



Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

Last Update: July 31, 2020

Meta-Summary
McMaster University National Collaborating Centre for Methods and Tools
Rapid Reviews on SARS CoV-2

Academic institutions around the world are conducting rapid reviews on vital questions concerning the Coronavirus Disease 2019 (COVID-19) pandemic. One of these institutions is the McMaster University National Collaborating Centre for Methods and Tools, in Hamilton Canada, dubbed as the 17th Best University in the World (2020).

The COVID-19 Rapid Evidence Service is McMaster University's platform in providing trusted synthesis of recent research to key questions on COVID-19. The rapid reviews include a summary of key points, identification of gaps in evidence and critical appraisal of methodology.

The meta –summary of McMaster University shall be divided into 18 topics: (1) Pregnancy, (2) Mental Health, (3) Indirect transmission, (4) Indigenous communities, (5) Policies for re-infections, (6) Serological testing, (7) Re-infection, (8) Policies for isolations, (9) Incubation Period, (10) Copper, (12) Cohort isolation, (11) Alcohol, (12) Psychiatric Inpatient Facilities, (13) Family Life (14) Transmission by Children, (15) Wastewater surveillance, (16) Congregate Living Settings and (17) Surface Transmission

Disclaimer: The contents of this meta-summary are for informational purposes only and is not intended to substitute for professional medical advice, individual clinical judgment, diagnosis or treatment for COVID-19. The DOH does not make warranties, express or implied, nor representations as to the accuracy of its content. In addition, use of information presented in this meta-summary should be done with due diligence, including referring to the original rapid reviews.

Intervention	Results	Recommendations	Reference
<p>Pregnancy</p> <p>Is there an increased risk of adverse maternal or fetal outcomes in women diagnosed with COVID-19 during pregnancy?</p> <p><i>This Rapid Review included a total of fifteen (15) publications (5 completed 7 ongoing studies, 3 single studies). Evidences included were up to May 7,2020</i></p> <p><i>Last Update: May 15,2020</i></p>	<p>Key Points:</p> <ol style="list-style-type: none"> (1) There is low to moderate quality of evidence on the adverse maternal and fetal outcomes among pregnant women with COVID-19. (2) There is inadequate evidence of adverse outcomes associated with pregnancy among women with COVID-19. (3) There is a high rate of cesarean deliveries (CS) in COVID-19 cases even though current evidence show vaginal deliveries can be safe. (4) Pre-term births have also been recorded (21-39%) among COVID-19 cases but this was not compared to non COVID-19 cases (5) There is no evidence of vertical transmission. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) Evidence is lacking on the following aspects: <ol style="list-style-type: none"> a. Fetal and neonatal outcomes among women with COVID-19 infection in their first and second trimesters; and b. Reason behind high rate of CS among COVID-19 cases (i.e., whether it is due to clinician preference or is medically indicated). (2) Weak study designs predominate, consisting mostly of case series, case reports, or case controls. (3) Synthesis of studies show presence of overlaps of single studies within the reviews. 	<p>Further research is needed to provide more evidence on maternal, fetal and neonatal outcomes associated with COVID-19.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, May 15). Rapid Review: Is there an increased risk of adverse maternal or fetal outcomes in women exposed to COVID-19 during pregnancy? Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/d4f7a6014d1256de704fca6ecbb8c421d951d666.pdf</p>

Intervention	Results	Recommendations	Reference
<p>Mental Health</p> <p>How does physical distancing impact mental health?</p> <p><i>This rapid review included nine (9) publications (1 completed, 6 in progress and 2 single studies). Evidences included were up to May 7, 2020</i></p> <p><i>Last Update: May 15, 2020</i></p>	<p>Key Points:</p> <ol style="list-style-type: none"> (1) There is low to moderate quality of evidence on the effect of physical distancing on mental health. (2) Evidence conducted during outbreaks prior to COVID-19 reveal an association between adverse mental health effects and quarantine. (3) Negative effects of quarantine were intensified by longer quarantine duration, fear of infection, frustration, boredom, inadequate supplies, inadequate information, financial loss, and stigma. (4) Negative effects of physical distancing can be minimized by following quarantine not longer than required, provision of clear rationale, information, and sufficient supplies. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) Current evidence is limited as only studies conducted on outbreaks before COVID-19 were reviewed. 	<p>More evidence on impact of physical distancing on mental health of specific groups is needed.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020). Rapid Review: How Does Physical Distancing Impact Mental Health? In (pp. 1-9). Hamilton, Ontario, Canada: McMaster University. Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/7fd03688caef40692dbecc7f071b8fd8ef3f9cec.pdf</p>

