

TETON DISTRICT HEALTH OFFICER

PUBLIC HEALTH ORDER #21-5

ORDER REQUIRING INDIVIDUALS WITHIN TETON COUNTY, WYOMING TO WEAR FACE COVERINGS IN CERTAIN PLACES, WITH EXCEPTIONS

WHEREAS, Dr. Travis Riddell, serves as the Teton District Health Officer pursuant to Wyoming Statute § 35-1-306(a); and

WHEREAS, Wyoming Statute § 35-1-240(a)(i), (ii), and (iii) gives the power to the Wyoming Department of Health, through the State Health Officer or under her direction and supervision, or through other employees of the Department of Health to investigate and control the causes or epidemic affecting the public health, and to establish, maintain and enforce isolation and quarantine, and in pursuance thereof, and for such purposes only, to exercise such physical control over property and over the people within this state as the State Health Officer may find necessary for the protection of the public health; and

WHEREAS, as evidenced by her signature below, Alexia Harrist, MD, Ph.D., the Wyoming State Health Officer has reviewed and does hereby authorize the issuance of this Order by Dr. Riddell, the Teton District Health Officer, and the State Health Officer, Dr. Harrist, also specifically makes the finding that this Order is necessary for the protection of the public health in Teton County; and

WHEREAS, COVID-19 was first detected in Wuhan, China in 2019, and since then has spread across the globe including the United States; and

WHEREAS, the World Health Organization declared COVID-19 a worldwide pandemic on March 11, 2020; and

WHEREAS, on March 13, 2020, the President of the United States declared a national emergency concerning the coronavirus, specifically stating that “in December 2019 a novel (new) coronavirus known as SARS-Co V-2 was first detected in Wuhan, Hubei Province, People’s Republic of China, causing outbreaks of the corona virus disease (COVID-19) that has now spread globally. The spread of COVID-19 within our Nation’s communities threatens to strain our Nation’s healthcare systems and cause great economic and social disruption. Additional measures are needed to successfully contain and combat the virus in the United States”; and

WHEREAS, on March 13, 2020, Wyoming Governor Mark Gordon declared a State of Emergency and Public Health Emergency in the State of Wyoming, stating that on March 11, 2020, an individual within the State of Wyoming tested presumptive positive for COVID-19; and

WHEREAS, Governor Gordon’s Declaration of a State of Emergency and Public Health Emergency directs the Wyoming Department of Health to take all appropriate and necessary actions, and that in the judgment of the Director of the Wyoming Department of Health, any actions necessary should be taken to provide aid to those locations where there is a threat or danger to public health, safety, and welfare; and

WHEREAS, a significant number of Wyoming citizens are at risk of serious health complications, including death, from COVID-19. Although most individuals who contract COVID-19 do not become seriously ill, people with mild symptoms, and even asymptomatic persons with COVID-19 place other vulnerable members of the public at significant risk; and

WHEREAS, the U.S. Centers for Disease Control and Prevention (CDC) have gathered peer-reviewed data throughout the pandemic¹ which have categorically demonstrated the safety and efficacy of masks including the following experimental and epidemiologic evidence:

- Masks are primarily intended to reduce the emission of virus-laden droplets (“source control”), which is especially relevant for asymptomatic or presymptomatic infected wearers who feel well and may be unaware of their infectiousness to others, and who are estimated to account for more than 50% of transmissions.² Multi-layer cloth masks block release of exhaled respiratory particles into the environment,³⁻⁶ along with the microorganisms these particles carry.^{7,8} Cloth masks not only effectively block most large droplets (i.e., 20-30 microns and larger)⁹ but they can also block the exhalation of fine droplets and particles (also often referred to as aerosols) smaller than 10 microns;^{3,5} which increase in number with the volume of speech¹⁰⁻¹² and specific types of phonation.¹³ Multi-layer cloth masks can both block up to 50-70% of these fine droplets and particles^{3,14} and limit the forward spread of those that are not captured.^{5,6,15,16} Upwards of 80% blockage has been achieved in human experiments that have measured blocking of all respiratory droplets,⁴ with cloth masks in some studies performing on par with surgical masks as barriers for source control.^{3,9,14}
- Studies also demonstrate that cloth mask materials can reduce wearers’ exposure to infectious droplets through filtration, including filtration of fine droplets and particles less than 10 microns. Multiple layers of cloth with higher thread counts have demonstrated superior performance compared to single layers of cloth with lower thread counts, in some cases filtering nearly 50% of fine particles less than 1 micron.^{14,17-29}
- At least ten studies have confirmed the benefit of universal masking in community level analyses: in a unified hospital system,³⁰ a German city,³¹ two U.S. states,^{32,33} a panel of 15 U.S. states and Washington, D.C.,^{34,35} as well as both Canada³⁶ and the U.S.³⁷⁻³⁹ nationally. Each analysis demonstrated that, following directives from organizational and political leadership for universal masking, new infections fell significantly. Two of these studies^{34,35} and an additional analysis of data from 200 countries that included the U.S.⁴⁰ also demonstrated reductions in mortality. Another 10-site study showed reductions in hospitalization growth rates following mask mandate implementation³⁷. A separate series of cross-sectional surveys in the U.S. suggested that a 10% increase in self-reported mask wearing tripled the likelihood of stopping community transmission.⁴¹
- Investigations of “real world” COVID transmission events demonstrating the benefits of masks include:
 - An investigation of a high-exposure event, in which 2 symptomatically ill hair stylists interacted for an average of 15 minutes with each of 139 clients during an 8-day period,

- found that none of the 67 clients who subsequently consented to an interview and testing developed infection. The stylists and all clients universally wore masks in the salon as required by local ordinance and company policy at the time.⁴²
- In a study of 124 Beijing households with ≥ 1 laboratory-confirmed case of SARS-CoV-2 infection, mask use by the index patient and family contacts before the index patient developed symptoms reduced secondary transmission within the households by 79%.⁴³
 - A retrospective case-control study from Thailand documented that, among more than 1,000 persons interviewed as part of contact tracing investigations, those who reported having always worn a mask during high-risk exposures experienced a greater than 70% reduced risk of acquiring infection compared with persons who did not wear masks under these circumstances.⁴⁴
 - A study of an outbreak aboard the USS Theodore Roosevelt, an environment notable for congregate living quarters and close working environments, found that use of face coverings on-board was associated with a 70% reduced risk.⁴⁵
 - Investigations involving infected passengers aboard flights longer than 10 hours strongly suggest that masking prevented in-flight transmissions, as demonstrated by the absence of infection developing in other passengers and crew in the 14 days following exposure.^{46,47}
- Research supports that mask wearing has no significant adverse health effects for wearers. Studies of healthy hospital workers, older adults, and adults with COPD reported no change in oxygen or carbon dioxide levels while wearing a cloth or surgical mask either during rest or physical activity.⁵⁸⁻⁵⁰ Among 12 healthy non-smoking adults, there was minimal impact on respiration when wearing a mask compared with not wearing a mask; however, the authors noted that while some respiratory discomfort may have been present, mask use was safe even during exercise.⁵¹ The safety of mask use during exercise has been confirmed in other studies of healthy adults.⁵²⁻⁵⁴ Additionally, no oxygen desaturation or respiratory distress was observed among children less than 2 years of age when masked during normal play.⁵⁵ While some studies have found an increase in reports of dyspnea⁵⁶ (difficulty breathing) when wearing face masks, no physiologic differences were identified between periods of rest or exercise while masked or non-masked.⁵⁴

WHEREAS, six B.1.617.2 (Delta) variant cases in Wyoming have been detected in Teton County as of August 20, 2021.⁵⁷ The Delta variant is more infectious and leads to increased transmissibility when compared to other variants. As of August 6, 2021, the Delta variant is currently the predominant strain of the SARS-Co V-2 virus in the United States. The CDC has indicated that fully vaccinated people who are infected with the Delta variant are capable of transmitting the virus to others; and⁵⁸

