

# The Research on Masking

The following pages provide a listing of scholarly research in peer-reviewed journals or released as pre-prints that are pending a peer review. This list is not exhaustive and reflects only research available as of September 2, 2021.

## Face Masks and Universal Masking Policy Effectiveness

### Studies

- Abaluck, J., Kwong, L. H., Styczynski, A., Haque, A., Kabir, Md. A., Bates-Jefferys, E., Crawford, E., Benjamin-Chung, J., Raihan, S., Rahman, S., Benhachmi, S., Zaman, N., Winch, P. J., Hossain, Md. M., Reza, H. M., All Jaber, A., Momen, S. G., Bani, F. L., Rahman, A., ... Mobarak, A. M. (2021). *The impact of community masking on COVID-19: A cluster-randomized trial in Bangladesh* (Working Paper No. NCT04630054; Working Paper Series). <https://doi.org/10.3386/w28734>
- Akhtar, J., Garcia, A. L., Saenz, L., Kuravi, S., Shu, F. (東方軍), & Kota, K. (2020). Can face masks offer protection from airborne sneeze and cough droplets in close-up, face-to-face human interactions?—A quantitative study. *Physics of Fluids*, 32(12), 127112. <https://doi.org/10.1063/5.0035072>
- Arumuru, V., Samantaray, S. S., & Pasa, J. (2021). Double masking protection vs. Comfort—A quantitative assessment. *Physics of Fluids*, 33(7), 077120. <https://doi.org/10.1063/5.0058571>
- Blaisdell, L. L., Cohn, W., Pavell, J. R., Rubin, D. S., & Vergales, J. E. (2020). Preventing and mitigating SARS-COV-2 transmission—Four overnight camps, Maine, June–August 2020. *MMWR. Morbidity and Mortality Weekly Report*, 69(35), 1216–1220. <https://doi.org/10.15585/mmwr.mm6935e1>

Brandal, L. T., Ofitserova, T. S., Meijerink, H., Rykkvin, R., Lund, H. M., Hungnes, O., Greve-Isdahl, M., Bragstad, K., Nygård, K., & Winje, B. A. (2021). Minimal transmission of SARS-CoV-2 from paediatric COVID-19 cases in primary schools, Norway, August to November 2020. *Euro Surveillance: Bulletin European Sur Les Maladies Transmissibles = European Communicable Disease Bulletin*, 26(1).

<https://doi.org/10.2807/1560-7917.ES.2020.26.1.2002011>

Broek-Altenburg, E. M. van den, Atherly, A. J., Diehl, S. A., Gleason, K. M., Hart, V. C., MacLean, C. D., Barkhuff, D. A., Levine, M. A., & Carney, J. K. (2021). Jobs, housing, and mask wearing: Cross-sectional study of risk factors for COVID-19. *JMIR Public Health and Surveillance*, 7(1), e24320. <https://doi.org/10.2196/24320>

Bundgaard, H., Bundgaard, J. S., Raaschou-Pedersen, D. E. T., von Buchwald, C., Todsen, T., Norsk, J. B., Pries-Heje, M. M., Vissing, C. R., Nielsen, P. B., Winsløw, U. C., Fogh, K., Hasselbalch, R., Kristensen, J. H., Ringgaard, A., Porsborg Andersen, M., Goecke, N. B., Trebbien, R., Skovgaard, K., Benfield, T., ... Iversen, K. (2021). Effectiveness of adding a mask recommendation to other public health measures to prevent SARS-cov-2 infection in Danish mask wearers. *Annals of Internal Medicine*, 174(3), 335–343. <https://doi.org/10.7326/M20-6817>

Chen, X., Ran, L., Liu, Q., Hu, Q., Du, X., & Tan, X. (2020). Hand hygiene, mask-wearing behaviors and its associated factors during the COVID-19 epidemic: A cross-sectional study among primary school students in Wuhan, China. *International Journal of Environmental Research and Public Health*, 17(8), 2893.

<https://doi.org/10.3390/ijerph17082893>

Cheng, V. C.-C., Wong, S.-C., Chuang, V. W.-M., So, S. Y.-C., Chen, J. H.-K., Sridhar, S., To, K. K.-W., Chan, J. F.-W., Hung, I. F.-N., Ho, P.-L., & Yuen, K.-Y. (2020). The role of community-wide wearing of face mask for control of coronavirus disease 2019

(COVID-19) epidemic due to SARS-CoV-2. *Journal of Infection*, 81(1), 107–114.

<https://doi.org/10.1016/j.jinf.2020.04.024>

Chernozhukov, V., Kasahara, H., & Schrimpf, P. (2021). Causal impact of masks, policies, behavior on early covid-19 pandemic in the U.S. *Pandemic Econometrics*, 220(1), 23–62. <https://doi.org/10.1016/j.jeconom.2020.09.003>

Dalla Volta, A., Valcamonico, F., Pedersini, R., Fornaro, C., Tovazzi, V., Monteverdi, S., Baggi, A., Consoli, F., Ferrari, V. D., Grisanti, S., Conti, E., Amoroso, V., Bossi, P., & Berruti, A. (2020). The spread of SARS-cov-2 infection among the medical oncology staff of ASST spedali civili of brescia: Efficacy of preventive measures. *Frontiers in Oncology*, 10, 1574. <https://doi.org/10.3389/fonc.2020.01574>

Darby, S., Chulliyallipalil, K., Przyjalgowski, M., McGowan, P., Jeffers, S., Giltinan, A., Lewis, L., Smith, N., & Sleator, R. D. (2021). COVID-19: Mask efficacy is dependent on both fabric and fit. *Future Microbiology*, 16(1), 5–11. <https://doi.org/10.2217/fmb-2020-0292>

Dawson, P., Worrell, M. C., Malone, S., Tinker, S. C., Fritz, S., Maricque, B., Junaidi, S., Purnell, G., Lai, A. M., Neidich, J. A., Lee, J. S., Orscheln, R. C., Charney, R., Rebmann, T., Mooney, J., Yoon, N., Petit, M., Schmidt, S., Grabeel, J., ... Bankamp, B. (2021). Pilot investigation of SARS-CoV-2 secondary transmission in Kindergarten through Grade 12 schools implementing mitigation strategies—St. Louis County and City of Springfield, Missouri, December 2020. *Morbidity and Mortality Weekly Report*, 70(12), 449–455. <https://doi.org/10.15585/mmwr.mm7012e4>

Derrick, J. L., & Gomersall, C. D. (2005). Protecting healthcare staff from severe acute respiratory syndrome: Filtration capacity of multiple surgical masks. *The Journal of Hospital Infection*, 59(4), 365–368. <https://doi.org/10.1016/j.jhin.2004.10.013>

Falk, A., Benda, A., Falk, P., Steffen, S., Wallace, Z., & Høeg, T. B. (2021). COVID-19 cases and transmission in 17 K–12 schools—Wood County, Wisconsin, August 31–

November 29, 2020. *MMWR. Morbidity and Mortality Weekly Report*, 70.

