

ENVIRONMENTAL HEALTH RESEARCH SCAN

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CONTENTS

- [AGRICULTURAL OPERATIONS](#)
- [BUILT ENVIRONMENT](#)
- [CHILDREN'S ENVIRONMENTAL HEALTH](#)
- [CLIMATE CHANGE](#)
- [DRINKING WATER](#)
- [EMERGENCY PREPAREDNESS](#)
- [ETHICS](#)
- [FOOD](#)
- [GENERAL](#)
- [GUIDANCE](#) (cleaning, face masks, hand hygiene, more)
- [HEALTH EQUITY](#)
- [HEALTH IMPACT ASSESSMENT](#)
- [HEALTH POLICY](#)
- [HOMELESS, VULNERABLE POPULATIONS](#)
- [INDOOR AIR](#)
- [INDIGENOUS ENVIRONMENTAL HEALTH](#)
- [MENTAL HEALTH](#)
- [MULTI-UNIT BUILDINGS](#)
- [OCCUPATIONAL GUIDANCE](#)
- [OUTDOOR AIR](#)
- [PERSONAL SERVICE ESTABLISHMENTS](#)
- [PETS](#)
- [PUBLIC FACILITIES](#)
- [RECREATIONAL AND SURFACE WATER](#)
- [RISK ASSESSMENT, COMMUNICATION](#)
- [SENIORS' ENVIRONMENTAL HEALTH](#)
- [SURVEILLANCE, BIOMONITORING](#)
- [SURVIVAL TIME](#)
- [TOBACCO, CANNABIS](#)
- [TRANSIT, TRANSPORTATION](#)
- [TRANSMISSION](#)
- [WASTE](#)
- [ZOOZOSES](#)

Environmental Health (EH) Research Scan: Aims and Scope (click [here](#) for Search Methodology)

NCCEH's EH Research Scan aims to expand awareness of topics in environmental health, in line with NCCEH's vision to be the indispensable online resource for environmental health practitioners and policy-makers across Canada. "We focus on health risks associated with the physical environment and identify evidence-based interventions to mitigate those risks." This review is not official or peer reviewed. It does not cover all research, news, and information, and NCCEH is not responsible for the accuracy of the content from media or databases. How to access the items? Click on the link related to each entry and it should take you to the item. Not all links are open access; some are abstract links where paid journal subscription is required.

EDITOR PICKS

Environmental Health Resources for the COVID-19 Pandemic [topic page] [topic page]

National Collaborating Centre for Environmental Health



“This topic page has been created to promote key COVID-19 resources to environmental health practitioners and related professions.”

Masking During the COVID-19 Pandemic [guidance]

National Collaborating Centre for Environmental Health



“This document outlines the main types of masks, their effectiveness in providing protection against pathogenic hazards, and considerations for the safe use.”

COVID-19 and outdoor safety: considerations for use of outdoor recreational spaces [guidance]

National Collaborating Centre for Environmental Health



“This document was developed to address concerns related to the safe use of public spaces during the COVID-19 outbreak.”

COVID-19 and use of disinfectants and sanitizers in food premises [blog]

Tina Chen, Knowledge Translation Scientist, National Collaborating Centre for Environmental Health



“This blog is based on the NCCEH guidance document [Disinfectants and Sanitizers for Use on Food Contact Surfaces](#) to reflect recent developments due to COVID-19.”

Environmental public health professionals can support health equity in the time of COVID-19 [blog]

Karen Rideout, Guest Blogger, National Collaborating Centre for Environmental Health



“...Environmental public health (EPH) professionals are playing an essential role to help control the spread of the SARS-CoV-2 virus, but roles have shifted. (more)...”

ENVIRONMENTAL HEALTH RESEARCH SCAN

AGRICULTURAL OPERATIONS

BUILT ENVIRONMENT

1. Acuto M. COVID-19: Lessons for an Urban (izing) World. *One Earth*. 2020 Apr 16. Available from: [https://www.cell.com/one-earth/fulltext/S2590-3322\(20\)30155-X](https://www.cell.com/one-earth/fulltext/S2590-3322(20)30155-X).
2. Blocken B, Malizia F, van Druenen T, Marchal T. Social distancing v2.0: during walking, running and cycling. Eindhoven, Netherlands: Eindhoven University of Technology; 2020 Apr. Available from: https://media.real.gr/filesystem/Multimedia/pdf/Social_Distancing_v20_White_Paper_id38170.pdf.
3. Blocken B, Malizia F, van Druenen T, Marchal T. Towards aerodynamically equivalent COVID19 1.5 m social distancing for walking and running. Eindhoven, Netherlands: Eindhoven University of Technology; 2020 Apr. Available from: http://www.urbanphysics.net/Social%20Distancing%20v20_White_Paper.pdf.
4. Cycling UK. Coronavirus Q&A: is it safe to cycle? How does the coronavirus outbreak affect cycling, and how can you minimise your risk as an individual? . London, UK: Cycling UK; 2020 Apr 20. Available from: <https://www.cyclinguk.org/article/coronavirus-qa-it-safe-cycle>.
5. Dietz L, Horve PF, Coil DA, Fretz M, Eisen JA, Van Den Wymelenberg K. 2019 Novel Coronavirus (COVID-19) Pandemic: Built Environment Considerations To Reduce Transmission. *Msystems*. 2020;5(2). Available from: <https://msystems.asm.org/content/5/2/e00245-20>.
6. European Cyclists' Federation. Keep Cycling during the Coronavirus Outbreak Belgium: ECF; 2020. Available from: <https://ecf.com/news-and-events/news/keep-cycling-during-coronavirus-outbreak>.
7. Schwedhelm A, Li W, Harms L, Adriaola-Steil C. Biking Provides a Critical Lifeline During the Coronavirus Crisis. Washington, DC: World Resources Institute; 2020 Apr 17. Available from: <https://www.wri.org/blog/2020/04/coronavirus-biking-critical-in-cities>.
8. Thoelen J. Belgian-Dutch Study: Why in times of COVID-19 you should not walk/run/bike close behind each other. *Medium*; 2020 [updated Apr 7]; Available from: <https://medium.com/@jurgenthoele/belgian-dutch-study-why-in-times-of-covid-19-you-can-not-walk-run-bike-close-to-each-other-a5df19c77d08>.
9. Waltner-Toews D, Waltner-Toews M. LA+ RISK “Designed for Disease? An Ecosystem Approach to Emerging Infectious Disease” *Landscape Architecture Plus*. 2020 Mar 26. Available from: <https://issuu.com/laplusjournal/docs/DesignedforDisease>.

CHILDREN'S ENVIRONMENTAL HEALTH

Schools

1. Brooks SK, Smith LE, Webster RK, Weston D, Woodland L, Hall I, et al. The impact of unplanned school closure on children's social contact: rapid evidence review. *Eurosurveillance*. 2020;25(13):2000188. Available from: <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.13.2000188>.
2. Children's Environmental Health Network. Parent and educator toolkit. Washington, DC: CEHN; 2020. Available from: <https://cehn.org/ceh-movement/parent-educator-toolkit/>.

