



# Renfrew County and District Health Unit

*"Optimal Health for All in Renfrew County and District"*

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July 17, 2020

Lynn Davis  
[REDACTED]

Dear Lynn,

Thank you for your letter.

I understand that not everyone supports the wearing of masks. However, the vast majority of people do. Many wonder why we did not encourage or require mask usage earlier. In fact, earlier on, during the "stay home" stage, your mask was your residence.

There is good evidence that masks reduce the spread of COVID-19. They protect bystanders from an infected individual who may even be asymptomatic. Masks also protect the wearer from others who are infected.

There is additional evidence that masks encourage better COVID-19 prevention behaviours, distancing when not wearing a mask, less lingering in stores, and handwashing, because people are more aware of their actions.

I have attached a bibliography of sources on masks for you. While some of the studies are early and there are a number of expert opinions, I think the list is both more comprehensive and up to date than those that you mention. More importantly the studies are of superior scientific merit.

Masks are mandated for use in enclosed, indoor public places. This is important when 2 metre distancing is not possible. Indoor mask use is all the more essential because the pandemic has clearly demonstrated that COVID-19 is almost exclusively an indoor disease.

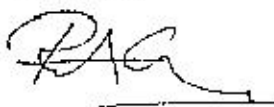
While a minor inconvenience, this is the socially responsible thing to do, to control COVID-19. Outbreaks have and will continue to occur with further opening up of the

economy. Think of the nail salon in Kingston, the US states that opened up too quickly, and now Australia, the country that was the envy of English-speaking countries for containing the pandemic. The last thing we want, is to go backwards.

This virus is wily and will continue to surprise us. The most recent case in Renfrew County had only a remote and surprisingly outdoor link to the Kingston nail salon. Vigilance and strict observance of public health measures are essential.

Obviously not everyone can wear a mask and we must not point fingers at those who cannot. As for others, this will be a gradual education process and we do not anticipate any major problems.

Sincerely,

A handwritten signature in black ink, appearing to read 'RAG', with a horizontal line drawn underneath it.

Dr. Robert Cushman  
Acting Medical Officer of Health  
Renfrew County and District Health Unit