<https://doi.org/10.15585/mmwr.mm7004e3>

Fischer, C. B., Adrien, N., Silguero, J. J., Hopper, J. J., Chowdhury, A. I., & Werler, M. M. (2021). Mask adherence and rate of COVID-19 across the United States. *PLOS ONE*, 16(4), e0249891. <https://doi.org/10.1371/journal.pone.0249891>

Fontanet, A., Tondeur, L., Grant, R., Temmam, S., Madec, Y., Bigot, T., Grzelak, L., Cailleau, I., Besombes, C., Ungeheuer, M.-N., Renaudat, C., Perlaza, B. L., Arowas, L., Jolly, N., Pellerin, S. F., Kuhmel, L., Staropoli, I., Huon, C., Chen, K.-Y., ... Hoen, B. (2021). SARS-CoV-2 infection in schools in a northern French city: A retrospective serological cohort study in an area of high transmission, France, January to April 2020. *Euro Surveillance: Bulletin Europeen Sur Les Maladies Transmissibles = European Communicable Disease Bulletin*, 26(15). <https://doi.org/10.2807/1560-7917.ES.2021.26.15.2001695>

Ganczak, M., Pasek, O., Duda – Duma, Ł., Świstara, D., & Korzeń, M. (2021). Use of masks in public places in Poland during SARS-CoV-2 epidemic: A covert observational study. *BMC Public Health*, 21(1), 393. <https://doi.org/10.1186/s12889-021-10418-3>

Gandini, S., Rainisio, M., Iannuzzo, M. L., Bellerba, F., Cecconi, F., & Scorrano, L. (2021). A cross-sectional and prospective cohort study of the role of schools in the SARS-CoV-2 second wave in Italy. *The Lancet Regional Health. Europe*, 5, 100092. <https://doi.org/10.1016/j.lanepe.2021.100092>

Gettings, J., Czarnik, M., Morris, E., Haller, E., Thompson-Paul, A. M., Rasberry, C., Lanzieri, T. M., Smith-Grant, J., Aholou, T. M., Thomas, E., Drenzek, C., & MacKellar, D. (2021). Mask use and ventilation improvements to reduce COVID-19 incidence in elementary schools—Georgia, November 16–December 11, 2020. *MMWR. Morbidity and Mortality Weekly Report*, 70(21), 779–784. PubMed. <https://doi.org/10.15585/mmwr.mm7021e1>

Gillespie, D. L., Meyers, L. A., Lachmann, M., Redd, S. C., & Zenilman, J. M. (2021). The experience of 2 independent schools with in-person learning during the COVID-19 pandemic. *The Journal of School Health*, 91(5), 347–355.

<https://doi.org/10.1111/josh.13008>

Gold, J. A. W. (2021). Clusters of SARS-CoV-2 infection among elementary school educators and students in one school district—Georgia, December 2020–January 2021. *MMWR. Morbidity and Mortality Weekly Report*, 70.

<https://doi.org/10.15585/mmwr.mm7008e4>

Goyal, A., Reeves, D. B., Thakkar, N., Famulare, M., Cardozo-Ojeda, E. F., Mayer, B. T., & Schiffer, J. T. (2021). Slight reduction in SARS-CoV-2 exposure viral load due to masking results in a significant reduction in transmission with widespread implementation. *Scientific Reports*, 11(1), 11838. <https://doi.org/10.1038/s41598-021-91338-5>

Groves, L. M., Usagawa, L., Elm, J., Low, E., Manuzak, A., Quint, J., Center, K. E., Buff, A. M., & Kemble, S. K. (2021). Community transmission of SARS-CoV-2 at three fitness facilities—Hawaii, June–July 2020. *Morbidity and Mortality Weekly Report*, 70(9), 316–320. <https://doi.org/10.15585/mmwr.mm7009e1>

Guy, G. P., Jr, Lee, F. C., Sunshine, G., McCord, R., Howard-Williams, M., Kompaniyets, L., Dunphy, C., Gakh, M., Weber, R., Sauber-Schatz, E., Omura, J. D., Massetti, G. M., CDC COVID-19 Response Team, M. P. A. U., & CDC Public Health Law Program. (2021). 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. Morbidity and Mortality Weekly Report*, 70(10), 350–354. PubMed. <https://doi.org/10.15585/mmwr.mm7010e3>

Hendrix, M. J. (2020). Absence of apparent transmission of SARS-CoV-2 from two stylists after exposure at a hair salon with a universal face covering policyy—Springfield,

Missouri, May 2020. *MMWR. Morbidity and Mortality Weekly Report*, 69.

<https://doi.org/10.15585/mmwr.mm6928e2>

Hershaw, R. B., Wu, K., Lewis, N. M., Milne, A. T., Currie, D., Smith, A. R., Lloyd, S., Orleans, B., Young, E. L., Freeman, B., Schwartz, N., Bryant, B., Espinosa, C., Nakazawa, Y., Garza, E., Almendares, O., Abara, W. E., Ehlman, D. C., Waters, K., ... Chu, V. T. (2021). Low SARS-CoV-2 transmission in elementary schools- Salt Lake County, Utah, December 3, 2020-January 31, 2021. *MMWR. Morbidity and Mortality Weekly Report*, 70(12), 442–448. <https://doi.org/10.15585/mmwr.mm7012e3>

Hill, W. C., Hull, M. S., & MacCuspie, R. I. (2020). 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 Letters*, 20(10), 7642–7647.

<https://doi.org/10.1021/acs.nanolett.0c03182>

Hobbs, C. V., Martin, L. M., Kim, S. S., Kirmse, B. M., Haynie, L., McGraw, S., Byers, P., Taylor, K. G., Patel, M. M., Flannery, B., Arriola, C. S., Griggs, E. P., Simon, A. K., & Stephenson, M. E. (2020). Factors associated with positive SARS-CoV-2 test results in outpatient health facilities and emergency departments among children and adolescents aged <18 years—Mississippi, September–November 2020. *Morbidity and Mortality Weekly Report*, 69(50), 1925–1929.