3. Densmore-James S. Top 10 List for Parents: How to “Normalize” our Lives when Life is Far from Normal. Florida: University of West Florida; 2020. Available from: <https://uwf.edu/media/university-of-west-florida/offices/alumni-relations/argos-at-home/Top-10-List-for-Parents.pdf>.
4. Iwata K, Doi A, Miyakoshi C. Was School Closure Effective in Mitigating Coronavirus Disease 2019 (COVID-19)? Time Series Analysis Using Bayesian Inference. 2020. Available from: <https://www.preprints.org/manuscript/202004.0058/v1>.
5. Joob B, Wiwanitkit V. COVID-19, School Closings and Weight Gain. Obesity. 2020. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/oby.22825>.
6. Li W, Liao J, Li Q, Baskota M, Wang X, Tang Y, et al. Health Education for Parents During the COVID-19 Outbreak Public Health Education for Parents During the Outbreak of COVID-19: A Rapid Review. medRxiv. 2020:2020.04.14.20064741. Available from: <https://www.medrxiv.org/content/medrxiv/early/2020/04/19/2020.04.14.20064741.full.pdf>.
7. Szabo T, Richling S, Embry DD, Biglan A, Wilson KG. From Helpless to Hero: Promoting Values-Based Behavior and Positive Family Interaction in the Midst of Covid-19. PsyArXiv. 2020 Apr 3. Available from: <https://doi.org/10.31234/osf.io/sgh5q>.
8. Van Lancker W, Parolin Z. COVID-19, school closures, and child poverty: a social crisis in the making. The Lancet Public Health. 2020. Available from: [https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667\(20\)30084-0/fulltext](https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(20)30084-0/fulltext).
9. Viner RM, Russell SJ, Croker H, Packer J, Ward J, Stansfield C, et al. School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. The Lancet Child & Adolescent Health. 2020. Available from: [https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642\(20\)30095-X/fulltext](https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(20)30095-X/fulltext).

Mental Health (children-specific; for ‘Genera’ see separate category below on ‘Mental Health’ general)

1. Lee J. Mental health effects of school closures during COVID-19. The Lancet Child & Adolescent Health. 2020. Available from: [https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642\(20\)30109-7/fulltext](https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(20)30109-7/fulltext).
2. Li Y, Cui Y. How to safeguard children’s mental health during emergencies. Pediatric Investigation. 2020. Available from: <https://onlinelibrary.wiley.com/doi/10.1002/ped4.12185>.

CLIMATE CHANGE

1. Ficaretola GF, Rubolini D. Climate affects global patterns of COVID-19 early outbreak dynamics. medRxiv. 2020:2020.03.23.20040501. Available from: <https://www.medrxiv.org/content/medrxiv/early/2020/03/31/2020.03.23.20040501.full.pdf>.

DRINKING WATER

1. Hyde K. Residential Water Quality and the Spread of COVID-19 in the United States. SSRN. 2020(Apr 9). Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3572341.

EMERGENCY PREPAREDNESS

1. McCarthy Tetrault. COVID-19: Emergency Measures Tracker. Toronto, ON: McCarthy Tetrault; 2020. Available from: <https://www.mccarthy.ca/en/insights/articles/covid-19-emergency-measures-tracker>.

ETHICS

1. National Collaborating Centre for Healthy Public Policy. Public Health Ethics and COVID-19: Selected Resources. Montreal, QC: University of Montreal; 2020 Mar. Available from: <http://www.ncchpp.ca/823/COVID-19.ccnpps>.

FOOD

Safety

1. British Columbia Centre for Disease Control. Covid-19. Food businesses. Information for grocery stores, restaurants and other food premises for employers and workers. What do I need to know about disinfectants? Vancouver, BC: BCCDC; 2020; Available from: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/employers-businesses/food-businesses>.
2. Cornell University Institute for Food Safety. Food safety recommendations & frequently asked questions for the consumer: Q: How should we treat packaging? How should we handle other groceries or make sure they're safe? Geneva, NY: Cornell University; 2020 [Apr 1]; Available from: <https://instituteforfoodsafety.cornell.edu/coronavirus-covid-19/food-safety-recommendation-consumer/#handling-packaging-groceries>
3. Danyluk M, Seymour N, Yavelak M, Christian C, Chapman B. COVID-19 and Food Safety FAQ: Shopping and Handling Groceries. Food Science and Human Nutrition (University of Florida, EDIS). 2020;2. Available from: <https://journals.flvc.org/edis/article/view/121492>.
4. Desai AN, Aronoff DM. Food Safety and COVID-19. JAMA. 2020. Available from: <https://doi.org/10.1001/jama.2020.5877>.
5. European Centre for Disease Control and Prevention. COVID-19 and food safety. Questions and Answers. Solna, Sweden: ECDC; 2020 Apr 8. Available from: https://ec.europa.eu/food/sites/food/files/safety/docs/biosafety_crisis_covid19_qandas.pdf.
6. Gu J, Han B, Wang J. COVID-19: Gastrointestinal Manifestations and Potential Fecal-Oral Transmission. Gastroenterology. 2020. Available from: <https://doi.org/10.1053/j.gastro.2020.02.054>.
7. National Environmental Health Association. Coronavirus Disease 2019 (COVID-19) and food safety. Denver, CO: NEHA; 2020. Available from: <https://www.neha.org/sites/default/files/COVID-19-FAQs-Food-Establishments.pdf>.
8. Pressman P, Naidu AS, Clemens R. COVID-19 and food safety: Risk Management and Future Considerations.
9. Quebec Agriculture Pêcheries et Alimentation. Guidance for Industry: What to do when someone tests positive for COVID-19 in a food establishment. A food handler has tested positive for COVID-19. What next? . Quebec: Government of Quebec; 2020. Available from: https://cdn-contenu.quebec.ca/cdn-contenu/adm/min/agriculture-pecheries-alimentation/publications-adm/Covid-19/GM_covid19_manipulateur_positif_MAPAQ_anglais.pdf?1585699613.

10. Vancouver Coastal Health. Coronavirus Disease 2019 (COVID-19) Information for Food Premises. Vancouver, BC: VCH; 2020 Apr 2. Available from: <http://www.vch.ca/Documents/COVID-19%20Information%20for%20Food%20Premises.pdf>.
11. World Health Organization. COVID-19 and food safety: Guidance for food businesses. Geneva, Switzerland: WHO; 2020 Apr 7. Available from: <https://www.who.int/publications-detail/covid-19-and-food-safety-guidance-for-food-businesses>.