Intervention	Results	Recommendations	Reference
<p>Indirect Transmission</p> <p>What is the role of indirect transmission (i.e., surfaces/fomites) in COVID-19?</p> <ol style="list-style-type: none"> 1) Do facial coverings reduce indirect or community transmission? 2) What is known about how long the virus can survive with potential for infection on outdoor surfaces compared to indoor surfaces? <p><i>This rapid review included 10 publications composed of eight (8) completed syntheses, (1) in progress synthesis and (1) completed single study.</i></p> <p><i>Last Update: May 15,2020</i></p>	<p>On reduction of community transmission through facial coverings</p> <p>Key points:</p> <ol style="list-style-type: none"> (1) There is very low to moderate quality of evidence on the role of face masks in the reduction of virus transmission in the community. (2) There is insufficient evidence on the effectiveness of face masks on their own to reduce indirect/community transmission of COVID-19. (3) The use of face masks in combination with other infection control interventions (i.e., hand hygiene) increases its effectiveness in disease transmission particularly when applied earlier in the pandemic. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) There have been overlaps in results from several syntheses on the use of face masks which may lead to overestimation of the real scenario. (2) Applicability of the evidence to different contexts is questionable as the studies 	<p>Further research on the effectiveness of facial coverings is needed to be able to gather adequate evidence on its ability to reduce virus transmission.</p>	<p>The National Collaborating Centre for Methods and Tools, U. (2020). Rapid Review: What is the role of indirect transmission (i.e. surfaces/fomites) on COVID-19? In (pp. 1-12). Hamilton, Ontario, Canada: University of McMaster. Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/e2acb6637d2ef7d2781291fc0e62968c78d9bc88.pdf</p>

Intervention	Results	Recommendation	Reference
<p>Continuation...</p>	<p>reviewed had varied settings and were not comparable in terms of level of exposures and other factors.</p> <p>On the length of time for viral survival and viability for infection on surfaces outdoors compared to indoors</p> <p>Key Points</p> <ol style="list-style-type: none"> (1) To date, there is no known evidence on the likelihood of COVID-19 transmission outdoors or indirectly on outdoor surfaces. (2) Currently, there is no known evidence specific to COVID-19 on the length of time the virus can live and be transmitted on outdoor compared to indoor surfaces. (3) One synthesis of low quality but with consistent findings, suggests that transmission of coronaviruses through surface, ground or drinking water is unlikely. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) The transferability of current evidences taken from other coronaviruses to COVID-19 is not known. 	<p>Further evidence specific to COVID-19 transmission is needed as majority of the reviewed studies were on other coronaviruses.</p>	

Intervention	Results	Recommendation	Reference
Continuation...	<p>(2) Laboratory based studies reveal that coronavirus including COVID-19 can be transmitted through droplets, saliva and fecal-oral route which can be transmitted to high-touch objects such as gates, benches or play structures.</p> <p>(3) To date, there is some evidence that temperature and environmental conditions affect COVID-19 transmission, such that increasing temperature is associated with lower COVID-19 incidence based on ecological studies. But these findings emanate from low quality evidence.</p>		

Intervention	Results	Recommendation	Reference
<p>Policies for re-infections</p> <p><i>Rapid Review: How have affected jurisdictions handled previously positive COVID-19 cases in the context of re-exposure/re-infection?</i></p> <p><i>This rapid review included five (5) publications composed of 2 scientific briefings and guidance documents, 2 expert opinion and 1 website. Evidences searched were up to May 27,2020.</i></p> <p><i>Last Update: May 29,2020</i></p>	<p>Key Points:</p> <ol style="list-style-type: none"> (1) To date there have been very few jurisdictions that have policies related to previously COVID-19 positive cases who are considered recovered and subsequently test positive. (2) Current evidence from South Korea reveal that “re-positive” cases resulted in no transmitted infections. Further study of these “re-positive cases” show that a previous negative result was an error and thus have been discharged from isolation. (3) Other jurisdictions have not developed policies on COVID-19 re-infections as to date there have been no evidence of re-infection. (4) No jurisdiction has policy directions toward the concept of “immunity passport” (previously positive cases who have developed immunity to the virus) given that there is no evidence supporting this claim. 	<p>Further updating of this rapid review is recommended as more evidence are gathered on this topic.</p>	<p>The National Collaborating Centre for Methods and Tools, U. (2020, May 29). Rapid Review: How have affected jurisdictions handled previously positive COVID-19 cases in the context of reexposure/re-infection? Retrieved July 23, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/6c143e558d7ae71f352c6df3af6ef8f77bae3ce2.pdf</p>