<https://doi.org/10.15585/mmwr.mm6950e3>

Hong, L.-X., Lin, A., He, Z.-B., Zhao, H.-H., Zhang, J.-G., Zhang, C., Ying, L.-J., Ge, Z.-M., Zhang, X., Han, Q.-Y., Chen, Q.-Y., Ye, Y.-H., Zhu, J.-S., Chen, H.-X., & Yan, W.-H. (2020). Mask wearing in pre-symptomatic patients prevents SARS-CoV-2 transmission: An epidemiological analysis. *Travel Medicine and Infectious Disease*, 36, 101803. <https://doi.org/10.1016/j.tmaid.2020.101803>

Kanu, F. A., Smith, E. E., Offutt-Powell, T., Hong, R., Dinh, T.-H., & Pevzner, E. (2020). Declines in SARS-CoV-2 transmission, hospitalizations, and mortality after implementation of mitigation measures—Delaware, March–June 2020. *Morbidity and Mortality Weekly Report*, 69(45), 1691–1694.

<https://doi.org/10.15585/mmwr.mm6945e1>

Katz, S. E., McHenry, R., Mauer, L. G., Chappell, J. D., Stewart, L. S., Schmitz, J. E., Halasa, N., Edwards, K. M., & Banerjee, R. (2021). Low in-school COVID-19 transmission and asymptomatic infection despite high community prevalence. *The Journal of Pediatrics*. <https://doi.org/10.1016/j.jpeds.2021.06.015>

Kenyon, C. (2020). *Widespread use of face masks in public may slow the spread of SARS CoV-2: An ecological study* (p. 2020.03.31.20048652).

<https://doi.org/10.1101/2020.03.31.20048652>

Kim, C. (2021). Characteristics of COVID-19 cases and outbreaks at child care facilities—District of Columbia, July–December 2020. *MMWR. Morbidity and Mortality Weekly Report*, 70. <https://doi.org/10.15585/mmwr.mm7020a3>

Kim, M.-C., Bae, S., Kim, J. Y., Park, S. Y., Lim, J. S., Sung, M., & Kim, S.-H. (2020). Effectiveness of surgical, KF94, and N95 respirator masks in blocking SARS-CoV-2: A controlled comparison in 7 patients. *Infectious Diseases*, 52(12), 908–912.

<https://doi.org/10.1080/23744235.2020.1810858>

Kriemler, S., Ulyte, A., Ammann, P., Peralta, G. P., Berger, C., Puhan, M. A., & Radtke, T. (2021). Surveillance of acute SARS-CoV-2 infections in school children and point-prevalence during a time of high community transmission in Switzerland. *Frontiers in Pediatrics*, 9, 645577. <https://doi.org/10.3389/fped.2021.645577>

Lawrence, R. B., Duling, M. G., Calvert, C. A., & Coffey, C. C. (2006). Comparison of performance of three different types of respiratory protection devices. *Journal of*

*Occupational and Environmental Hygiene*, 3(9), 465–474.

<https://doi.org/10.1080/15459620600829211>

Leung, N. H. L., Chu, D. K. W., Shiu, E. Y. C., Chan, K.-H., McDevitt, J. J., Hau, B. J. P., Yen, H.-L., Li, Y., Ip, D. K. M., Peiris, J. S. M., Seto, W.-H., Leung, G. M., Milton, D. K., & Cowling, B. J. (2020). Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nature Medicine*, 26(5), 676–680. <https://doi.org/10.1038/s41591-020-0843-2>

Li, J., Fink, J. B., Elshafei, A. A., Stewart, L. M., Barbian, H. J., Mirza, S. H., Al-Harthi, L., Vines, D., & Ehrmann, S. (2021). Placing a mask on COVID-19 patients during high-flow nasal cannula therapy reduces aerosol particle dispersion. *ERJ Open Research*, 7(1), 00519–02020. <https://doi.org/10.1183/23120541.00519-2020>

Li, Y., Campbell, H., Kulkarni, D., Harpur, A., Nundy, M., Wang, X., Nair, H., & Usher Network for COVID-19 Evidence Reviews (UNCOVER) group. (2021). The temporal association of introducing and lifting non-pharmaceutical interventions with the time-varying reproduction number (R) of SARS-CoV-2: A modelling study across 131 countries. *The Lancet. Infectious Diseases*, 21(2), 193–202.

[https://doi.org/10.1016/S1473-3099\(20\)30785-4](https://doi.org/10.1016/S1473-3099(20)30785-4)

Lindsley, W. G., Derk, R. C., Coyle, J. P., Martin, S. B., Mead, K. R., Blachere, F. M., Beezhold, D. H., Brooks, J. T., Boots, T., & Noti, J. D. (2021). Efficacy of portable air cleaners and masking for reducing indoor exposure to simulated exhaled SARS-CoV-2 aerosols—United States, 2021. *Morbidity and Mortality Weekly Report*, 70(27), 972–976. <https://doi.org/10.15585/mmwr.mm7027e1>

Link-Gelles, R. (2020). Limited secondary transmission of SARS-CoV-2 in child care programs—Rhode Island, June 1–July 31, 2020. *MMWR. Morbidity and Mortality Weekly Report*, 69. <https://doi.org/10.15585/mmwr.mm6934e2>

Liu, Y., Morgenstern, C., Kelly, J., Lowe, R., CMMID COVID-19 Working Group, & Jit, M. (2021). The impact of non-pharmaceutical interventions on SARS-CoV-2 transmission across 130 countries and territories. *BMC Medicine*, 19(1), 40.

<https://doi.org/10.1186/s12916-020-01872-8>

Liu, Y., & Zhao, B. (2021). Size-dependent filtration efficiencies of face masks and respirators for removing SARS-CoV-2-laden aerosols. *Infection Control & Hospital Epidemiology*, 42(7), 906–907. <https://doi.org/10.1017/ice.2020.366>

Lyu, W., & Wehby, G. L. (2020). Community use of face masks and COVID-19: Evidence from a natural experiment of state mandates in the US. *Health Affairs*, 39(8), 1419–1425. <https://doi.org/10.1377/hlthaff.2020.00818>

Ma, Q., Shan, H., Zhang, H., Li, G., Yang, R., & Chen, J. (2020). Potential utilities of mask-wearing and instant hand hygiene for fighting SARS-CoV-2. *Journal of Medical Virology*, 10.1002/jmv.25805. <https://doi.org/10.1002/jmv.25805>

Martí, M., Tuñón-Molina, A., Aachmann, F. L., Muramoto, Y., Noda, T., Takayama, K., & Serrano-Aroca, Á. (2021). Protective face mask filter capable of inactivating SARS-CoV-2, and methicillin-resistant staphylococcus aureus and staphylococcus epidermidis. *Polymers*, 13(2), 207. <https://doi.org/10.3390/polym13020207>

Maurer, L., Peris, D., Kerl, J., Guenther, F., Koehler, D., & Dellweg, D. (2021). Community masks during the SARS-CoV-2 Pandemic: Filtration efficacy and air resistance polymers. *Journal of Aerosol Medicine and Pulmonary Drug Delivery*, 34(1), 11–19. <https://doi.org/10.1089/jamp.2020.1635>

Miller, G. F., Greening, B., Rice, K. L., Arifkhanova, A., Meltzer, M. I., & Coronado, F. (2021). Modeling the Transmission of COVID-19: Impact of mitigation strategies in Prekindergarten-Grade 12 public schools, United States, 2021. *Journal of Public Health Management and Practice: JPHMP*.