GENERAL

1. Alberta Health Services. COVID-19 Podcasts. Edmonton, AB: Government of Alberta; 2020. Available from: <https://www.albertahealthservices.ca/news/Page15434.aspx>.
2. Australian Government. Coronavirus (COVID-19) resources. Canberra ACT: Australian Government; 2020 Apr 16. Available from: <https://www.health.gov.au/resources/collections/novel-coronavirus-2019-ncov-resources>.
3. British Columbia Centre for Disease Control. COVID-19. Vancouver, BC: BCCDC; 2020; Available from: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19>.
4. European Centre for Disease Control and Prevention. COVID-19. Stockholm, Sweden: ECDCP; 2020 [updated 2020 Apr 15]; Available from: <https://www.ecdc.europa.eu/en/covid-19-pandemic>.
5. European Centre for Disease Control and Prevention. Coronavirus disease. Solna, Sweden: ECDC; 2020. Available from: <https://www.ecdc.europa.eu/en>.
6. Eurosurveillance. NEW: Coronavirus disease (COVID-19). Stockholm, Sweden: European Centre for Disease Prevention; 2020. Available from: <https://www.eurosurveillance.org/content/2019-ncov>.
7. Hong Kong Centre for Health Protection. COVID-19 together we fight the virus. Hong Kong: Government of the Hong Kong Special Administrative Region; 2020. Available from: <https://www.coronavirus.gov.hk/eng/index.html>.
8. Lau LS, Samari G, Moresky RT, Casey SE, Kachur SP, Roberts LF, et al. COVID-19 in humanitarian settings and lessons learned from past epidemics. *Nat Med*. 2020 2020/04/08. Available from: <https://doi.org/10.1038/s41591-020-0851-2>.
9. Manitoba Health. COVID-19 Novel Coronavirus. Winnipeg, MB: Government of Manitoba; 2020. Available from: <https://www.gov.mb.ca/covid19/index.html>.
10. National Collaborating Centre for Environmental Health. Environmental Health Resources for the COVID-19 Pandemic [topic page]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 Apr 3. Available from: <https://ncceh.ca/environmental-health-in-canada/health-agency-projects/environmental-health-resources-covid-19>.
11. National Collaborating Centre for Infectious Diseases. 2019 Novel coronavirus (2019-nCoV) outbreak. Disease debrief. Winnipeg, MB: National Collaborating Centre for Infectious Diseases; 2020 Apr 17. Available from: <https://nccid.ca/2019-novel-coronavirus-outbreak/>.
12. National Environmental Health Association. Coronavirus Disease 2019 (COVID-19) [compilation of resources]. Denver, CO: NEHA; 2020. Available from: <https://www.neha.org/covid-19>.
13. National Library of Medicine. LitCov. 2020. Available from: <https://www.ncbi.nlm.nih.gov/research/coronavirus/>.
14. New Brunswick Office of the Chief Medical Officer of Health (Public Health). Coronavirus. Saint John, NB: Government of New Brunswick; 2020. Available from: https://www2.gnb.ca/content/gnb/en/departments/ocmoh/cdc/content/respiratory_diseases/coronavirus.html.

15. Northwest Territories Health and Human Services. Coronavirus Disease (COVID-19). Yellowknife, NWT: Government of NWT; 2020. Available from: <https://www.hss.gov.nt.ca/en/services/coronavirus-disease-covid-19>.
16. Nova Scotia Government. Novel coronavirus. Government's response to COVID-19. Halifax, NS: Government of Nova Scotia; 2020. Available from: <https://novascotia.ca/coronavirus/>.
17. Nunavut Department of Health. COVID-19 (Novel coronavirus). Iqaluit, NU: Government of Nunavut; 2020. Available from: <https://www.gov.nu.ca/health/information/covid-19-novel-coronavirus>.
18. Public Health Ontario. Synopsis of Key Articles – Coronavirus Disease 2019 (COVID-19). Toronto, ON: PHO; 2020. Available from: <https://www.publichealthontario.ca/en/diseases-and-conditions/infectious-diseases/respiratory-diseases/novel-coronavirus/articles>.
19. Publons. COVID-19 related publications: Web of Science Group; 2020. Available from: https://publons.com/publon/covid-19/?sort_by=date.
20. Quebec Sante Montreal. Coronavirus COVID-19. Information and recommendations for Montrealers. Montreal, QC: Government of Quebec; 2020. Available from: <https://santemontreal.qc.ca/en/public/coronavirus-covid-19/#c36359>.
21. Saskatchewan Health Authority. COVID-19. Regina, SK: Government of Saskatchewan; 2020. Available from: <https://www.saskatchewan.ca/government/health-care-administration-and-provider-resources/treatment-procedures-and-guidelines/emerging-public-health-issues/2019-novel-coronavirus>.
22. Statistics Canada. Impacts of COVID-19 on Canadians. Ottawa, ON: Statistics Canada; 2020 Apr. Available from: <https://www.statcan.gc.ca/eng/survey/household/5311-COVID-19>.
23. Toronto Public Health. COVID-19: Stay Home & Reduce Virus Spread. Toronto, ON: TPH; 2020 Apr 16. Available from: <https://www.toronto.ca/home/covid-19/covid-19-protect-yourself-others/covid-19-stay-reduce-virus-spread/>.
24. Webster P. Canada and COVID-19: learning from SARS. The Lancet. 2020;395(10228):936-7. Available from: [https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(20\)30670-X.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)30670-X.pdf).
25. World Health Organization. Coronavirus disease (COVID-19) Pandemic. Geneva, Switzerland: WHO; 2020; Available from: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>.
26. World Health Organization. 2019 Novel Coronavirus (2019 nCoV): Strategies, Plans and Operations. Geneva, Switzerland: WHO; 2020 Apr 14. Available from: <https://www.who.int/publications-detail/covid-19-strategy-update-13-april-2020>.
27. Yukon Health and Wellness. Information about COVID-19. Whitehorse, YT: Government of Yukon; 2020. Available from: <https://yukon.ca/covid-19>.

GUIDANCE (for 'Occupational Guidance' – see separate topic heading)

Cleaning

1. Bird C, Prezant B, Green J, Stamkos J, Heckenberg A, Cole B, et al. Draft Guidelines for Post Cleaning Validation of Buildings Contaminated with SARS-CoV-2 v2. Victoria, Australia: Indoor Air Quality Association Australia; 2020 Apr 10. Available from: <https://www.iaqaaustralia.org.au/wp-content/uploads/2020/04/IAQAA-COVID-19-PCV-Guidelines-Draft-v2.pdf>.
2. Canadian Food Inspection Agency. Cleaning and sanitation program. Ottawa, ON: Government of Canada; 2020; Available from: <https://www.inspection.gc.ca/preventive-controls/cleaning-and-sanitation-program/eng/1511374381399/1528206247934>.

3. Chen T. COVID-19 and use of disinfectants and sanitizers in food premises [blog]. Vancouver, BC: National Collaborating Centre for Environmental Health; 2020 Apr 4. Available from: <http://ncceh.ca/content/blog/covid-19-and-use-disinfectants-and-sanitizers-food-premises>.
4. European Centre for Disease Prevention and Control. Interim guidance for environmental cleaning in non-healthcare facilities exposed to SARS-CoV-2. Stockholm, Sweden: ECDPC; 2020 Feb 18. Available from: <https://www.ecdc.europa.eu/sites/default/files/documents/coronavirus-SARS-CoV-2-guidance-environmental-cleaning-non-healthcare-facilities.pdf>.
5. European Centre for Disease Prevention and Control. Infection prevention and control in the household management of people with suspected or confirmed coronavirus disease (COVID-19). Stockholm, Sweden: ECDPC; 2020 Mar 30. Available from: <https://www.ecdc.europa.eu/sites/default/files/documents/Home-care-of-COVID-19-patients-2020-03-31.pdf>.
6. European Centre for Disease Prevention and Control. Disinfection of environments in healthcare and nonhealthcare settings potentially contaminated with SARS-CoV-2. Stockholm, Sweden: ECDPC; 2020 Mar. Available from: https://www.ecdc.europa.eu/sites/default/files/documents/Environmental-persistence-of-SARS-CoV-2-virus-Options-for-cleaning2020-03-26_0.pdf.
7. Health Canada. Hard surface disinfectants and hand sanitizers (COVID-19): disinfectants and hand sanitizers accepted under COVID-19 interim measure. Ottawa, ON: Health Canada; 2020 [updated 2020 Apr 17]; Available from: <https://www.canada.ca/en/health-canada/services/drugs-health-products/disinfectants/covid-19/products-accepted-under-interim-measure.html>.