WHEREAS, in line with the above evidence, the CDC on July 27, 2021, issued a recommendation that people, regardless of vaccination status, wear face coverings in public indoor

settings located in areas of substantial or high transmission of the COVID-19.⁵⁹ As of August 19, 2021, Teton County is determined by the CDC to be an area of high transmission; and⁶⁰

WHEREAS, the busiest commercial airport in Wyoming is in Teton County and proximal to two national parks: Grand Teton and Yellowstone National Park. Both Grand Teton and Yellowstone National Park report record visitations for July 2021. Therefore, additional new variants and COVID-19 cases in general are more likely to appear here relative to other areas in Wyoming; and

WHEREAS, there has been an increase in the number of COVID-19 cases throughout the month of August 2021. As of August 19, 2021 Teton County is averaging 13.57 new cases per day with 130 active cases. 56% of cases in the past two weeks were due to community spread. Since August 19, 2021, there have been 204 new resident cases out of 276 total confirmed cases reported in Teton County in the past 2 weeks. 53.3% of total confirmed cases are breakthrough cases (occurring in fully vaccinated individuals). It is expected that more cases will be diagnosed; and

NOW, THEREFORE, IT IS HEREBY ORDERED that persons within Teton County, Wyoming, shall wear Face Coverings as described below:

1. “Face Covering,” as used in this Order, means a covering made of cloth, fabric, or other soft or permeable material, without holes, that covers the nose and mouth and surrounding areas of the lower face.
2. “Business” means any business entity (retail or commercial) that employs or engages workers or volunteers.
3. Except as specifically exempted below, all members of the public must wear a Face Covering in the following situations:
 - a. When any person is inside any business or any government facility open to the public, including county and municipal buildings but excluding state/federal buildings.
 - b. When any person is obtaining services at, or visiting healthcare operations, including, but not limited to, hospitals, clinics, and walk-in health facilities, dentists, pharmacies, blood banks, other healthcare facilities, behavioral health providers, and facilities providing veterinary and similar healthcare services for animals.
 - c. When any person is riding on public transportation or paratransit, or while they are riding in a taxi, private car service, shuttle, tour, or ride-sharing vehicle. The driver shall also wear a Face Covering when passengers are in the vehicle.
4. K-12 schools including both private and public K-12 schools and postsecondary institutions shall require all students, teachers, school staff, and visitors (including parents, families, and members of the public) to wear face coverings indoors where 6 feet of

separation between individuals cannot be maintained. Individuals engaged in athletic activities or performances are exempted. Individuals who have an Individual Education Program (IEP) under Individuals with Disabilities Education Act, 20 U.S.C. § 1414, or an accommodation under Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. § 794, that would necessitate exempting the individual from wearing a Face Covering shall be exempted.

5. All businesses must post notices stating that Face Coverings are required in a clearly visible location at or near the entrance of the business.
6. All government facilities open to the public, specifically county and municipal buildings, but excluding state and federal buildings, must post notices stating that Face Coverings are required in a clearly visible location at or near the entrance of the building.
7. All employees, owners, and volunteers of businesses and employees and volunteers of government facilities open to the public, including county and municipal buildings but excluding state and federal buildings, shall wear Face Coverings at their business or government facility when they are within 6 feet of customers, clients, other staff/workers, or volunteers. They must also wear a Face Covering when working or volunteering in a space that could be visited by members of the public, such as by way of example, but not limited to: reception areas, hallways, grocery store aisles, service counters, public restrooms, cashier and checkout areas, waiting rooms, service areas, and other spaces that could be used by members of the public.
8. A Face Covering is not required under the following circumstances:
 - a. When a person is in a personal office (a single room) where others outside of that person's household are not present as long as the public does not regularly visit the room, but that individual must put on a Face Covering when they are within 6 feet of a client, customer, volunteer, worker, or other member of the public.
 - b. In a restaurant, coffee shop, bar, or other dining/drinking establishment once the individual has been seated.
 - c. Children who are under 3 years of age.
 - d. When a person is inside or obtaining services at a location engaged primarily in providing congregate care, residential health care, or shelter care, and the individual is engaged in activities not conducive to wearing a Face Covering, such as eating or drinking, or the individual is in an area of that facility that is not designed for community gathering, such as a sleeping area.
 - e. If a person has a medical condition, mental health condition, or disability that prevents him or her from wearing a Face Covering. This includes, by way of example, but is not limited to, persons with a medical condition for whom wearing a Face Covering could obstruct breathing or who are unconscious, incapacitated, or otherwise unable to remove a Face Covering without assistance. A person is not

