltown Community School District (Sept. 22, 2021), https://www.marshalltown.k12.ia.us/media/cms/Mask_mandate_for_Pk6_students_and_s_2081BD8B9CB04.pdf (last accessed Sept. 23, 2021).

u. The Mount Vernon Community School District has implemented a mask mandate that includes all students in grades k-6.[22]

v. The Boone Community School District has implemented a mask mandate that includes all students in grades k-8.[23]

w. The Van Buren Community School District has implemented a mask mandate that includes all students in grades k-12.[24]

x. The College Community School District has implemented a mask mandate that includes all students in grades k-6.[25]

4. At this time approximately 30% of students in Iowa are protected by a mask mandate at their school.

5. It is reassuring to see school districts across the state following CDC guidelines and implementing mask mandates in schools in the last ten days.

6. It is clear that mask requirements in schools are not only effective, but are in fact vital to both protecting student health and granting educational stability. A CDC study released on September 24th, 2021 analyzed the impact of universal masking in Arizona's K-12 schools from July-August 2021. Schools without mask requirements were 3.5 times more likely to have a COVID-19 outbreak as compared to those with mask requirements.[26]

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[22] Jacob Strom, *Mount Vernon School Board Approves Mask Mandate for Pre-Kindergarten – 6th Grade*, Iowa's News Now (Sept. 21, 2021), https://cbs2iowa.com/news/local/mount-vernon-school-board-approves-mask-mandate-for-pre-kindergarten-6th-grade (last accessed Sept. 23, 2021).

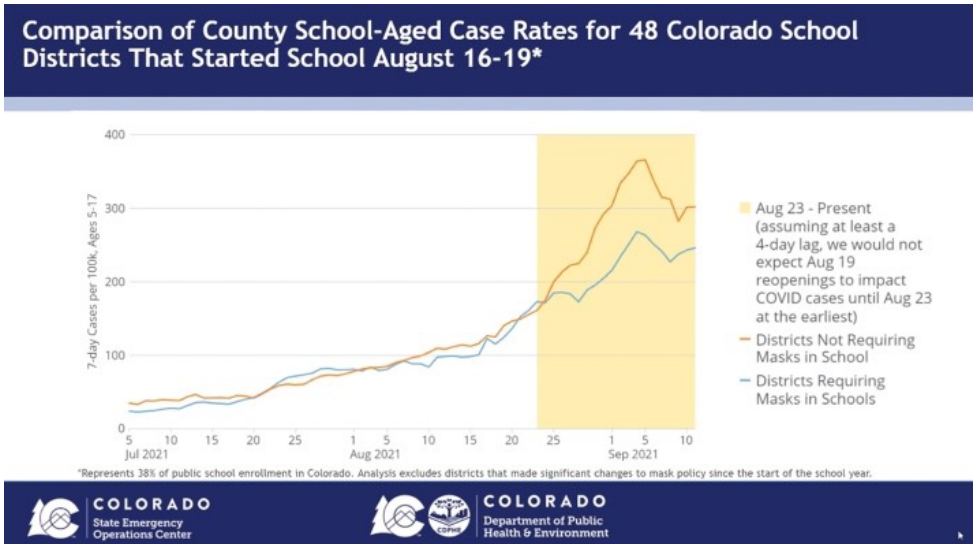
[23] Phillip Sitter, *Boone's school board votes 3-2 to implement mask mandate, following court order,* Ames Tribune (Sept. 23, 2021), https://www.amestrib.com/story/news/education/2021/09/23/boone-school-board-implements-iowa-covid-mask-mandate-kim-reynolds/5831015001/ last accessed Sept. 23, 2021).

[24] Beth Waldon, *Van Buren CSD Implements Mask Mandate*, KTVO, (Sept. 22, 2021), https://ktvo.com/news/local/van-buren-csd-implements-mask-mandate (last accessed Sept. 23, 2021).

[25] Michael Howell, *College Community Schools Now Have Mask Mandate for Kindergarten – 6th Grade*, Iowa's News Now (Sept. 21, 2021), https://cbs2iowa.com/news/local/college-community-schools-now-have-mask-mandate-for-pre-k-6th-grade (last accessed Sept. 23, 2021).

[26] Jehn M, McCullough JM, Dale AP, et al., *Association Between K–12 School Mask Policies and School-Associated COVID-19 Outbreaks — Maricopa and Pima Counties, Arizona, July–August 2021*, Morbidity & Mortality Weekly Rep. (Sept. 24,2021),

7. The Colorado Department of Public Health and Environment found similar results. The 75% of schools in Colorado with a mask requirement had significantly lower rates of COVID-19 cases than those without a mask requirement. Case rates in the non-masking districts were significantly higher — about 20% higher — than the rates in the districts with masks policies.[27]



8. Similarly, a CDC report published September 24, 2021, examined county-level transmission during the first two weeks of school. COVID-19 pediatric case rates were significantly lower in counties with school mask requirements (16.32 cases per 100,000/day) than in counties without masks requirements (34.85 cases per 100,000/day).[28]

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https://www.cdc.gov/mmwr/volumes/70/wr/mm7039e1.htm?s_cid=mm7039e1_w&fbclid=IwAR0N0ty54XuyI6G5B1DoWPhekvgXKOxPfQH9Jl-AtuM8CRmgYQup37CuYws.