Death

1. British Columbia Centre for Disease Control, British Columbia Ministry of Health. Safe Handling of Bodies of Deceased Persons with Suspected or Confirmed COVID-19: Interim Guidance. Vancouver, BC: BCCDC; 2020 Apr 2. Available from: http://www.bccdc.ca/Health-Professionals-Site/Documents/COVID19_SafeHandlingBodies.pdf.
2. Public Health England. Guidance updated to support the safe management of funerals. London, UK: PHE; 2020 Apr. Available from: <https://www.gov.uk/government/news/guidance-updated-to-support-the-safe-management-of-funerals>.

Face Masks

1. Brosseau LM, Sietsema M. Commentary: Masks-for-all for COVID-19 not based on sound data. Minnesota: CIDRAP; 2020. Available from: <https://www.cidrap.umn.edu/news-perspective/2020/04/commentary-masks-all-covid-19-not-based-sound-data>.
2. Cheng KK, Lam TH, Leung CC. Wearing face masks in the community during the COVID-19 pandemic: altruism and solidarity. *The Lancet*. 2020. Available from: [https://doi.org/10.1016/S0140-6736\(20\)30918-1](https://doi.org/10.1016/S0140-6736(20)30918-1).
3. Desai AN, Aronoff DM. Masks and Coronavirus Disease 2019 (COVID-19). *JAMA*. 2020 Apr 18. Available from: <https://jamanetwork.com/journals/jama/fullarticle/2764955>.
4. European Centre for Disease Control and Prevention. Using face masks in the community - Reducing COVID-19 transmission from potentially asymptomatic or pre-symptomatic people through the use of face masks. Solna, Sweden: ECDC; 2020 Apr 8. Available from: <https://www.ecdc.europa.eu/en/publications-data/using-face-masks-community-reducing-covid-19-transmission>.

5. Greenhalgh T, Schmid MB, Czypionka T, Bassler D, Gruer L. Face masks for the public during the covid-19 crisis. *BMJ*. 2020;369:m1435. Available from: <https://www.bmj.com/content/bmj/369/bmj.m1435.full.pdf>.
6. Howard J. Papers about effectiveness of basic masks #masks4all. Google Docs2020. Available from: https://docs.google.com/document/d/1HLrm0pqBN_5bdyysOeoOBX4pt4oFDBhsC_jpbIXpNtQ/mobilebasic.
7. Howard J, Huang A, Li Z, Tufekci Z, Zdimal V, van der Westhuizen H-M, et al. Face Masks Against COVID-19: An Evidence Review. 2020. Available from: <https://www.preprints.org/manuscript/202004.0203/v1>.
8. Javid B, Weekes MP, Matheson NJ. Covid-19: should the public wear face masks? *BMJ*. 2020;369:m1442. Available from: <https://www.bmj.com/content/bmj/369/bmj.m1442.full.pdf>.
9. Mahase E. Covid-19: What is the evidence for cloth masks? *BMJ*. 2020;369:m1422. Available from: <https://www.bmj.com/content/bmj/369/bmj.m1422.full.pdf>.
10. National Collaborating Centre for Environmental Health. Masking during the pandemic [guidance document]. Vancouver, BC: NCCEH; 2020 04 17 Apr 17. Available from: <https://ncceh.ca/documents/guide/masking-during-pandemic>.
11. Nazeeri AI, Hilburn IA, Wu D-A, Mohammed KA, Badal DY, Chan MH, et al. An Efficient Ethanol-Vacuum Method for the Decontamination and Restoration of Polypropylene Microfiber Medical Masks & Respirators. *medRxiv*. 2020. Available from: <https://www.medrxiv.org/content/10.1101/2020.04.12.20059709v1>.
12. Nicholson K, Henke-Adams A, Henke DM, Kravitz AV, Gay HA. Modified Full-Face Snorkel Mask as COVID-19 Personal Protective Equipment: Quantitative Results. *PrePrints*. 2020 Apr. Available from: <https://www.preprints.org/manuscript/202004.0293/v1>.
13. O’Kelly E, Pirog S, Ward J, Clarkson PJ. Informing Homemade Emergency Facemask Design: The Ability of Common Fabrics to Filter Ultrafine Particles. *medRxiv*. 2020. Available from: <https://www.medrxiv.org/content/10.1101/2020.04.14.20065375v1>.
14. Pleil JD, Beauchamp JD, Risby TH, Dweik RA. The scientific rationale for the use of simple masks or improvised face coverings to trap exhaled aerosols and possibly reduce the breathborne spread of COVID-19. *J Breath Res*. 2020 Apr 17. Available from: <https://iopscience.iop.org/article/10.1088/1752-7163/ab8a55>.
15. Public Health Agency of Canada. Council of Chief Medical Officers of Health Communication: Use of Non-Medical Masks (or Facial Coverings) by the Public. Ottawa, ON: PHAC; 2020 Apr 7. Available from: <https://www.canada.ca/en/public-health/news/2020/04/ccmoh-communication-use-of-non-medical-masks-or-facial-coverings-by-the-public.html>.
16. Public Health Ontario. 2019-nCoV – What We Know So Far About...Wearing Masks in Public. Toronto, ON: PHO; 2020 Apr 7. Available from: <https://www.publichealthontario.ca/-/media/documents/ncov/covid-wwksf/what-we-know-public-masks-apr-7-2020.pdf?la=en>.
17. Rodriguez-Palacios A, Cominelli F, Basson A, Pizarro T, Ilic S. Textile Masks and Surface Covers- A’Universal Droplet Reduction Model’Against Respiratory Pandemics. *medRxiv*. 2020. Available from: <https://www.medrxiv.org/content/10.1101/2020.04.07.20045617v1.full.pdf>.
18. Szarpak L, Smereka J, Filipiak KJ, Ladny JR, Jaguszewski M. Cloth masks versus medical masks for COVID-19 protection. *Cardiology Journal*. 2020. Available from: https://journals.viamedica.pl/cardiology_journal/article/view/68300.
19. Wang M-W, Cheng Y-r, Ye L, Zhou M-Y, Chen J, Feng Z-h. The COVID-19 outbreak: issue of face masks. *Infect Control Hosp Epidemiol*. 2020:1-5. Available from: <https://doi.org/10.1017/ice.2020.129>.

Outdoor Safety

1. National Collaborating Centre for Environmental Health. COVID-19 and outdoor safety: considerations for use of outdoor recreational spaces [guidance document]. Vancouver, BC: NCCEH; 2020 04 17 Apr 17. Available from: <https://ncceh.ca/documents/guide/covid-19-and-outdoor-safety-considerations-use-outdoor-recreational-spaces>.