required to provide any documentation demonstrating that the person cannot wear a Face Covering for any medical condition, mental health condition, or disability.

- f. Individuals who are hearing impaired, or communicating with an individual who is hearing impaired, where the ability to see the mouth is essential for communication.
- g. Individuals for whom wearing a Face Covering would create a risk to the individual related to their work, as determined by local, state, or federal workplace safety guidelines.
- h. Individuals who are obtaining a service involving the nose or face for which temporary removal of the Face Covering is necessary to perform the service.
- i. Individuals who are purchasing a product or receiving a service that requires identification may briefly remove a Face Covering as necessary, so that the retailer or service provider can verify identity.
- j. When engaged in exercise or athletic activities, or artistic performances.
- k. When law enforcement asks an individual to remove a Face Covering for identification purposes.

IT IS FURTHER ORDERED that the Teton District Health Officer may grant exceptions to this Order on a case-by-case basis after evaluating the request; and

IT IS FURTHER ORDERED that this Order shall become effective on August 26, 2021, and remain in effect through September 4, 2021, which is ten (10) days from entry of the Order. In the event that the CDC lists Teton County as an area of “low” or “moderate” transmission according to criteria established and data maintained by the CDC and published daily on the CDC’s COVID Tracker website, the requirements in this Order are temporarily suspended during the time period when Teton County is deemed “low” or “moderate” transmission.

IT IS FURTHER ORDERED that any business or person that violates this Order may be subject to criminal prosecution under Wyoming Statutes §§ 35-1-105 and 35-1-106.

DATED this ____ day of August, 2021.

Travis Riddell, M.D.
Teton District Health Officer

Authority to Issue Order

I, Alexia Harrist, MD, Ph.D., the Wyoming State Health Officer, hereby state that I have reviewed the above Order and hereby authorize, pursuant to Wyoming Statute §§ 35-1-227 and 35-1-240(a)(i), (ii), and (iii), the Teton District Health Officer to issue the above Order, in Teton County, Wyoming. As the State Health Officer, I specifically find that this Order is necessary for the protection of public health in Teton County. I will reassess the necessity of this Order as appropriate and in accordance with accepted epidemiological and medical standards.