<https://doi.org/10.1097/phh.0000000000001373>

- Mirikar, D., Palanivel, S., & Arumuru, V. (2021). Droplet fate, efficacy of face mask, and transmission of virus-laden droplets inside a conference room. *Physics of Fluids*, 33(6), 065108. <https://doi.org/10.1063/5.0054110>
- Ng, V., Fazil, A., Waddell, L. A., Bancej, C., Turgeon, P., Otten, A., Atchessi, N., & Ogden, N. H. (2020). Projected effects of nonpharmaceutical public health interventions to prevent resurgence of SARS-CoV-2 transmission in Canada. *CMAJ: Canadian Medical Association Journal = Journal de l'Association Medicale Canadienne*, 192(37), E1053–E1064. <https://doi.org/10.1503/cmaj.200990>
- Nir-Paz, R., Grotto, I., Strolov, I., Salmon, A., Mandelboim, M., Mendelson, E., & Regev-Yochay, G. (2020). Absence of in-flight transmission of SARS-CoV-2 likely due to use of face masks on board. *Journal of Travel Medicine*, 27(8). <https://doi.org/10.1093/jtm/taaa117>
- Panovska-Griffiths, J., Kerr, C. C., Waites, W., Stuart, R. M., Mistry, D., Foster, D., Klein, D. J., Viner, R. M., & Bonell, C. (2021). Modelling the potential impact of mask use in schools and society on COVID-19 control in the UK. *Scientific Reports*, 11(1), 8747. <https://doi.org/10.1038/s41598-021-88075-0>
- Park, S., & Jayaraman, S. (2021). From containment to harm reduction from SARS-CoV-2: A fabric mask for enhanced effectiveness, comfort, and compliance. *The Journal of The Textile Institute*, 112(7), 1144–1158. <https://doi.org/10.1080/00405000.2020.1805971>
- Rader, B., White, L. F., Burns, M. R., Chen, J., Brilliant, J., Cohen, J., Shaman, J., Brilliant, L., Kraemer, M. U. G., Hawkins, J. B., Scarpino, S. V., Astley, C. M., & Brownstein, J. S. (2021). Mask-wearing and control of SARS-CoV-2 transmission in the USA: A cross-sectional study. *The Lancet Digital Health*, 3(3), e148–e157. [https://doi.org/10.1016/S2589-7500\(20\)30293-4](https://doi.org/10.1016/S2589-7500(20)30293-4)

- Reychler, G., Straeten, C. vander, Schalkwijk, A., & Poncin, W. (2021). Effects of surgical and cloth facemasks during a submaximal exercise test in healthy adults. *Respiratory Medicine*, 186, 106530. <https://doi.org/10.1016/j.rmed.2021.106530>
- Reynolds, C., Ng, S., & Yang, W. (2021). Factors affecting the transmission of SARS-CoV-2 in school settings. *MedRxiv: The Preprint Server for Health Sciences*, 2021.06.18.21259156. <https://doi.org/10.1101/2021.06.18.21259156>
- Rosenstrom, E., Oruc, B. E., Hupert, N., Ivy, J., Keskinocak, P., Mayorga, M. E., & Swann, J. L. (2021). High-quality masks reduce COVID-19 infections and deaths in the US. *NIH Pre-Prints*. <https://doi.org/10.1101/2020.09.27.20199737>
- Rothamer, D. A., Sanders, S., Reindl, D., & Bertram, T. H. (2021). Strategies to minimize SARS-CoV-2 transmission in classroom settings: Combined impacts of ventilation and mask effective filtration efficiency. *MedRxiv: The Preprint Server for Health Sciences*, 2020.12.31.20249101. <https://doi.org/10.1101/2020.12.31.20249101>
- Sande, M. van der, Teunis, P., & Sabel, R. (2008). Professional and home-made face masks reduce exposure to respiratory infections among the general population. *PLOS ONE*, 3(7), e2618. <https://doi.org/10.1371/journal.pone.0002618>
- Scott, N., Saul, A., Spelman, T., Stoove, M., Pedrana, A., Saeri, A., Grundy, E., Smith, L., Toole, M., McIntyre, C. R., Crabb, B. S., & Hellard, M. (2021). The introduction of a mandatory mask policy was associated with significantly reduced COVID-19 cases in a major metropolitan city. *PLOS ONE*, 16(7), e0253510. <https://doi.org/10.1371/journal.pone.0253510>
- Seidelman, J. L., Lewis, S. S., Advani, S. D., Akinboyo, I. C., Epling, C., Case, M., Said, K., Yancey, W., Stiegel, M., Schwartz, A., Stout, J., Sexton, D. J., & Smith, B. A. (2020). Universal masking is an effective strategy to flatten the severe acute respiratory coronavirus virus 2 (SARS-CoV-2) healthcare worker epidemiologic curve. *Infection*

*Control & Hospital Epidemiology*, 41(12), 1466–1467.

<https://doi.org/10.1017/ice.2020.313>

Telles, C. R., Roy, A., Ajmal, M. R., Mustafa, S. K., Ahmad, M. A., de la Serna, J. M., Frigo, E. P., & Rosales, M. H. (2021). The impact of COVID-19 management policies tailored to airborne SARS-CoV-2 transmission: Policy analysis. *JMIR Public Health and Surveillance*, 7(4), e20699. <https://doi.org/10.2196/20699>

Thielecke, M., Theuring, S., van Loon, W., Hommes, F., Mall, M. A., Rosen, A., Böhringer, F., von Kalle, C., Kirchberger, V., Kurth, T., Seybold, J., Mockenhaupt, F. P., & BECOSS study group. (2021). SARS-CoV-2 infections in kindergartens and associated households at the start of the second wave in Berlin, Germany—A cross sectional study. *European Journal of Public Health*, ckab079.