Intervention	Results	Recommendation	Reference
<p>Serological testing</p> <p>Rapid Review: What serological tests are available, and what are their sensitivities and specificities?</p> <p><i>This rapid review included a total of 22 publications composed of 3 completed and 5 in - progress syntheses and 14 single studies.</i></p> <p><i>Last Update: May 29, 2020</i></p>	<p>Key Points:</p> <ol style="list-style-type: none"> (1) There are numerous serological tests available from different manufacturers for the detection of antibodies to the virus that cause COVID-19. (2) There is high variability in the sensitivity of these tests with estimates ranging from 18.4% to as high as 100%. Results were inconsistent with low to moderate quality of evidence. (3) Specificity is higher ranging from 84.3% to 100%. Results were consistent with low to moderate quality of evidence. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) There are differences in the methodological quality of the studies evaluating different serological tests for antibodies for COVID-19. 	<p>It is suggested that future reviews on serological testing may need to explore combining of test results to be able to determine the clinical stage of infection particularly in the timing of serological testing for IgM and IgG antibodies.</p>	<p>The National Collaborating Centre for Methods and Tools, U. (n.d.). Rapid Review: What serological tests are available, and what are their sensitivities and specificities? Retrieved July 28, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/30a5f07d8d2ce85e856a7ac93feac9bc6552374f.pdf</p>

Intervention	Results	Recommendation	Reference
Continuation...	<p>(1) Different serological test types exist which include chemiluminescent immunoassays (CLIA), enzyme-linked immunosorbent assays (ELISA), lateral flow immunochromatographic assays (LFIA) and colloidal gold immunochromatography (GICA). The main distinction among these tests is whether the tests must be conducted in laboratory setting or if they can be conducted rapidly at point of patient care.</p> <p>(2) Currently, RT-PCR for viral RNA is the “gold standard” for the diagnosis of COVID-19 and has been used as reference for all studies in the rapid review. There are limitations with the sensitivity of RT-PCR in detecting SARS COV2, which pose difficulties in establishing the sensitivity of serological tests.</p> <p>(3) Overlaps of single studies within reviews which may inflate the impact of some studies on the overall findings.</p>		

Intervention	Results	Recommendations	Reference
<p>Re-infection</p> <p>What is known on the potential for COVID-19 re-infection, including new transmission after recovery?</p> <p><i>This rapid review included 10 publications composed of 4 completed and two in ongoing syntheses and 4 single studies.</i></p> <p><i>Last Update: May 29,2020</i></p>	<p>Key Points:</p> <ol style="list-style-type: none"> (1) There is low quality of evidence with inconsistent findings related to COVID-19 potential for re-infection and new transmission after recovery. (2) To date, there is not enough evidence of re-infection in COVID-19 cases. (3) In two recent syntheses, around 2-21% percentage of patients discharged from hospital after having tested negative in RT-PCR test, have subsequently been tested positive during routine follow-up test. (4) Majority of the patients who tested positive following a previous negative test for COVID are asymptomatic. (5) Various tests were used which may have resulted to false positives at initial or follow-up test or false negative indicating that the virus has been cleared. (6) Currently, there is no evidence on the ability of those who may have been re-infected to transmit the virus. 	<p>There is a need for longer follow-up of COVID-19 patients to be able to detect long term immunity and ability for virus transmission.</p>	<p>The National Collaborating Centre for Methods and Tools, U. (May 29,2020). Rapid Review: What is known on the potential for COVID-19 re-infection, including new transmission after recovery? In (pp. 1-10). Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/e313ad9d3559b30af71208bb03b2cf7096aa490f.pdf</p>