Enclosure

## Recent Studies:

- Rothe C, Schunk M, Sothmann P, et al. Transmission of 2019-nCoV Infection from an Asymptomatic Contact in Germany. *The New England Journal of medicine*. 2020;382(10):970-971. PMID: 32003551 [↗](#)
- Zou L, Ruan F, Huang M, et al. SARS-CoV-2 Viral Load in Upper Respiratory Specimens of Infected Patients. *The New England Journal of medicine*. 2020;382(12):1177-1179. PMID: 32074444 [↗](#)
- Pan X, Chen D, Xia Y, et al. Asymptomatic cases in a family cluster with SARS-CoV-2 infection. *The Lancet Infectious diseases*. 2020. PMID: 32087116 [↗](#)
- Bai Y, Yao L, Wei T, et al. Presumed Asymptomatic Carrier Transmission of COVID-19. *Jama*. 2020. PMID: 32083643 [↗](#)
- Kimball A HK, Arons M, et al. Asymptomatic and Presymptomatic SARS-CoV-2 Infections in Residents of a Long-Term Care Skilled Nursing Facility — King County, Washington, March 2020. *MMWR Morbidity and mortality weekly report*. 2020; ePub: 27 March 2020. PMID: 32240128 [↗](#)
- Wei WE LZ, Chiew CJ, Yong SE, Toh MP, Lee VJ. Presymptomatic Transmission of SARS-CoV-2 — Singapore, January 23–March 16, 2020. *MMWR Morbidity and Mortality Weekly Report*. 2020; ePub: 1 April 2020. PMID: 32271722 [↗](#)
- Li R, Pei S, Chen B, et al. Substantial undocumented infection facilitates the rapid dissemination of novel coronavirus (SARS-CoV2). *Science (New York, NY)*. 2020. PMID: 32179701 [↗](#)
- Furukawa NW, Brooks JT, Sobel J. Evidence Supporting Transmission of Severe Acute Respiratory Syndrome Coronavirus 2 While Presymptomatic or Asymptomatic [published online ahead of print, 2020 May 4]. *Emerg Infect Dis*. 2020;26(7):10.3201/eid2607.201595. [Link](#)
- Oran DP, Topol Prevalence of Asymptomatic SARS-CoV-2 Infection: A Narrative Review [published online ahead of print, 2020 Jun 3]. *Ann Intern Med*. 2020;M20-3012. PMID: 32491919 [↗](#)
- National Academies of Sciences, Engineering, and Medicine. 2020. Rapid Expert Consultation on the Possibility of Bioaerosol Spread of SARS-CoV-2 for the COVID-19 Pandemic (April 1, 2020). Washington, DC: The National Academies Press. <https://doi.org/10.17226/25769> [↗](#) .
- Schwartz KL, Murti M, Finkelstein M, et al. Lack of COVID-19 transmission on an international flight. *CMAJ*. 2020;192(15):E410. PMID: 32392504 [↗](#)
- Anfinrud P, Stadnytskyi V, Bax CE, Bax A. Visualizing Speech-Generated Oral Fluid Droplets with Laser Light Scattering. *N Engl J Med*. 2020 Apr 15. doi:10.1056/NEJMc2007800. PMID: 32294341 [↗](#)
- Davies A, Thompson KA, Gli 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*. 2013;7(4):413-8. PMID: 24229526 [↗](#)
- Konda A, Prakash A, Moss GA, Schmoldt M, Grant GD, Guha S. Aerosol Filtration Efficiency of Common Fabrics Used in Respiratory Cloth Masks. *ACS Nano*. 2020 Apr 24. PMID: 32329337 [↗](#)
- Aydin O, Emon B, Saif MTA. Performance of fabrics for home-made masks against spread of respiratory infection through droplets: a quantitative mechanistic study. *medRxiv preprint doi: <https://doi.org/10.1101/2020.04.19.20071779>*, posted April 24, 2020.
- Ma QX, Shan H, Zhang HL, Li GM, Yang RM, Chen JM. Potential utilities of mask-wearing and instant hand hygiene for fighting SARS-CoV-2. *J Med Virol*. 2020. PMID: 32232986 [↗](#)
- Leung, N.H.L., Chu, D.K.W., Shu, E.Y.C. *et al*. Respiratory virus shedding in exhaled breath and efficacy of face masks. *Nat Med*. 2020. PMID: 32371934 [↗](#)
- Johnson DE, Druce JD, Birch C, Grayson ML. A quantitative assessment of the efficacy of surgical and N95 masks to filter influenza virus in patients with acute influenza infection. *Clin Infect Dis*. 2009 Jul 15;49(2):275-7. PMID: 19522650 [↗](#)
- Green CF, Davidson CS, Panfillo AL, et al. Effectiveness of selected surgical masks in arresting vegetative cells and endospores when worn by simulated contagious patients. *Infect Control Hosp Epidemiol*. 2012;33(5):487-494. PMID: 22476275 [↗](#)

## EXPERT OPINIONS

- Chiang CH, Chlang CH, Chiang CH. Letter to editor - Can universal masking help with our recovery from the COVID-19 pandemic? Int J Surg. 2020 May 23;79:125-126. doi: 10.1016/j.ijssu.2020.05.058.
- - Clase CM, Fu EL, Joseph M et al. Cloth masks may prevent transmission of COVID-19: An evidence-based, risk-based approach. Ann Intern Med. 2020 May 22.
- - Greenhalgh T, Schmid MB, Czypionka T, Bassler D, Gruer L. Face masks for the public during the COVID-19 crisis. BMJ 2020; 369.
- Javid B, Weekes MP, Matheson NJ. COVID-19: Should the public wear face masks? BMJ. 2020 Apr 9;369.
- Keshikar-Jahromi M, Sulkowski M, Holakouie-Naieni K. Public masking: An urgent need to revise global policies to protect against COVID-19. Am J Trop Med Hyg. 2020 Jun;102(6):1160-1161. doi: 10.4269/ajtmh.20-0305.
- Klompas M, Morris CA, Shenoy ES. Universal masking in the COVID-19 era. N Engl J Med. 2020 Jun 3.
- Lim S, Yoon HI, Song KH, Kim ES, Kim HB. Face masks and containment of COVID-19: Experience from South Korea. J Hosp Infect. 2020 Jun 12: S0195-6701(20)30302-9.
- Zhiqiang Zhai. Facial mask: A necessity to beat COVID-19. Bull Environ. 2020 May 15;175:106827. Epub 2020 Mar 23.