<https://doi.org/10.1093/eurpub/ckab079>

Ueki, H., Furusawa, Y., Iwatsuki-Horimoto, K., Imai, M., Kabata, H., Nishimura, H., & Kawaoka, Y. (2020). Effectiveness of face masks in preventing airborne transmission of SARS-CoV-2. *MSphere*, 5(5), e00637-20. <https://doi.org/10.1128/mSphere.00637-20>

Van Dyke, M. E., Rogers, T. M., Pevzner, E., Satterwhite, C. L., Shah, H. B., Beckman, W. J., Ahmed, F., Hunt, D. C., & Rule, J. (2020). Trends in county-level COVID-19 incidence in counties with and without a mask mandate—Kansas, June 1-August 23, 2020. *MMWR. Morbidity and Mortality Weekly Report*, 69(47), 1777–1781.

<https://doi.org/10.15585/mmwr.mm6947e2>

Volpp, K. G., Kraut, B. H., Ghosh, S., & Neatherlin, J. (2021). Minimal SARS-CoV-2 transmission after implementation of a comprehensive mitigation strategy at a school—New Jersey, August 20-November 27, 2020. *MMWR. Morbidity and Mortality Weekly Report*, 70(11), 377–381. <https://doi.org/10.15585/mmwr.mm7011a2>

- Wang, X., Ferro, E. G., Zhou, G., Hashimoto, D., & Bhatt, D. L. (2020). Association between universal masking in a health care system and SARS-CoV-2 positivity among health care workers. *JAMA*, 324(7), 703–704. <https://doi.org/10.1001/jama.2020.12897>
- Wang, X., Pan, Z., & Cheng, Z. (2020). Association between 2019-nCoV transmission and N95 respirator use. *The Journal of Hospital Infection*, 105(1), 104–105. <https://doi.org/10.1016/j.jhin.2020.02.021>
- Wang, Y., Tian, H., Zhang, L., Zhang, M., Guo, D., Wu, W., Zhang, X., Kan, G. L., Jia, L., Huo, D., Liu, B., Wang, X., Sun, Y., Wang, Q., Yang, P., & MacIntyre, C. R. (2020). 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 Global Health*, 5(5), e002794. <https://doi.org/10.1136/bmigh-2020-002794>
- Xi, J. (奚金祥), Si, X. A. (司秀华), & Nagarajan, R. (2020). Effects of mask-wearing on the inhalability and deposition of airborne SARS-CoV-2 aerosols in human upper airway. *Physics of Fluids*, 32(12), 123312. <https://doi.org/10.1063/5.0034580>
- Yung, C. F., Kam, K.-Q., Nadua, K. D., Chong, C. Y., Tan, N. W. H., Li, J., Lee, K. P., Chan, Y. H., Thoon, K. C., & Ng, K. C. (2021). Novel Coronavirus 2019 transmission risk in educational settings. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, 72(6), 1055–1058. <https://doi.org/10.1093/cid/ciaa794>
- Zangmeister, C. D., Radney, J. G., Vicenzi, E. P., & Weaver, J. L. (2020). Filtration efficiencies of nanoscale aerosol by cloth mask materials used to slow the spread of SARS-CoV-2. *ACS Nano*, 14(7), 9188–9200. <https://doi.org/10.1021/acsnano.0c05025>
- Zimmerman, K. O., Akinboyo, I. C., Brookhart, M. A., Boutzoukas, A. E., McGann, K. A., Smith, M. J., Maradiaga Panayotti, G., Armstrong, S. C., Bristow, H., Parker, D., Zadrozny, S., Weber, D. J., Benjamin, D. K., & ABC SCIENCE COLLABORATIVE.

(2021). Incidence and secondary transmission of SARS-CoV-2 infections in schools. *Pediatrics*, 147(4), e2020048090. <https://doi.org/10.1542/peds.2020-048090>

## Reviews

- Abboah-Offei, M., Salifu, Y., Adewale, B., Bayuo, J., Ofosu-Poku, R., & Opare-Lokko, E. B. A. (2021). A rapid review of the use of face mask in preventing the spread of COVID-19. *International Journal of Nursing Studies Advances*, 3, 100013. <https://doi.org/10.1016/j.ijnsa.2020.100013>
- An, B., Porcher, S., Tang, S.-Y., & Kim, E. (2021). *Policy Design for COVID-19: Worldwide Evidence on the Efficacies of Early Mask Mandates and Other Policy Interventions* [Pre-Print]. <https://doi.org/10.21203/rs.3.rs-139339/v1>
- Brooks, J. T., & Butler, J. C. (2021). Effectiveness of mask wearing to control community spread of SARS-cov-2. *JAMA*, 325(10), 998–999. <https://doi.org/10.1001/jama.2021.1505>
- Busa, F., Bardanzellu, F., Pintus, M. C., Fanos, V., & Marcialis, M. A. (2021). COVID-19 and school: To open or not to open, that is the question. The first review on current knowledge. *Pediatric Reports*, 13(2), 257–278. <https://doi.org/10.3390/pediatric13020035>
- CDC. (2020). *Community use of cloth masks to control the spread of SARS-CoV-2* [Science Brief]. <https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/masking-science-sars-cov2.html>
- CDC. (2021). *Transmission of SARS-CoV-2 in K-12 schools and early care and education programs – updated* [Science Brief]. [https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/transmission\\_k\\_12\\_schools.html](https://www.cdc.gov/coronavirus/2019-ncov/science/science-briefs/transmission_k_12_schools.html)

Chetty, T., Ramokolo, V., Rees, K., Kredo, T., Balakrishna, Y., Mathews, C., & Siegfried, N. (2021). Rapid review of the effects of cloth and medical masks for preventing transmission of SARS-CoV-2 in community and household settings. *South African Medical Journal = Suid-Afrikaanse Tydskrif Vir Geneeskunde*, 111(3), 227–233.

<https://doi.org/10.7196/SAMJ.2021.v111i3.15119>

Chou, R., Dana, T., Jungbauer, R., Weeks, C., & McDonagh, M. S. (2020). Masks for prevention of respiratory virus infections, including SARS-cov-2, in health care and community settings. *Annals of Internal Medicine*, 173(7), 542–555.

<https://doi.org/10.7326/M20-3213>

Chu, D. K., Akl, E. A., Duda, S., Solo, K., Yaacoub, S., Schünemann, H. J., Chu, D. K., Akl, E. A., El-harakeh, A., Bognanni, A., Lotfi, T., Loeb, M., Hajizadeh, A., Bak, A., Izcovich, A., Cuello-Garcia, C. A., Chen, C., Harris, D. J., Borowiack, E., ... Schünemann, H. J. (2020). 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. *The Lancet*, 395(10242), 1973–1987. [https://doi.org/10.1016/S0140-6736\(20\)31142-9](https://doi.org/10.1016/S0140-6736(20)31142-9)

Coclite, D., Napoletano, A., Gianola, S., Del Monaco, A., D'Angelo, D., Fauci, A., Iacorossi, L., Latina, R., Torre, G. L., Mastroianni, C. M., Renzi, C., Castellini, G., & Iannone, P. (2021). Face mask use in the community for reducing the spread of COVID-19: A systematic review. *Frontiers in Medicine*, 7, 594269–594269. PubMed.