Alexia Harrist, M.D., PhD
Wyoming State Health Officer

References

1. U.S. Centers for Disease Control and Prevention. Science Brief: Community Use of Cloth Masks to Control the Spread of SARS-CoV-2 Available: <https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/masking-science-sars-cov2.html> [accessed: 08/19/2021]
2. Johansson MA, Quandelacy TM, Kada S, et al. SARS-CoV-2 Transmission From People Without COVID-19 Symptoms. *JAMA Netw Open*. Jan 4 2021;4(1):e2035057. doi:10.1001/jamanetworkopen.2020.35057
3. Lindsley WG, Blachere FM, Law BF, Beezhold DH, Noti JD. Efficacy of face masks, neck gaiters and face shields for reducing the expulsion of simulated cough-generated aerosols. *Aerosol Sci Technol*. 2020; in press
4. Fischer EP, Fischer MC, Grass D, Henrion I, Warren WS, Westman E. Low-cost measurement of face mask efficacy for filtering expelled droplets during speech. *Sci Adv*. Sep 2020;6(36)doi:10.1126/sciadv.abd3083
5. Verma S, Dhanak M, Frankenfield J. Visualizing the effectiveness of face masks in obstructing respiratory jets. *Phys Fluids* (1994). Jun 1 2020;32(6):061708. doi:10.1063/5.0016018
6. Bahl P, Bhattacharjee S, de Silva C, Chughtai AA, Doolan C, MacIntyre CR. Face coverings and mask to minimise droplet dispersion and aerosolisation: a video case study. *Thorax*. Nov 2020;75(11):1024-1025. doi:10.1136/thoraxjnl-2020-215748
7. Davies A, Thompson KA, Giri K, Kafatos G, Walker J, Bennett A. Testing the efficacy of homemade masks: would they protect in an influenza pandemic? *Disaster Med Public Health Prep*. Aug 2013;7(4):413-8. doi:10.1017/dmp.2013.43

8. Leung NHL, Chu DKW, Shiu EYC, et al. Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nature medicine*. Apr 03 2020;26(5):676-680. doi:<https://dx.doi.org/10.1038/s41591-020-0843-2>
9. Bandiera L., Pavar G., Pisetta G., et al. Face coverings and respiratory tract droplet dispersion. *medRxiv*. 2020;doi:10.1101/2020.08.11.20145086
10. Alsved M, Matamis A, Bohlin R, et al. Exhaled respiratory particles during singing and talking. *Aerosol Science and Technology*. 2020;54(11):1245-1248. doi:10.1080/02786826.2020.1812502
11. Asadi S, Wexler AS, Cappa CD, Barreda S, Bouvier NM, Ristenpart WD. Aerosol emission and superemission during human speech increase with voice loudness. *Sci Rep*. Feb 20 2019;9(1):2348. doi:10.1038/s41598-019-38808-z
12. Morawska L., Johnson GR, Ristovski ZD, et al. Size distribution and sites of origin of droplets expelled from the human respiratory tract during expiratory activities. *Aerosol Sci*. 2009;40(3):256-269.
13. Abkarian M, Mendez S, Xue N, Yang F, Stone HA. Speech can produce jet-like transport relevant to asymptomatic spreading of virus. *Proc Natl Acad Sci U S A*. Oct 13 2020;117(41):25237-25245. doi:10.1073/pnas.2012156117
14. Ueki H, Furusawa Y, Iwatsuki-Horimoto K, et al. Effectiveness of Face Masks in Preventing Airborne Transmission of SARS-CoV-2. *mSphere*. Oct 21 2020;5(5)doi:10.1128/mSphere.00637-20
15. Rodriguez-Palacios A, Cominelli F, Basson AR, Pizarro TT, Ilic S. Textile Masks and Surface Covers-A Spray Simulation Method and a “Universal Droplet Reduction Model” Against Respiratory Pandemics. *Front Med (Lausanne)*. 2020;7:260. doi:10.3389/fmed.2020.00260
16. Viola I.M., Peterson B., Pisetta G., et al. Face coverings, aerosol dispersion and mitigation of virus transmission risk. 2020. <https://arxiv.org/abs/2005.10720>
17. Rengasamy S, Eimer B, Shaffer RE. Simple respiratory protection—evaluation of the filtration performance of cloth masks and common fabric materials against 20-1000 nm size particles. *Ann Occup Hyg*. Oct 2010;54(7):789-98. doi:10.1093/annhyg/meq044
18. Konda A, Prakash A, Moss GA, Schmoltdt M, Grant GD, Guha S. Aerosol Filtration Efficiency of Common Fabrics Used in Respiratory Cloth Masks. *ACS nano*. May 26 2020;14(5):6339-6347. doi:10.1021/acsnano.0c03252
19. Long KD, Woodburn EV, Berg IC, Chen V, Scott WS. Measurement of filtration efficiencies of healthcare and consumer materials using modified respirator fit tester setup. *PLoS One*. 2020;15(10):e0240499. doi:10.1371/journal.pone.024049
20. O’Kelly E, Pirog S, Ward J, Clarkson PJ. Ability of fabric face mask materials to filter ultrafine particles at coughing velocity. *BMJ Open*. Sep 22 2020;10(9):e039424. doi:10.1136/bmjopen-2020-039424
21. Aydin O, Emon B, Cheng S, Hong L, Chamorro LP, Saif MTA. Performance of fabrics for home-made masks against the spread of COVID-19 through droplets: A quantitative mechanistic study. *Extreme Mech Lett*. Oct 2020;40:100924. doi:10.1016/j.eml.2020.100924