[27] John Ingold, *Colorado schools that require masks have lower coronavirus case rates, state says Data also show a correlation between higher vaccination rates for kids and lower rates of COVID-19,* Colorado Sun Times (Sept. 23, 2021), https://coloradosun.com/2021/09/23/coronavirus-rates-school-mask-mandates/.

[28] Budzyn SE, Panaggio MJ, Parks SE, et al., *Pediatric COVID-19 Cases in Counties With and Without School Mask Requirements — United States, July 1–September 4, 2021*, Morbidity & Mortality Weekly Rep. (Sept. 24, 2021), https://www.cdc.gov/mmwr/volumes/70/wr/mm7039e3.htm?s_cid=mm7039e3_w

9. Many Iowa hospitals are currently at resource capacity, leaving both COVID and non-COVID patients with less than optimal care due to an overburdened health system. And case rates are still on an upward trajectory. The CDC study above demonstrates that simple mitigation with a school mask requirement can significantly help reduce the demand on local health care systems.
10. Stable in-person learning is vital for childhood development. Between August 1 and September 17, 2021, 1,800 schools nationwide have had closures due to COVID-19 outbreaks, impacting the education and well-being of 933,000 students.[29] Universal masking in schools is one of the most important mitigation strategies that can be used to prevent closures and maintain a stable learning environment.
11. Authorization for vaccinations for children under twelve is not likely until at least mid- or late October, at the earliest. Even after the authorization, there is a delay until the vaccinees are administered to children, because of the time it takes to coordinate staffing, roll out and distribution.
12. In a recent study it was found that while vaccines are effective against the Delta variant, infection risk remains elevated among unvaccinated persons in schools. As a result, in addition to vaccination, strict adherence to multiple nonpharmaceutical prevention strategies, including masking, are important to ensure safe school instruction.[30]

[29] Parks SE, Zviedrite N, Budzyn SE, et al., *COVID-19–Related School Closures and Learning Modality Changes — United States, August 1–September 17, 2021*, Morbidity & Mortality Weekly Rep. (Sept. 24, 2021), https://www.cdc.gov/mmwr/volumes/70/wr/mm7039e2.htm?s_cid=mm7039e2_w.

[30] Tracy Lam-Hine et al., *Outbreak Associated with SARS-CoV-2 B.1.617.2 (Delta) Variant in an Elementary School — _Marin County, California, May–June 2021*, Morbidity & Mortality Weekly Rep. (Sept. 3, 2021), https://www.cdc.gov/mmwr/volumes/70/wr/pdfs/mm7035e2-H.pdf.

13. As a result, even once the vaccination is approved for children under 12, vaccination alone is likely not sufficient to control spread. We must continue implementing other mitigation strategies, such as masking, alongside vaccination.
14. I have been asked to give my professional medical opinion on the State's representation that masking may cause children to receive an inadequate amount of oxygen and breathe in germs and that masking in schools is not supported by the WHO guidance.
15. Simply stated, there are no studies to support this claim, and it is not medically or scientifically supported.
16. In fact, the one study that was previously used in support of such claims has since been retracted. That study had reported unacceptably high levels of carbon dioxide by German standards in air inside masks worn by children in a laboratory environment. In the retraction notice, the journal editors cited numerous scientific issues, and questioned the validity of the study's conclusions.[31]
17. I have also been asked to provide my professional opinion regarding the State's citation to the interim WHO guidance for the proposition that schools should not mandate masking.[32] In my professional opinion, the WHO guidance does not support the state's conclusion that schools should not follow current public health guidance for universal masking in schools to reduce the transmission of COVID-19.
18. First, this WHO guidance which the State references is from August 2020 and was issued specifically an interim guidance. As we are all aware, the circumstances surrounding

[31] Christakis D, Fontanarosa PB. Notice of Retraction. Walach H, et al. Experimental Assessment of Carbon Dioxide Content in Inhaled Air With or Without Face Masks in Healthy Children: A Randomized Clinical Trial. *JAMA Pediatr*. Published online June 30, 2021. *JAMA Pediatr*. 2021;175(9):e213252. doi:10.1001/jamapediatrics.2021.3252

[32] *See* World Health Organization, *Advice on the Use of Masks for Children in the Community in the Context of COVID-19*, Aug. 21, 2020, *available at* https://perma.cc/TTQ8-PNHU

COVID-19, and our understanding of the spread of the virus, have changed drastically since that time, especially with the spread of the Delta variant.