<https://doi.org/10.3389/fmed.2020.594269>

Fathizadeh, H., Maroufi, P., Momen-Heravi, M., & Dao, S. (2020). Protection and disinfection policies against SARS-CoV-2 (COVID-19). *Le Infezioni in Medicina*, 28(2), 185–191.

Ford, N., Holmer, H. K., Chou, R., Villeneuve, P. J., Baller, A., Kerkhove, M. V., & Allegranzi, B. (2021). Mask use in community settings in the context of COVID-19: A

systematic review of ecological data. *EClinicalMedicine*, 38.

<https://doi.org/10.1016/j.eclinm.2021.101024>

Howard, J., Huang, A., Li, Z., Tufekci, Z., Zdimal, V., van der Westhuizen, H.-M., von Delft, A., Price, A., Fridman, L., Tang, L.-H., Tang, V., Watson, G. L., Bax, C. E., Shaikh, R., Questier, F., Hernandez, D., Chu, L. F., Ramirez, C. M., & Rimoin, A. W. (2021). An evidence review of face masks against COVID-19. *Proceedings of the National Academy of Sciences*, 118(4), e2014564118. <https://doi.org/10.1073/pnas.2014564118>

Ippolito, M., Vitale, F., Accurso, G., Iozzo, P., Gregoretti, C., Giarratano, A., & Cortegiani, A. (2020). Medical masks and respirators for the protection of healthcare workers from SARS-CoV-2 and other viruses. *Pulmonology*, 26(4), 204–212.

<https://doi.org/10.1016/j.pulmoe.2020.04.009>

Krishnaratne, S., Pfadenhauer, L. M., Coenen, M., Geffert, K., Jung-Sievers, C., Klinger, C., Kratzer, S., Littlecott, H., Movsisyan, A., Rabe, J. E., Rehfuss, E., Sell, K., Strahwald, B., Stratil, J. M., Voss, S., Wabnitz, K., & Burns, J. (2020). Measures implemented in the school setting to contain the COVID-19 pandemic: A scoping review. *The Cochrane Database of Systematic Reviews*, 12, CD013812.

<https://doi.org/10.1002/14651858.CD013812>

Laine, C., Goodman, S. N., & Guallar, E. (2021). The role of masks in mitigating the SARS-CoV-2 pandemic: Another piece of the puzzle. *Annals of Internal Medicine*, 174(3), 419–420. <https://doi.org/10.7326/M20-7448>

Liao, M., Liu, H., Wang, X., Hu, X., Huang, Y., Liu, X., Brenan, K., Mecha, J., Nirmalan, M., & Lu, J. R. (2021). A technical review of face mask wearing in preventing respiratory COVID-19 transmission. *Current Opinion in Colloid & Interface Science*, 52, 101417. <https://doi.org/10.1016/j.cocis.2021.101417>

Long, Y., Hu, T., Liu, L., Chen, R., Guo, Q., Yang, L., Cheng, Y., Huang, J., & Du, L. (2020). Effectiveness of N95 respirators versus surgical masks against influenza: A

systematic review and meta-analysis. *Journal of Evidence-Based Medicine*, 10.1111/jebm.12381. <https://doi.org/10.1111/jebm.12381>

MacIntyre, C. R., & Chughtai, A. A. (2020). A rapid systematic review of the efficacy of face masks and respirators against coronaviruses and other respiratory transmissible viruses for the community, healthcare workers and sick patients. *International Journal of Nursing Studies*, 108, 103629–103629. PubMed.

<https://doi.org/10.1016/j.ijnurstu.2020.103629>

Prather, K., Wang, C., & Schooley, R. (2020). Reducing transmission of SARS-CoV-2. *Science*, 368, eabc6197. <https://doi.org/10.1126/science.abc6197>

Raymond, J. R. (2020). The great mask debate: A debate that shouldn't be a debate at all. *WMJ: Official Publication of the State Medical Society of Wisconsin*, 119(4), 229–239.

Shrivastava, S. R., & Shrivastava, P. S. (2021). COVID-19 infection: Use of face masks in children in community settings. *Indian Journal of Respiratory Care*, 10, 160–161.

Sommerstein, R., Fux, C. A., Vuichard-Gysin, D., Abbas, M., Marschall, J., Balmelli, C., Troillet, N., Harbarth, S., Schlegel, M., Widmer, A., Balmelli, C., Eisenring, M.-C., Harbarth, S., Marschall, J., Pittet, D., Sax, H., Schlegel, M., Schweiger, A., Senn, L., ... Swissnoso. (2020). Risk of SARS-CoV-2 transmission by aerosols, the rational use of masks, and protection of healthcare workers from COVID-19. *Antimicrobial Resistance & Infection Control*, 9(1), 100. <https://doi.org/10.1186/s13756-020-00763-0>

Sunjaya, A. P., & Jenkins, C. (2020). Rationale for universal face masks in public against COVID-19. *Respirology (Carlton, Vic.)*, 25(7), 678–679. PubMed.

<https://doi.org/10.1111/resp.13834>

Szarpak, L., Smereka, J., Filipiak, K. J., Ladny, J. R., & Jaguszewski, M. (2020). Cloth masks versus medical masks for COVID-19 protection. *Cardiology Journal*, 27(2), 218–219. <https://doi.org/10.5603/CJ.a2020.0054>

- Tabatabaeizadeh, S.-A. (2021). Airborne transmission of COVID-19 and the role of face mask to prevent it: A systematic review and meta-analysis. *European Journal of Medical Research*, 26(1), 1. <https://doi.org/10.1186/s40001-020-00475-6>
- Tang, S., Mao, Y., Jones, R. M., Tan, Q., Ji, J. S., Li, N., Shen, J., Lv, Y., Pan, L., Ding, P., Wang, X., Wang, Y., MacIntyre, C. R., & Shi, X. (2020). Aerosol transmission of SARS-CoV-2? Evidence, prevention and control. *Environment International*, 144, 106039. <https://doi.org/10.1016/j.envint.2020.106039>
- Tirupathi, R., Bharathidasan, K., Palabindala, V., Salim, S. A., & Al-Tawfiq, J. A. (2020). Comprehensive review of mask utility and challenges during the COVID-19 pandemic. *Le Infezioni in Medicina, Supplement 1*, 57–63.
- Wang, J., Pan, L., Tang, S., Ji, J. S., & Shi, X. (2020). Mask use during COVID-19: A risk adjusted strategy. *Environmental Pollution*, 266, 115099. <https://doi.org/10.1016/j.envpol.2020.115099>
- Wang, M. X., Gwee, S. X. W., Chua, P. E. Y., & Pang, J. (2020). Effectiveness of surgical face masks in reducing acute respiratory infections in non-healthcare settings: A systematic review and meta-analysis. *Frontiers in Medicine*, 7, 582. <https://doi.org/10.3389/fmed.2020.564280>