Personal Protective Equipment - General

1. Fischer R, Morris DH, van Doremalen N, Sarchette S, Matson J, Bushmaker T, et al. Assessment of N95 respirator decontamination and re-use for SARS-CoV-2. medRxiv. 2020. Available from: <https://www.medrxiv.org/content/10.1101/2020.04.11.20062018v1>.
2. Health Canada. Fraudulent and unauthorized N95 respirators may not protect consumers against COVID-19. Ottawa, ON: Health Canada; 2020 [updated 2020 Apr 14]; Available from: <https://healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2020/72707a-eng.php>.
3. O’Hearn K, Gertsman S, Sampson M, Webster R, Tsampalieros A, Gibson RN, et al. Decontaminating N95 masks with Ultraviolet Germicidal Irradiation (UVGI) does not impair mask efficacy and safety: A Systematic Review. OSF Preprints. 2020 Mar 31. Available from: <https://doi.org/10.31219/osf.io/29z6u>.
4. O’Hearn K, Webster R, Tsampalieros A, Sampson M, Sikora L, Gertsman S, et al. Efficacy and Safety of Disinfectants for Decontamination of N95 and SN95 Filtering Facepiece Respirators: Protocol for a Systematic Review. OSF Preprints. 2020. Available from: <https://osf.io/8usx6/>.

Social Distancing

1. Miceli S. Exploring the Science of Social Distancing and What it Means for Everyday Life. Washington, DC: National Academies of Science Engineering and Medicine; 2020 Apr 3. Available from: https://www.nationalacademies.org/news/2020/03/exploring-the-science-of-social-distancing-and-what-it-means-for-everyday-life?utm_source=NASEM+News+and+Publications&utm_campaign=99a90ebe01-NAP_mail_new_2020_04_06&utm_medium=email&utm_term=0_96101de015-99a90ebe01-102675305&goal=0_96101de015-99a90ebe01-102675305&mc_cid=99a90ebe01&mc_eid=72cce80828.
2. Vogel L. How long will social distancing take to work? Experts weigh in on Canada’s COVID-19 response. Can Med Assoc J. 2020. Available from: <https://www.cmaj.ca/content/192/14/E382>.
3. Yeung EY. Certain social distancing measures are counterintuitive. Can Med Assoc J. 2020 Apr. Available from: <https://www.cmaj.ca/content/certain-social-distancing-measures-are-counterintuitive>.

Control, Mitigation – General

1. Bruinen de Bruin Y, Lequarre AS, McCourt J, Clevestig P, Pigazzani F, Zare Jeddi M, et al. Initial impacts of global risk mitigation measures taken during the combatting of the COVID-19 pandemic. Saf Sci. 2020 Apr 15:104773. Available from: <https://dx.doi.org/10.1016%2Fj.ssci.2020.104773>.
2. Lasry A, Kidder D, Hast M, Poovey J, Sunshine G, Winglee K, et al. Timing of Community Mitigation and Changes in Reported COVID-19 and Community Mobility — Four U.S. Metropolitan Areas, February 26–April 1, 2020. . MMWR Morb Mortal Wkly Rep. 2020;69:451–7. Available from: <http://dx.doi.org/10.15585/mmwr.mm6915e2>.

3. Liu X. How to Carry Out Epidemic Prevention and Control After School Starts with the COVID-19 Epidemic Mitigated? A Case Study of Experimental High School in Wangmo County, Guizhou Province, China. *Sci Insigt Edu Front.* 2020;5(2):563-7. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3565637.
4. Salama AM. Coronavirus questions that will not go away: interrogating urban and socio-spatial implications of COVID-19 measures. *Emerald Open Research-Sustainable Cities.* 2020. Available from: <https://strathprints.strath.ac.uk/72101/>.
5. Tobias A. Evaluation of the lockdowns for the SARS-CoV-2 epidemic in Italy and Spain after one month follow up. *Sci Total Environ.* 2020 Apr 6;725:138539. Available from: <https://www.sciencedirect.com/science/article/pii/S0048969720320520>.
6. Xu C, Luo X, Yu C, Cao S-J. The 2019-nCoV epidemic control strategies and future challenges of building healthy smart cities. Sage. 2020. Available from: <https://journals.sagepub.com/doi/full/10.1177/1420326X20910408>.

HEALTH EQUITY

1. American Public Health Association. Covid-19 and equity. Washington, DC: APHA; 2020 Apr. Available from: <https://www.apha.org/topics-and-issues/communicable-disease/coronavirus/equity>.
2. Chiou L, Tucker CE. Social Distancing, Internet Access and Inequality. SSRN. 2020 Apr 3. Available from: <http://dx.doi.org/10.2139/ssrn.3568255>.
3. National Collaborating Centre for Determinants of Health. Conversation series: Health equity, determinants of health and COVID-19. Antigonish, NS: St. Francis Xavier University; 2020 Apr. Available from: <http://nccdh.ca/workshops-events/entry/COVID-19-webinar-conversation-series>.
4. Rideout K. Environmental public health professionals can support health equity in the time of COVID-19 [blog]. Vancouver, BC: National Collaborating Center for Environmental Health; 2020 04 17 Apr 17. Available from: <https://ncceh.ca/content/blog/environmental-public-health-professionals-can-support-health-equity-time-covid-19>.

HEALTH IMPACT ASSESSMENT

HEALTH POLICY

1. Hennessy T. Assessment of two COVID-19 models to guide community intervention policies in Anchorage and Alaska. Anchorage, AL: Municipality of Anchorage Health Department, Department of Health and Social Services; 2020 Mar 25. Available from: <https://www.uaa.alaska.edu/academics/college-of-health/college/news/documents/2020-03-25-COVID19-models-review-FINAL-3-30-20.pdf>.
2. Twa MD. A Need for Data-driven Public Health Responses to COVID-19. *Optom Vis Sci.* 2020 Apr;97(4):227-8. Available from: <https://doi.org/10.1097/OPX.0000000000001511>.

HOMELESS, VULNERABLE POPULATIONS

1. American Public Health Association. Covid-19 Guidance for Higher-Risk Populations*. Washington, DC: APHA; 2020 Apr. Available from: <https://www.apha.org/topics-and-issues/communicable-disease/coronavirus/higher-risk-populations>.

2. Health Canada. Coronavirus disease (COVID-19): Vulnerable populations and COVID-19. Ottawa, ON: Government of Canada; 2020 [updated 2020 Apr 15]; Available from: <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/vulnerable-populations-covid-19.html>.
3. Region of Peel Housing Services. COVID-19 Guidance for Homelessness Service Providers. Brampton, ON: Regional Municipality of Peel; 2020 Mar 31. Available from: <https://www.peelregion.ca/coronavirus/housing/COVID-19-guidance-for-homelessness-svc-providers.pdf>.

INDOOR AIR

1. BGE Indoor Air Quality Solutions Ltd. Information About COVID-19, Air Filtration, and Indoor Air Quality. Vancouver, BC: BGE; 2020 Mar 13. Available from: <https://bgecleanair.com/wp-content/uploads/2020/03/2020-03-13-Coronavirus-and-Air-Filtration-1.pdf>.
2. Elias B, Bar-Yam Y. Could Air Filtration Reduce COVID-19 Severity and Spread? Cambridge, MA: New England Complex Systems Institute; 2020 Mar 9. Available from: <https://necsi.edu/could-air-filtration-reduce-covid19-severity-and-spread>.