19. More recently, in August 2021, the CDC has recommended that children return to school with masks.[33] The CDC guidance is more recent than the WHO Interim guidance, and it considers the increased spread with the Delta strain.

20. The CDC guidance is also not inconsistent with the WHO guidance. The WHO has highlighted that one of the factors to consider when deciding if children should mask in school is the intensity of transmission in the area where the child is. The transmission rates in Iowa, and across much of the country, are very high. This supports masking in schools.

21. Iowa is currently facing its highest rate of COVID-19 cases and related hospitalizations in 2021.[34]

22. The latest data indicates that over the last week, there have been an average of almost 1,800 new cases per day, a rate 50 percent higher than at the time of my earlier declaration.[35]

23. In the last 14 days, COVID-19 cases have increased in the state of Iowa by 38%, and hospitalizations have increased by nine percent. [36]

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[33] *Guidance for COVID-19 Prevention in K-12 Schools*, Ctrs. for Disease Control & Prevention (Aug. 4, 2021 update), https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html (last visited Sept. 24, 2021).

[34] Tim Webber and Nick Coltrain, *How long can the health care system hold up?' Iowa sets new 2021 high for COVID hospitalizations,* Des Moines Reg. (Sept. 22, 2021), https://www.desmoinesregister.com/story/news/health/2021/09/22/covid-19-iowa-state-reaches-2021-high-hospitalizations-delta-variant-cases-deaths/5804666001/.

[35] *Tracking Coronavirus in Iowa: Latest Map and Case Count*, N.Y. Times (Sept. 25, 2021), https://www.nytimes.com/interactive/2021/us/iowa-covid-cases.html.

[36] *Id.*

24. On Wednesday, Sept 22, 2021, more than 3,000 additional children were reported positive for COVID-19— more than a quarter of the state's 12,163 new reported cases.[37] This percentage represents a record high.[38]

25. I am familiar with a statewide compendium of COVID-19 case counts called the Iowa COVID-19 Tracker (https://iowacovid19tracker.org/), which compiles data from dashboards maintained by each school district. I am also aware that The Iowa Department of Education tracks the number of students enrolled in each school district in Iowa (https://educateiowa.gov/data-reporting/education-statistics). I am also familiar with the data published by school boards, reporting incidence of COVID-19.

26. Based on this data, it appears that as of September 25, 2021:

    a. Eleven school districts in Iowa have reported more positive cases thus far during the 2021-2022 school year than during the entire 2020-2021 school year. These school districts are Alburnett, Anamosa, Woodbine, Waterloo, Vinton-Shellsburg, South Winneshiek, South Hamilton, Sioux City, Muscatine, Chariton, and Central City. These 11 districts represent 33,525 students, or 6.6% of all Iowa public school students.

    b. Sixteen additional school districts in Iowa have recorded at least 50% of the COVID-19 cases that they reported during the entire 2020-2021 school year. These school districts are: College, Spencer, Shenandoah, Pella, Mount Vernon, Mid-Prairie, Marshalltown, Marion, Lone Tree, Linn-Mar, Johnston, Independence,

[37] Tim Webber, *Iowa sets new 2021 high for COVID hospitalizations — with new reported cases not far behind*, Des Moines Reg. (Sept. 22, 2021), https://www.desmoinesregister.com/story/news/health/2021/09/22/covid-19-iowa-state-reaches2021-high-hospitalizations-delta-variant-cases-deaths/5804666001/.
[38] *Id.*

Greene, Des Moines, Dallas Center-Grimes, and Cedar Rapids. With the 11 districts referenced above, these 27 districts represent 124,419 students or 24.55% of all Iowa public school students.

27. In the case of a state like Iowa, with such rampant spread, the benefits of children wearing masks is significantly higher than any potential harm associated with mask wearing.

28. The CDC recommends universal indoor masking for all students, staff, teachers, and visitors to K-12 schools, regardless of vaccination status. I am glad to see a number of school districts across Iowa moving in this direction and I believe this must continue in order to contain the spread of COVID-19 in Iowa.

I swear under the penalty of perjury under the laws of the United States that the foregoing is true and correct to the best of my knowledge.

Dated this _26_ day of September 2021, at _Des Moines__, Iowa.

Megan L. Srinivas

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Megan L. Srinivas

CERTIFICATE OF SERVICE

I hereby certify that on this date, I electronically filed the foregoing paper with the Clerk of Court by using the CM/ECF system.

Date: 9/26/2021

/s/Rita Bettis Austen
Rita Bettis Austen