## Face Masks Safety

### Studies

- Assathiany, R., Salinier, C., Béchet, S., Dolard, C., Kochert, F., Bocquet, A., & Levy, C. (2021). Face masks in young children during the COVID-19 pandemic: Parents' and pediatricians' point of view. *Frontiers in Pediatrics*, 9, 676718. <https://doi.org/10.3389/fped.2021.676718>

- Dost, B., Kömürcü, Ö., Bilgin, S., Dokmeci, H., Terzi, Ö., & Baris, S. (2021). Investigating the effects of protective face masks on the respiratory parameters of children in the post-anesthesia care unit during the COVID-19 pandemic. *Journal of PeriAnesthesia Nursing*. <https://doi.org/10.1016/j.jopan.2021.02.004>
- Georgi, C., Haase-Fielitz, A., Meretz, D., Gäsert, L., & Butter, C. (2020). The impact of commonly-worn face masks on physiological parameters and on discomfort during standard work-related physical effort. *Deutsches Ärzteblatt International*, 117(40), 674–675. <https://doi.org/10.3238/arztebl.2020.0674>
- Goh, D. Y. T., Mun, M. W., Lee, W. L. J., Teoh, O. H., & Rajgor, D. D. (2019). A randomised clinical trial to evaluate the safety, fit, comfort of a novel N95 mask in children. *Scientific Reports*, 9(1), 18952. <https://doi.org/10.1038/s41598-019-55451-w>
- Isikalan, M. M., Özkan, B., Özkan, E. B., Gümüş, M., Ferlibaş, E., & Acar, A. (2021). Does wearing double surgical masks during the COVID-19 pandemic reduce maternal oxygen saturation in term pregnant women?: A prospective study. *Archives of Gynecology and Obstetrics*. <https://doi.org/10.1007/s00404-021-06126-3>
- Lubrano, R., Bloise, S., Testa, A., Marcellino, A., Dilillo, A., Mallardo, S., Isoldi, S., Martucci, V., Sanseviero, M., Del Giudice, E., Malvaso, C., Iorfida, D., & Ventriglia, F. (2021). Assessment of respiratory function in infants and young children wearing face masks during the COVID-19 pandemic. *JAMA Network Open*, 4(3), e210414–e210414. <https://doi.org/10.1001/jamanetworkopen.2021.0414>
- Mapelli, M., Salvioni, E., Martino, F. D., Mattavelli, I., Gugliandolo, P., Vignati, C., Farina, S., Palermo, P., Campodonico, J., Maragna, R., Russo, G. L., Bonomi, A., Sciomer, S., & Agostoni, P. (2021). “You can leave your mask on”: Effects on cardiopulmonary parameters of different airway protection masks at rest and during maximal exercise. *European Respiratory Journal*. <https://doi.org/10.1183/13993003.04473-2020>

- Samannan, R., Holt, G., Calderon-Candelario, R., Mirsaeidi, M., & Campos, M. (2021). Effect of face masks on gas exchange in healthy persons and patients with chronic obstructive pulmonary disease. *Annals of the American Thoracic Society*, 18(3), 541–544. <https://doi.org/10.1513/AnnalsATS.202007-812RL>
- Shaw, K., Butcher, S., Ko, J., Zello, G. A., & Chilibeck, P. D. (2020). Wearing of cloth or disposable surgical face masks has no effect on vigorous exercise performance in healthy individuals. *International Journal of Environmental Research and Public Health*, 17, 8110. <https://doi.org/10.3390/ijerph17218110>
- Smart, N. R., Horwell, C. J., Smart, T. S., & Galea, K. S. (2020). Assessment of the wearability of facemasks against air pollution in primary school-aged children in London. *International Journal of Environmental Research and Public Health*, 17(11), 3935. <https://doi.org/10.3390/ijerph17113935>

## Reviews

- Dias, J. V., Contreiras, M., & Oom, P. (2020). SARS-CoV-2 pandemic: Should children wear masks? *Acta Médica Portuguesa*, 33(10), 711–711.  
<https://doi.org/10.20344/amp.14787>
- Eberhart, M., Orthaber, S., & Kerbl, R. (2021). The impact of face masks on children—A mini review. *Acta Paediatrica*, 110(6), 1778–1783. <https://doi.org/10.1111/apa.15784>
- Esposito, S., & Principi, N. (2020). To mask or not to mask children to overcome COVID-19. *European Journal of Pediatrics*, 179(8), 1267–1270.  
<https://doi.org/10.1007/s00431-020-03674-9>

## Other Studies

### Face Masking Feasibility

Aaronson, B., Glick, S. N., Kirk, C. J., McCloud, W. A., IV, Sasser, T. R., Zerr, D. M., & Englund, J. A. (2021). Assessment of feasibility of face covering in school-aged children with Autism Spectrum Disorders and Attention-Deficit/Hyperactivity Disorder. *JAMA Network Open*, 4(5), e2110281.

<https://doi.org/10.1001/jamanetworkopen.2021.10281>

Abaluck, J., Kwong, L. H., Styczynski, A., Haque, A., Kabir, Md. A., Bates-Jefferys, E., Crawford, E., Benjamin-Chung, J., Benhachmi, S., Raihan, S., Rahman, S., Zaman, N., Winch, P. J., Hossain, Md. M., Reza, H. M., Luby, S. P., & Mobarak, A. M. (2021). *Normalizing community mask-wearing: A cluster randomized trial in Bangladesh* (Working Paper No. 28734; Working Paper Series). National Bureau of Economic Research. <https://doi.org/10.3386/w28734>

Mickells, G. E., Figueroa, J., West, K. W., Wood, A., & McElhanon, B. O. (2021). Adherence to masking requirement during the COVID-19 pandemic by early elementary school children. *The Journal of School Health*, 91(7), 555–561.

<https://doi.org/10.1111/josh.13033>

### The Need for Masking

Bosslet, G. T., Pollak, M., Jang, J. H., Roll, R., Sperling, M., & Khan, B. (2021). The effect of in-person primary and secondary school instruction on county-level SARS-CoV-2 spread in Indiana. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, ciab306. <https://doi.org/10.1093/cid/ciab306>

Bullard, J., Funk, D., Dust, K., Garnett, L., Tran, K., Bello, A., Strong, J. E., Lee, S. J., Waruk, J., Hedley, A., Alexander, D., Caeseele, P. V., Loeppky, C., & Poliquin, G.