INDIGENOUS ENVIRONMENTAL HEALTH

1. Assembly of First Nations Quebec-Labrador (AFNQL), Regional Commissions and Organizations (RCO). Coronavirus (COVID-19). Guidance and information. Ottawa, ON: AFNQL; 2020. Available from: <https://covid19.cssspnql.com/?lang=en>.
2. First Nations Health Authority. Home and Community Care COVID-19 Toolkit. West Vancouver, BC: FNHA; 2020 Apr. Available from: <https://www.fnha.ca/Documents/FNHA-Home-and-Community-Care-COVID-19-Toolkit.pdf>.
3. Mushquash C. Podcast: Voices from the Field 10 - Supporting First Nations, Inuit and Métis Peoples' Mental Health and Well-being during COVID-19. Prince George, BC: National Collaborating Centre for Indigenous Health, University of Northern British Columbia; 2020 Apr. Available from: https://www.nccih.ca/495/Podcast_Voices_from_the_Field_10_-_Supporting_First_Nations,_Inuit_and_M%C3%A9tis_Peoples%E2%80%99_Mental_Health_and_Well-being_during_COVID-19.nccih?id=295.

MENTAL HEALTH

General

1. DePierro J, Lowe S, Katz C. Lessons Learned from 9/11: Mental Health Perspectives on the COVID-19 Pandemic. *Psychiatry Res.* 2020:113024. Available from: <https://dx.doi.org/10.1016%2Fj.psychres.2020.113024>.
2. Golberstein E, Wen H, Miller BF. Coronavirus Disease 2019 (COVID-19) and Mental Health for Children and Adolescents. *JAMA pediatrics.* 2020. Available from: <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2764730>.
3. Holmes EA, O'Connor RC, Perry VH, Tracey I, Wessely S, Arseneault L, et al. Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *The Lancet Psychiatry.* 2020. Available from: [https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(20\)30168-1/fulltext](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(20)30168-1/fulltext).

4. Rajkumar RP. COVID-19 and mental health: A review of the existing literature. *Asian Journal of Psychiatry*. 2020 2020/08/01/;52:102066. Available from: <http://www.sciencedirect.com/science/article/pii/S1876201820301775>.
5. Zhang J, Lu H, Zeng H, Zhang S, Du Q, Jiang T, et al. The differential psychological distress of populations affected by the COVID-19 pandemic. *Brain, Behavior, and Immunity*. 2020 2020/04/15/. Available from: <http://www.sciencedirect.com/science/article/pii/S0889159120305353>.

See also Children's Environmental Health – Mental Health sub topic

MULTI-UNIT BUILDINGS

OCCUPATIONAL GUIDANCE

Occupational and Social

1. Alberta Health Services. COVID-19 information. Information for faith-based organizations. Edmonton, AB: Government of Alberta; 2020 Apr 1. Available from: <https://www.alberta.ca/assets/documents/covid-19-fact-sheet-faith-based-organizations.pdf>.
2. Golf Course Superintendents Association of America's (GCSAA). Guidelines for coronavirus (COVID-19). Information for you and your golf facility. Lawrence, KS: GCSAA; 2020. Available from: https://www.gcsaa.org/docs/default-source/resources/covid-19_gcsaa_v4.pdf?sfvrsn=2f7dfa3e_0.
3. Government of Alberta. COVID-19 information guidance for managers and operators of industrial work camps. Edmonton, AB: Government of Alberta; 2020 Apr. Available from: <https://www.alberta.ca/assets/documents/covid-19-work-camps-fact-sheet.pdf>.
4. Health Canada. Preventing COVID-19 in the workplace: Employers, employees and essential service workers. Ottawa, ON: Government of Canada; 2020 [updated 2020 Mar 31]; Available from: <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/preventing-covid-19-workplace-employers-employees-essential-service-workers.html>.
5. Iowa Department of Health. COVID-19 Guidance on "Drive-In" Worship. Des Moines, IA: Government of Iowa; 2020 Apr 4. Available from: https://idph.iowa.gov/Portals/1/userfiles/7/COVID-19%20Guidance%20for%20Drive-In%20Worship%204_4_20.pdf.
6. Lan F-Y, Wei C-F, Hsu Y-T, Christiani DC, Kales SN. Work-related Covid-19 transmission. medRxiv. 2020:2020.04.08.20058297. Available from: <https://www.medrxiv.org/content/medrxiv/early/2020/04/11/2020.04.08.20058297.full.pdf>.
7. Toronto Public Health. COVID-19: Community & Workplace Settings. Toronto, ON: City of Toronto; 2020 Apr 17. Available from: <https://www.toronto.ca/home/covid-19/covid-19-protect-yourself-others/community-settings-workplaces/>.
8. Wine BC. BC wine industry protocol in response to COVID-19. Vancouver, BC: Wine BC; 2020 Mar. Available from: https://winebc.com/industry/wp-content/uploads/sites/2/2020/03/BCWineryProtocol_Covid19_Final.pdf.

OUTDOOR AIR

1. Martelletti L, Martelletti P. Air Pollution and the Novel Covid-19 Disease: a Putative Disease Risk Factor. *SN Compr Clin Med*. 2020 Apr 15:1-5. Available from: <https://dx.doi.org/10.1007%2Fs42399-020-00274-4>.

2. Wu X, Nethery RC, Sabath B, Braun D, Dominici F. Exposure to air pollution and COVID-19 mortality in the United States. MedRxiv. 2020(Apr 5). Available from: <https://doi.org/10.1101/2020.04.05.20054502>.

PERSONAL SERVICE ESTABLISHMENTS

PETS

1. Almendros A. Can companion animals become infected with Covid-19? Veterinary Record. 2020;186(13):419-20. Available from: <https://veterinaryrecord.bmj.com/content/vetrec/186/13/419.2.full.pdf>.

PUBLIC FACILITIES

Housing

1. Direction Régionale de Santé Publique de Montréal. Information to owners and residents of residential buildings with 10 or more units. Montreal, QC: Centre Integre universitaire de sante et de services sociaux du Centre-Sud-de-l'île-de-Montreal; 2020 Apr 14. Available from: <https://santemontreal.qc.ca/fileadmin/fichiers/Campagnes/coronavirus/Consignes-directives/Affiche-ProprietaireResidentsImmeublesLogementsMultiples-EN.pdf>.
2. New York City Health. COVID-19: FAQ for Residential and Commercial Buildings. New York, NY: Government of New York; 2020. Available from: <https://www1.nyc.gov/assets/doh/downloads/pdf/imm/covid-19-residential-buildings-faq.pdf>.
3. US Centers for Disease Control. Guidance for building water systems - Coronavirus Disease 2019 (COVID-19). Atlanta, GA: CDC; 2020 [updated 2020 Apr 7]; Available from: <https://www.cdc.gov/coronavirus/2019-ncov/php/building-water-system.html>.

Jails, Prisons

1. Simpson PL, Butler TG. Covid-19, prison crowding, and release policies. BMJ. 2020;369:m1551. Available from: <https://www.bmj.com/content/bmj/369/bmj.m1551.full.pdf>.
2. United Nations on Drugs and Crime. Position Paper. COVID-19 preparedness and responses in prison: UNODC; 2020 Mar 31. Available from: https://www.unodc.org/documents/hiv-aids/publications/UNODC_position_paper_COVID-19_in_prisons_FINAL.pdf.
3. World Health Organization Regional Office for Europe. Preparedness, prevention and control of COVID-19 in prisons and other places of detention. Interim guidance Copenhagen, Denmark: WHO; 2020 Mar 15. Available from: http://www.euro.who.int/_data/assets/pdf_file/0019/434026/Preparedness-prevention-and-control-of-COVID-19-in-prisons.pdf.