22. Bhattacharjee S, Bahl P, Chughtai AA, MacIntyre CR. Last-resort strategies during mask shortages: optimal design features of cloth masks and decontamination of disposable masks during the COVID-19 pandemic. *BMJ Open Respir Res.* Sep 2020;7(1)doi:10.1136/bmjresp-2020-000698
23. Maurer L, Peris D, Kerl J, Guenther F, Koehler D, Dellweg D. Community Masks During the SARS-CoV-2 Pandemic: Filtration Efficacy and Air Resistance. *J Aerosol Med Pulm Drug Deliv.* Sep 23 2020;doi:10.1089/jamp.2020.1635
24. Hill WC, Hull MS, MacCuspie RI. Testing of Commercial Masks and Respirators and Cotton Mask Insert Materials using SARS-CoV-2 Virion-Sized Particulates: Comparison of Ideal Aerosol Filtration Efficiency versus Fitted Filtration Efficiency. *Nano Lett.* Oct 14 2020;20(10):7642-7647. doi:10.1021/acs.nanolett.0c03182
25. Whiley H, Keerthirathne TP, Nisar MA, White MAF, Ross KE. Viral Filtration Efficiency of Fabric Masks Compared with Surgical and N95 Masks. *Pathogens.* Sep 17 2020;9(9)doi:10.3390/pathogens9090762
26. Hao W, Parasch A, Williams S, et al. Filtration performances of non-medical materials as candidates for manufacturing facemasks and respirators. *Int J Hyg Environ Health.* Aug 2020;229:113582. doi:10.1016/j.ijheh.2020.113582
27. van der Sande M, Teunis P, Sabel R. Professional and home-made face masks reduce exposure to respiratory infections among the general population. *PLoS One.* Jul 9 2008;3(7):e2618. doi:10.1371/journal.pone.0002618
28. Chu DK, Akl EA, Duda S, et al. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. *Lancet.* Jun 27 2020;395(10242):1973-1987. doi:10.1016/S0140-6736(20)31142-9
29. Clase CM, Fu EL, Ashur A, et al. Forgotten Technology in the COVID-19 Pandemic: Filtration Properties of Cloth and Cloth Masks-A Narrative Review. *Mayo Clin Proc.* Oct 2020;95(10):2204-2224. doi:10.1016/j.mayocp.2020.07.020
30. Wang X, Ferro EG, Zhou G, Hashimoto D, Bhatt DL. Association Between Universal Masking in a Health Care System and SARS-CoV-2 Positivity Among Health Care Workers. *JAMA.* Jul 14 2020;doi:10.1001/jama.2020.12897
31. Mitze T., Kosfeld R., Rode J., Wälde K. Face Masks Considerably Reduce COVID-19 Cases in Germany: A Synthetic Control Method Approach. 2020. ISSN: 2365-9793, DP No. 13319. <http://ftp.iza.org/dp13319.pdf>
32. Gallaway MS, Rigler J, Robinson S, et al. Trends in COVID-19 Incidence After Implementation of Mitigation Measures – Arizona, January 22-August 7, 2020. *MMWR Morb Mortal Wkly Rep.* Oct 9 2020;69(40):1460-1463. doi:10.15585/mmwr.mm6940e3
33. Van Dyke ME, Rogers TM, Pevzner E, et al. Trends in County-Level COVID-19 Incidence in Counties With and Without a Mask Mandate – Kansas, June 1-August 23, 2020. *MMWR Morb Mortal Wkly Rep.* Nov 27 2020;69(47):1777-1781. doi:10.15585/mmwr.mm6947e2