(2021). Infectivity of severe acute respiratory syndrome coronavirus 2 in children compared with adults. *CMAJ*, 193(17), E601–E606.

<https://doi.org/10.1503/cmaj.210263>

Dattner, I., Goldberg, Y., Katriel, G., Yaari, R., Gal, N., Miron, Y., Ziv, A., Sheffer, R., Hamo, Y., & Huppert, A. (2021). The role of children in the spread of COVID-19: Using household data from Bnei Brak, Israel, to estimate the relative susceptibility and infectivity of children. *PLoS Computational Biology*, 17(2), e1008559.

<https://doi.org/10.1371/journal.pcbi.1008559>

Engzell, P., Frey, A., & Verhagen, M. D. (2021). Learning loss due to school closures during the COVID-19 pandemic. *Proceedings of the National Academy of Sciences*, 118(17). <https://doi.org/10.1073/pnas.2022376118>

Head, J. R., Andrejko, K. L., & Remais, J. V. (2021). Model-based assessment of SARS-CoV-2 Delta variant transmission dynamics within partially vaccinated K-12 school populations. *MedRxiv: The Preprint Server for Health Sciences*.

<https://doi.org/10.1101/2021.08.20.21262389>

Johansson, M. A., Quadelacy, T. M., Kada, S., Prasad, P. V., Steele, M., Brooks, J. T., Slayton, R. B., Biggerstaff, M., & Butler, J. C. (2021). SARS-CoV-2 transmission from people without COVID-19 symptoms. *JAMA Network Open*, 4(1), e2035057.

<https://doi.org/10.1001/jamanetworkopen.2020.35057>

Jones, B., Phillips, G., Kemp, S., Payne, B., Hart, B., Cross, M., & Stokes, K. A. (2021). SARS-CoV-2 transmission during rugby league matches: Do players become infected after participating with SARS-CoV-2 positive players? *British Journal of Sports Medicine*, 55(14), 807–813. <https://doi.org/10.1136/bjsports-2020-103714>

Jones, T. C., Mühlmann, B., Veith, T., Biele, G., Zuchowski, M., Hofmann, J., Stein, A., Edelmann, A., Corman, V. M., & Drosten, C. (2020). *An analysis of SARS-CoV-2 viral*

*load by patient age* (p. 2020.06.08.20125484).

<https://doi.org/10.1101/2020.06.08.20125484>

Llupià, A., Borràs-Santos, A., Guinovart, C., Utzet, M., Moriña, D., & Puig, J. (2021). SARS-CoV-2 transmission in students of public schools of Catalonia (Spain) after a month of reopening. *PLoS One*, 16(5), e0251593. <https://doi.org/10.1371/journal.pone.0251593>

Lyngse, F. P., Mølbak, K., Franck, K. T., Nielsen, C., Skov, R. L., Voldstedlund, M., Cohen, A. S., & Kirkeby, C. T. (2021). *Association between SARS-CoV-2 transmissibility, viral load, and age in household* (p. 2021.02.28.21252608).

<https://doi.org/10.1101/2021.02.28.21252608>

Maltezou, H. C., Vorou, R., Papadima, K., Kossyvakis, A., Spanakis, N., Gioula, G., Exindari, M., Metallidis, S., Lourida, A. N., Raftopoulos, V., Froukala, E., Martinez-Gonzalez, B., Mitsianis, A., Roilides, E., Mentis, A., Tsakris, A., & Papa, A. (2021). Transmission dynamics of SARS-CoV-2 within families with children in Greece: A study of 23 clusters. *Journal of Medical Virology*, 93(3), 1414–1420.

<https://doi.org/10.1002/jmv.26394>

Paul, L. A., Daneman, N., Schwartz, K. L., Science, M., Brown, K. A., Whelan, M., Chan, E., & Buchan, S. A. (2021). Association of age and pediatric household transmission of SARS-CoV-2 infection. *JAMA Pediatrics*.

<https://doi.org/10.1001/jamapediatrics.2021.2770>

Pavlonis, B., Ierardi, A. M., Levine, L., Mirer, F., & Kelvin, E. A. (2021). Estimating aerosol transmission risk of SARS-CoV-2 in New York City public schools during reopening. *Environmental Research*, 195, 110805. <https://doi.org/10.1016/j.envres.2021.110805>

Posfay-Barbe, K. M., Wagner, N., Gauthey, M., Moussaoui, D., Loevy, N., Diana, A., & L'Huillier, A. G. (2020). COVID-19 in children and the dynamics of infection in families. *Pediatrics*, 146(2). <https://doi.org/10.1542/peds.2020-1576>

Soriano-Arandes, A., Gatell, A., Serrano, P., Biosca, M., Campillo, F., Capdevila, R., Fàbrega, A., Lobato, Z., López, N., Moreno, A. M., Poblet, M., Riera-Bosch, M. T., Rius, N., Ruiz, M., Sánchez, A., Valldepérez, C., Vilà, M., Pineda, V., Lazcano, U., ... COPEDI-CAT research group. (2021). Household SARS-CoV-2 transmission and children: A network prospective study. *Clinical Infectious Diseases: An Official Publication of the Infectious Diseases Society of America*, ciab228.

<https://doi.org/10.1093/cid/ciab228>

Stein-Zamir, C., Abramson, N., Shoob, H., Libal, E., Bitan, M., Cardash, T., Cayam, R., & Miskin, I. (2020). A large COVID-19 outbreak in a high school 10 days after schools' reopening, Israel, May 2020. *Eurosurveillance*, 25(29), 2001352.

<https://doi.org/10.2807/1560-7917.ES.2020.25.29.2001352>

Verlenden, J. V., Pampati, S., Rasberry, C. N., Liddon, N., Hertz, M., Kilmer, G., Viox, M. H., Lee, S., Cramer, N. K., Barrios, L. C., & Ethier, K. A. (2021). Association of children's mode of school instruction with child and parent experiences and well-being during the covid-19 pandemic—COVID Experiences Survey, United States, October 8–November 13, 2020. *MMWR. Morbidity and Mortality Weekly Report*, 70(11), 369–376.

<https://doi.org/10.15585/mmwr.mm7011a1>

Zhang, Y., Johnson, K., Lich, K. H., Ivy, J., Keskinocak, P., Mayorga, M., & Swann, J. L. (2021). COVID-19 projections for K12 schools in fall 2021: Significant transmission without interventions. *MedRxiv: The Preprint Server for Health Sciences*.

<https://doi.org/10.1101/2021.08.10.21261726>