## EVIDENCE AND STUDIES ON FACE COVERINGS

- Alberta Health Services COVID-19 Scientific Advisory Group. Rapid Response Report: What is the effectiveness of wearing medical masks, including home-made masks, to reduce the spread of COVID-19 in the community? Updated 2020 April.
- Aydin O, Emon B, Saif MTA. Performance of fabrics for home-made masks against spread of respiratory infection through droplets: a quantitative mechanistic study. Preprint. medRxiv. Posted 2020 April 24.
- Chan JF, Yuan S, Zhang AJ et al. Surgical mask partition reduces the risk of non-contact transmission in a golden Syrian hamster model for Coronavirus Disease 2019 (COVID-19). Clin Infect Dis. 2020 May 30.

- Cheng VC, Wong SC, Chuang VW et al. The role of community-wide wearing of face mask for control of coronavirus disease 2019 (COVID-19) epidemic due to SARS-CoV-2. J Infect. 2020;81(1):107-114.
- 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. 2020 395 (10242) :1973-1987.
- 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. 2013;7(4):413-8.
- Eikenberry SE, Mancuso M, Iboi E et al. To mask or not to mask: Modeling the potential for face mask use by the general public to curtail the COVID-19 pandemic. Infect Dis Model; 5: 293-308.
- European Centre for Disease Prevention and Control. Using face masks in the community. Stockholm: ECDC; 2020.
- Furukawa NW, Brooks JT, Sabel J. Evidence supporting transmission of Severe Acute Respiratory Syndrome Coronavirus 2 while presymptomatic or asymptomatic. EID Journal. 2020; 26(7).
- Gandhi M, Havlir D. The Time for universal masking of the public for Coronavirus Disease 2019 is now. Open Forum Infect Dis. 2020;7(4).
- Kai D, Goldstein G, Morgunov A et al. Universal masking is urgent in the COVID-19 pandemic: SEIR and agent based models, empirical validation, policy recommendations. Preprint. arXiv. Posted 2020 April 22.
- Kenyon C. Widespread use of face masks in public may slow the spread of SARS CoV-2: an ecological study. Preprint. medRxiv. Posted 2020 April 6.
- Leffler CT, Ing E, Lykins JD, McKeown CA, Grzybowski A. Country-wide coronavirus mortality and use of masks by the public. Submitted for publication 2020 April 22.
- Liang M, Gao L, Cheng C, et al. Efficacy of face mask in preventing respiratory virus transmission: a systematic review and meta-analysis. Travel Med Infect Dis. 2020 May 28.
- Lyu W, Wenby GL. Community use of face masks and COVID-19: evidence from a natural experiment of State mandates in the US. Health Affairs. 2020 June 16.

- Ma QX, Shan H, Zhang HL, Li GM, Yang RM, Chen JM. Potential utilities of mask-wearing and instant hand hygiene for fighting SARS-CoV-2. J Med Virol. 2020 March.
- MacIntyre CR, Chughtai AA. 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. Int J Nurs Stud.2020; 108(103629).
- Marchiori, M. COVID-19 and the social distancing paradox: dangers and solutions. Preprint. arXiv. Posted 2020 May 26.
- Mitze, T., Kosfeld, R., Rode, J., Waide, K. Face masks considerably reduce COVID-19 cases in Germany: A synthetic control method approach. Bonn, Germany. IZA Institute of Labor Economics. 2020 June.
- Public Health Ontario. COVID-19 – what we know so far about...wearing masks in public. 2020 June 17.
- 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 May 27;7:260.
- Worby CJ, Chang HH. Face mask use in the general population and optimal resource allocation during the COVID-19 pandemic. Preprint. medRxiv. Posted 2020 Apr 7.