34. Lyu W, Wehby GL. Community Use Of Face Masks And COVID-19: Evidence From A Natural Experiment Of State Mandates In The US. *Health Aff (Millwood)*. Aug 2020;39(8):1419-1425. doi:10.1377/hlthaff.2020.00818
35. Hatzius J, Struyven D, Rosenberg I. Face Masks and GDP. Updated June 29, 2020. Accessed July 8, 2020. <https://www.goldmansachs.com/insights/pages/face-masks-and-gdp.html>
36. Karaivanov A., Lu S.E., Shigeoka H., Chen C., Pamplona S. Face Masks, Public Policies And Slowing The Spread Of Covid-19: Evidence from Canada. 2020. Working Paper 27891. <http://www.nber.org/papers/w27891>
37. Joo H, Miller GF, Sunshine G, et al. Decline in COVID-19 Hospitalization Growth Rates Associated with Statewide Mask Mandates — 10 States, March–October 2020. *MMWR*. February 12, 2021 / 70(6);212–216
38. Chernozhukov V, Kasahara H, Schrimpf P. Causal Impact of Masks, Policies, Behavior on Early Covid-19 Pandemic in the U.S. medRxiv. 2020;doi:10.1101/2020.05.27.20115139
39. Guy GP, Jr., Lee FC, Sunshine G, et al. Association of State-Issued Mask Mandates and Allowing On-Premises Restaurant Dining with County-Level COVID-19 Case and Death Growth Rates – United States, March 1-December 31, 2020. *MMWR Morb Mortal Wkly Rep*. Mar 12 2021;70(10):350-354. doi:10.15585/mmwr.mm7010e3
40. Leffler CT, Ing E, Lykins JD, Hogan MC, McKeown CA, Grzybowski A. Association of Country-wide Coronavirus Mortality with Demographics, Testing, Lockdowns, and Public Wearing of Masks. *Am J Trop Med Hyg*. Dec 2020;103(6):2400-2411. doi:10.4269/ajtmh.20-1015
41. Rader B, White LF, Burns MR, et al. Mask-wearing and control of SARS-CoV-2 transmission in the USA: a cross-sectional study. *The Lancet Digital Health*. 2021/01/19/2021;doi:[https://doi.org/10.1016/S2589-7500\(20\)30293-4](https://doi.org/10.1016/S2589-7500(20)30293-4)
42. Hendrix MJ, Walde C, Findley K, Trotman R. Absence of Apparent Transmission of SARS-CoV-2 from Two Stylists After Exposure at a Hair Salon with a Universal Face Covering Policy – Springfield, Missouri, May 2020. *MMWR Morb Mortal Wkly Rep*. Jul 17 2020;69(28):930-932. doi:10.15585/mmwr.mm6928e2
43. Wang Y, Tian H, Zhang L, et al. Reduction of secondary transmission of SARS-CoV-2 in households by face mask use, disinfection and social distancing: a cohort study in Beijing, China. *BMJ Glob Health*. May 2020;5(5)doi:10.1136/bmjgh-2020-002794
44. Doung-Ngern P, Suphanchaimat R, Panjangampatthana A, et al. Case-Control Study of Use of Personal Protective Measures and Risk for Severe Acute Respiratory Syndrome Coronavirus 2 Infection, Thailand. *Emerg Infect Dis*. Sep 15 2020;26(11)doi:10.3201/eid2611.203003
45. Payne DC, Smith-Jeffcoat SE, Nowak G, et al. SARS-CoV-2 Infections and Serologic Responses from a Sample of U.S. Navy Service Members – USS Theodore Roosevelt, April 2020. *MMWR Morb Mortal Wkly Rep*. Jun 12 2020;69(23):714-721. doi:10.15585/mmwr.mm6923e4