Transportation (see separate category, 'Transit, Transportation')

RECREATIONAL AND SURFACE WATER

RISK ASSESSMENT, COMMUNICATION

Assessment

1. Jull K. Coronavirus Emergency Response: Risk Assessment and Risk Management. Toronto Law Journal, Forthcoming. 2020. Available from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3573991.

Communication

1. Abrams EM, Greenhawt M. Special Article: Risk Communication During COVID-19. J Allergy Clin Immunol Pract. 2020 Apr 15. Available from: <https://doi.org/10.1016/j.jaip.2020.04.012>.
2. Basch CE, Basch CH, Hillyer GC, Jaime C. The Role of YouTube and the Entertainment Industry in Saving Lives by Educating and Mobilizing the Public to Adopt Behaviors for Community Mitigation of COVID-19: A Successive Sampling Design. JMIR Public Health Surveill. 2020 Apr 10. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32297593>.
3. Glauser W. Communication, transparency key as Canada faces new coronavirus threat. CMAJ : Canadian Medical Association journal = journal de l'Association medicale canadienne. 2020;192(7):E171-E2. Available from: <https://www.cmaj.ca/content/192/7/E171>.
4. Hu D, Lou X, Xu Z, Meng N, Xie Q, Zhang M, et al. More Effective Strategies are Required to Strengthen Public Awareness of COVID-19: Evidence from Google Trends. SSRN. 2020 Mar 3. Available from: <http://dx.doi.org/10.2139/ssrn.3550008>.
5. Jacobsen KH, Vraga EK. Improving Communication About COVID-19 and Other Emerging Infectious Diseases. Eur J Clin Invest. 2020 Apr 15:e13225. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/eci.13225>.
6. World Health Organization. Risk communication and community engagement readiness and initial response for novel coronaviruses (nCoV): interim guidance v1. Geneva, Switzerland: World Health Organization; 2020. Available from: [https://www.who.int/publications-detail/risk-communication-and-community-engagement-readiness-and-initial-response-for-novel-coronaviruses-\(ncov\)](https://www.who.int/publications-detail/risk-communication-and-community-engagement-readiness-and-initial-response-for-novel-coronaviruses-(ncov)).

SENIORS' ENVIRONMENTAL HEALTH

1. Banskota S, Healy M, Goldberg EM. 15 Smartphone Apps for Older Adults to Use While in Isolation During the COVID-19 Pandemic. Irvine, CA: University of California at Irvine; 2020. Available from: <https://escholarship.org/uc/item/75r2d6qb>.
2. Koenig HG. Ways of Protecting Religious Older Adults from the Consequences of COVID-19. The American Journal of Geriatric Psychiatry. 2020 2020/04/12/. Available from: <http://www.sciencedirect.com/science/article/pii/S1064748120302888>.
3. Lai C-C, Wang J-H, Ko W-C, Yen M-Y, Lu M-C, Lee C-M, et al. COVID-19 in long-term care facilities: An upcoming threat that cannot be ignored. Journal of Microbiology, Immunology and Infection. 2020 2020/04/13/. Available from: <http://www.sciencedirect.com/science/article/pii/S168411822030102X>.
4. Yen MY, Schwartz J, King CC, Lee CM, Hsueh PR. Recommendations for protecting against and mitigating the COVID-19 pandemic in long-term care facilities. J Microbiol Immunol Infect. 2020 Apr 10. Available from: <https://www.sciencedirect.com/science/article/pii/S1684118220300979>.

SURVEILLANCE, BIOMONITORING

1. Berry I, Soucy J-PR, Tuite A, Fisman D, COVID-19 Canada Open Data Working Group. Open access epidemiological data and an interactive dashboard to monitor the COVID-19 outbreak in Canada. *Can Med Assoc J*. 2020. Available from: <https://www.cmaj.ca/content/open-access-epidemiological-data-and-interactive-dashboard-monitor-covid-19-outbreak-canada>.
2. Miller M. 2019 Novel Coronavirus COVID-19 (2019-nCoV) Data Repository. Johns Hopkins University Center for Systems Science and Engineering. *Bulletin-Association of Canadian Map Libraries and Archives (ACMLA)*. 2020(164):47-51. Available from: <https://openjournals.uwaterloo.ca/index.php/acmla/article/view/1730>.
3. Ota M. Will we see protection or reinfection in COVID-19? *Nature Reviews Immunology*. 2020/04/17. Available from: <https://doi.org/10.1038/s41577-020-0316-3>.
4. Soetewey A. Top 50 R resources on Novel COVID-19 Coronavirus. 2020 [updated Mar 11]; Available from: <https://towardsdatascience.com/top-5-r-resources-on-covid-19-coronavirus-1d4c8df6d85f>.

SURVIVAL TIME

1. Chung E. The riskiest surfaces for coronavirus and how to clean them. Ottawa, ON: CBC News; 2020 Apr 1. Available from: <https://www.cbc.ca/news/health/covid-19-surfaces-1.5509619>.
2. Tovey E. Can you get the coronavirus from receiving parcels? Toronto, ON: National Post; 2020 Mar 25. Available from: <https://nationalpost.com/news/canada/can-you-get-the-coronavirus-from-receiving-parcels>.

TOBACCO, CANNABIS, VAPING

1. Shekhar S, Hannah-Shmouni F. Hookah smoking and COVID-19: Call for Action. *CMAJ*. 2020 Apr 6. Available from: <https://www.cmaj.ca/content/hookah-smoking-and-covid-19-call-action>.

TRANSMISSION

General

1. Alzamora MC, Paredes T, Caceres D, Webb CM, Valdez LM, La Rosa M. Severe COVID-19 during Pregnancy and Possible Vertical Transmission. *Am J Perinatol*. 2020 Apr 18. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32305046>.
2. Anfinrud P, Stadnytskyi V, Bax CE, Bax A. Visualizing Speech-Generated Oral Fluid Droplets with Laser Light Scattering. *N Engl J Med*. 2020. Available from: <https://www.nejm.org/doi/full/10.1056/NEJMc2007800>.
3. Atkinson B, Petersen E. SARS-CoV-2 shedding and infectivity. *Lancet*. 2020 Apr 15. Available from: [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30868-0/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30868-0/fulltext).
4. Bahri N, Dashti S, Najafi T, Tohidinik H. Assessment of the possibility of vertical transmission of COVID-19: A systematic review and meta-analysis protocol. PrePrint from ResearchSquare. 2020 Mar 18. Available from: <https://europepmc.org/article/ppr/ppr122589>.