46. Schwartz KL, Murti M, Finkelstein M, et al. Lack of COVID-19 transmission on an international flight. *Cmaj*. Apr 14 2020;192(15):E410. doi:10.1503/cmaj.75015
47. Freedman DO, Wilder-Smith A. In-flight Transmission of SARS-CoV-2: a review of the attack rates and available data on the efficacy of face masks. *J Travel Med*. Sep 25 2020;doi:10.1093/jtm/taaa178
48. Shein SL, Whitticar S, Mascho KK, Pace E, Speicher R, Deakins K. The effects of wearing facemasks on oxygenation and ventilation at rest and during physical activity. *PLoS One*. 2021;16(2):e0247414. doi:10.1371/journal.pone.0247414
49. Chan NC, Li K, Hirsh J. Peripheral Oxygen Saturation in Older Persons Wearing Nonmedical Face Masks in Community Settings. *JAMA*. Dec 8 2020;324(22):2323-2324. doi:10.1001/jama.2020.21905
50. Samannan R, Holt G, Calderon-Candelario R, Mirsaeidi M, Campos M. Effect of Face Masks on Gas Exchange in Healthy Persons and Patients with Chronic Obstructive Pulmonary Disease. *Ann Am Thorac Soc*. Mar 2021;18(3):541-544. doi:10.1513/AnnalsATS.202007-812RL
51. Mapelli M, Salvioni E, De Martino F, et al. "You can leave your mask on": effects on cardiopulmonary parameters of different airway protection masks at rest and during maximal exercise. *Eur Respir J*. Mar 7 2021;doi:10.1183/13993003.04473-2020
52. Roberge RJ, Kim JH, Benson SM. Absence of consequential changes in physiological, thermal and subjective responses from wearing a surgical mask. *Respir Physiol Neurobiol*. Apr 15 2012;181(1):29-35. doi:10.1016/j.resp.2012.01.010
53. Epstein D, Korytny A, Isenberg Y, et al. Return to training in the COVID-19 era: The physiological effects of face masks during exercise. *Scand J Med Sci Sports*. Jan 2021;31(1):70-75. doi:10.1111/sms.13832
54. Hopkins SR, Dominelli PB, Davis CK, et al. Face Masks and the Cardiorespiratory Response to Physical Activity in Health and Disease. *Ann Am Thorac Soc*. Mar 2021;18(3):399-407. doi:10.1513/AnnalsATS.202008-990CME
55. Lubrano R, Bloise S, Testa A, et al. Assessment of Respiratory Function in Infants and Young Children Wearing Face Masks During the COVID-19 Pandemic. *JAMA Netw Open*. Mar 1 2021;4(3):e210414. doi:10.1001/jamanetworkopen.2021.0414
56. Person E, Lemercier C, Royer A, Reyckler G. [Effect of a surgical mask on six minute walking distance]. *Rev Mal Respir*. Mar 2018;35(3):264-268. Effet du port d'un masque de soins lors d'un test de marche de six minutes chez des sujets sains. doi:10.1016/j.rmr.2017.01.010
57. Wyoming Department of Health. Wyoming COVID Data Tracker. Available: <https://sites.google.com/wyo.gov/covid-19/home>. [accessed: 08/19/2021]
58. U.S. Centers For Disease Control and Prevention. Delta Variant: What We Know About the Science. Available: <https://www.cdc.gov/coronavirus/2019-ncov/variants/delta-variant.html>. [accessed: 08/19/2021]
59. U.S. Centers For Disease Control and Prevention. Interim Public Health Recommendations for Fully Vaccinated People. Available:

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html>.
[accessed: 08/19/2021]

60. U.S. Centers For Disease Control and Prevention. COVID Data Tracker. Available:
<https://covid.cdc.gov/covid-data-tracker/#county-view>. [accessed: 08/19/2021]