5. Cowling B, Leung N, Chu D, Shiu E, Chan K, McDevitt J, et al. Respiratory Virus Shedding in Exhaled Breath and Efficacy of Face Masks. 2020. Available from: <https://www.nature.com/articles/s41591-020-0843-2>.
6. de Niet A, Waanders BL, Walraven I. The role of children in the transmission of mild SARS-CoV-2 infection. *Acta Paediatr.* 2020 Apr 16. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32298494>.
7. Diaz-Quijano FA, Rodriguez-Morales AJ, Waldman EA. Translating transmissibility measures into recommendations for coronavirus prevention. *Rev Saude Publica.* 2020;54:43. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32294667>.
8. Galbadage T, Peterson BM, Gunasekera RS. Does COVID-19 spread through droplets alone? *Frontiers in Public Health - Infectious Diseases – Surveillance, Prevention and Treatment.* 2020. Available from: <https://digitalcommons.biola.edu/faculty-articles/408/>.
9. He X, Lau EHY, Wu P, Deng X, Wang J, Hao X, et al. Temporal dynamics in viral shedding and transmissibility of COVID-19. *Nat Med.* 2020 Apr 15. Available from: <https://www.nature.com/articles/s41591-020-0869-5>.
10. Kissler SM, Tedijanto C, Goldstein E, Grad YH, Lipsitch M. Projecting the transmission dynamics of SARS-CoV-2 through the postpandemic period. *Science.* 2020:eabb5793. Available from: <https://science.sciencemag.org/content/sci/early/2020/04/14/science.abb5793.full.pdf>.
11. Liu J, Zhou J, Yao J, Zhang X, Li L, Xu X, et al. Impact of meteorological factors on the COVID-19 transmission: A multi-city study in China. *Sci Total Environ.* 2020 Apr 9;726:138513. Available from: <https://doi.org/10.1016/j.scitotenv.2020.138513>.
12. Loh N-HW, Tan Y, Taculod J, Gorospe B, Teope AS, Somani J, et al. The impact of high-flow nasal cannula (HFNC) on coughing distance: implications on its use during the novel coronavirus disease outbreak. *Canadian Journal of Anesthesia.* 2020:1-2. Available from: <https://link.springer.com/article/10.1007/s12630-020-01634-3>.
13. Meselson M. Droplets and Aerosols in the Transmission of SARS-CoV-2. *N Engl J Med.* 2020. Available from: <https://www.nejm.org/doi/full/10.1056/NEJMc2009324>.
14. Morawska L, Cao J. Airborne transmission of SARS-CoV-2: The world should face the reality. *Environ Int.* 2020 Apr 10;139:105730. Available from: <https://www.sciencedirect.com/science/article/pii/S016041202031254X>.
15. National Academies of Sciences Engineering and Medicine. 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; 2020. Available from: <https://www.nap.edu/catalog/25769/rapid-expert-consultation-on-the-possibility-of-bioaerosol-spread-of-sars-cov-2-for-the-covid-19-pandemic-april-1-2020>.
16. Scorzolini L, Corpolongo A, Castilletti C, Lalle E, Mariano A, Nicastri E. Comment of the potential risks of sexual and vertical transmission of Covid-19 infection. *Clin Infect Dis.* 2020 Apr 16. Available from: <https://academic.oup.com/cid/article/doi/10.1093/cid/cia445/5820874>.
17. Tang B, Bragazzi NL, Li Q, Tang S, Xiao Y, Wu J. An updated estimation of the risk of transmission of the novel coronavirus (2019-nCov). *Infectious Disease Modelling.* 2020 2020/01/01/;5:248-55. Available from: <http://www.sciencedirect.com/science/article/pii/S246804272030004X>.
18. Xia J, Tong J, Liu M, Shen Y, Guo D. Evaluation of coronavirus in tears and conjunctival secretions of patients with SARS-CoV-2 infection. *J Med Virol.* 2020;92(6):589-94. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1002/jmv.25725>.

19. Xu P, Qian H, Miao T, Yen H-I, Tan H, Cowling BJ, et al. Transmission routes of Covid-19 virus in the Diamond Princess Cruise ship. medRxiv. 2020:2020.04.09.20059113. Available from: <https://www.medrxiv.org/content/medrxiv/early/2020/04/14/2020.04.09.20059113.full.pdf>.
20. Yeo C, Kaushal S, Yeo D. Enteric involvement of coronaviruses: is faecal-oral transmission of SARS-CoV-2 possible? The Lancet Gastroenterology & Hepatology. 2020;5(4):335-7. Available from: [https://doi.org/10.1016/S2468-1253\(20\)30048-0](https://doi.org/10.1016/S2468-1253(20)30048-0).
21. Zhen-Dong G, Zhong-Yi W, Shou-Feng Z, Xiao L, Lin L, Chao L, et al. Aerosol and Surface Distribution of Severe Acute Respiratory Syndrome Coronavirus 2 in Hospital Wards, Wuhan, China, 2020. Emerging Infectious Disease journal. 2020;26(7). Available from: https://wwwnc.cdc.gov/eid/article/26/7/20-0885_article.

Faecal-Oral

1. Dona D, Minotti C, Costenaro P, Da Dalt L, Giaquinto C. Faecal-oral transmission of SARS-COV-2 in children: Is it time to change our approach? *Pediatr Infect Dis J*. 2020 Apr 16. Available from: <http://dx.doi.org/10.1097/INF.0000000000002704>.

TRANSIT, TRANSPORTATION

1. Browne A, Ahmad SS-O, Beck CR, Nguyen-Van-Tam JS. The roles of transportation and transportation hubs in the propagation of influenza and coronaviruses: a systematic review. *J Travel Med*. 2016;23(1). Available from: <https://academic.oup.com/jtm/article-lookup/doi/10.1093/jtm/tav002>.
2. WSP. Can we reduce covid-19 on public transit? Vancouver, BC: WSP Global Inc; 2020 Mar 25. Available from: <https://www.wsp.com/en-CA/insights/can-we-reduce-covid-19-on-public-transit>.

WASTE

1. Mol MPG, Caldas S. Can the human coronavirus epidemic also spread through solid waste? *Waste Manag Res*. 2020 Apr 17:734242x20918312. Available from: <https://journals.sagepub.com/doi/full/10.1177/0734242X20918312>.

ZOOZOSES

COVID-19 Issue Supplement, Environmental Health Research Scan

Search Methodology

This supplement complements the [April COVID-19 Special Issue](#). Rapid literature searches were conducted to locate Covid-19 articles specific to Environmental Health topics that have been relevant to NCCEH work in the past. The searches aimed to capture scientific and grey literature relevant to each topic with specific interest in the past year. Articles were selected by title rather than abstract or full-text review; the goal was to scope relevant literature by topic quickly, prepare a list for distribution and then, depending on follow-up interest, knowledge translation scientists would further review and evaluate. Bibliographies of review articles were scanned to retrieve more articles. Any related articles and suggested articles appearing within a search engine were also considered for inclusion.

Inclusion of articles with publishing dates from years 2019-2020 (including pre-prints) were preferable, but articles were not excluded by date if their material was of particular interest. Grey literature was included for additional topic information and description. The searches were restricted to English language articles and the searches were run between April 2 and April 20, 2020.

With respect to databases used, articles were identified through EBSCOhost (to access MEDLINE, CINAHL, PsycINFO, Biomedical Reference Collection, and Academic Search Complete), Ovid (to access Elsevier Science Direct, Evidence Based Medicine, SAGE journals online, and Cochrane Database of Systematic Reviews), Google Scholar (to access books, book chapters, older articles, and articles from journals not indexed through major database platforms) and Google (for websites, fact sheets, and primarily government/organization material). Broad keywords and search statements (and iterations of these) for gathering material were used. The approach was not systematic, yet consistency in Covid-19 search terms was a goal across searches. **This should not be viewed as a comprehensive list**; more as a foundation for select environmental health topics. Some topics were searched more thoroughly depending upon field inquiries received while searching.

Additional description of search engines/databases for sources of information:

- University of British Columbia Library – Ebscohost (includes Medline, Cinahl, Academic Search Complete, ERIC, etc.)
- Pubmed
- ScienceDirect
- Ingentaconnect
- Embase
- Web of Science
- Indigenous Journals
- Google Scholar
- Google

For more on environmental health information and evidence, visit NCCEH.ca

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