Intervention	Results	Recommendation	Reference
<p>Continuation...</p>	<p>Gaps in Evidence:</p> <p>(1) Majority of the evidences are from China where discharged cases undergo a 14-day quarantine which may indicate that cases thought to be re-infections may rather be due to inaccuracies in testing.</p>		
<p>Policies for Isolation</p> <p>Are any other jurisdictions using isolation periods other than 14 days in response to COVID-19? If yes, what is their rate of COVID-19 cases?</p> <p><i>This rapid review has included 21 publications comprising 2 completed syntheses, 17 jurisdictional policies or recommendations and 2 international organization policies or recommendations.</i></p> <p><i>Last Update: June 5,2020</i></p>	<p>Key points</p> <p>(1) Most of the jurisdictions recommended or required 14-day quarantine for people who have been exposed or have likely been exposed to COVID-19.</p> <p>(2) Among jurisdictions with a 14-day quarantine, the number of cases range from 58 to 6125 per million.</p> <p>(3) Among the jurisdictions under this review, three of these had different quarantine periods. Switzerland and Norway has a 10-day quarantine period; Sweden does not recommend a period of quarantine for people who may have been exposed to COVID-19. Two of these jurisdictions have higher total number of cases per million than Canada (for June 3,2020, Canada:2448 cases/million,</p>	<p>There is a need for more evidence on the effect or impact of shortened quarantine or self-isolation periods of less than 15 days.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (june 5,2020). Rapid Review: Are any jurisdictions using isolation periods other than 14 days in response to COVID-19? If yes, what is their rate of COVID-19 cases? In (pp. 1-10). Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/c3cede9d26120644874cdbe82815504c76d06736.pdf</p>

Intervention	Results	Recommendation	Reference
Continuation...	<p>Norway 1557 cases/million, Switzerland 3557 cases/million; Sweden 3820 cases/million.</p> <p>(4) There were differences in quarantine and self-isolation periods, application of other public health measures and the timing of imposition of these measures relative to the occurrence of cases</p> <p>(5) There were also differences in the prescribed self-isolation period for people who are infected and able to self-isolate at home. It ranges from 5-14 days post-symptom onset and / or 1-7 days after the end of fever or other symptoms.</p> <p>Gaps in Evidence:</p> <p>(1) The effect or impact of shortened quarantine periods (shorter than 14 days) cannot be determined given small number of jurisdictions implementing such.</p> <p>(2) The effect or impact of shortened self-isolation periods (shorter than 14 days) cannot be determined due to the wide variability in the prescribed variability in self-isolation.</p>		

Intervention	Results	Recommendation	Reference
<p>Incubation period</p> <p>Rapid Review: What is known about the duration from exposure to symptoms or diagnosis for COVID-19?</p> <p><i>This rapid review included a total of 20 publications consisting of 5 completed syntheses, 4 ongoing syntheses and 11 single studies.</i></p> <p><i>Last Updated: June 5, 2020</i></p>	<p>Key point:</p> <ol style="list-style-type: none"> (1) The quality of evidence range from low to moderate. (2) To date, there has been consistency in evidence that estimates or mean or median incubation period were between four to six days. (3) In the included studies, the range of incubation periods for individuals varied from 1 to 14 days. (4) There were variations in the incubation per age group. One study suggests longer incubation period for 64-86 years old. While another study revealed longer incubation periods for 18-64 years old. (5) Precise computation for incubation period was more feasible earlier in the pandemic due to limited cases and more accurate identification of exposure time as compared to widespread community transmission where accuracy of exposure is difficult to determine. 	<p>More studies are needed on discovering the factors that contribute to variation in incubation periods as there is evidences on this area are of low quality and are inconsistent.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, June 5). Rapid Review: What is known about the duration from exposure to symptoms or diagnosis for COVID-19? Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/a6760064f09f37937994941e286d75923357f79f.pdf</p>

Intervention	Results	Recommendation	Reference
Continuation...	<p>Gaps in Evidence:</p> <ul style="list-style-type: none"> (1) In the evidences that were reviewed, there were differences in the methodology in quantifying incubation period such as determining incubations as the time to symptom onset while some studies used time to positive RT-PCR test. (2) Numerous studies estimated incubation period by serially testing household contacts of individuals who are COVID-19 positive over a 14-day self-isolation or quarantine period, while other studies utilized longer incubation periods. (3) Calculation for exposure were also varied in the studies included. 		

Intervention	Results	Recommendation	Reference
<p>Copper What is known about the efficacy and cost-effectiveness of copper materials to reduce transmission of viruses?</p> <p><i>This rapid review included 11 publications consisting of 2 completed syntheses and 9 single studies.</i></p> <p><i>Last Update: June 12, 2020</i></p>	<p>Key Points:</p> <ol style="list-style-type: none"> (1) The quality of evidence span from low, moderate to high quality evidence. (2) To date, there is no evidence on the efficacy or cost-effectiveness of copper-treated Personal Protective Equipment (PPE) in hospitals or public settings to reduce the transmission of any virus. Furthermore, there were no reports of hospitals using copper-treated PPE for COVID-19 protection or other viruses. (3) In one high quality synthesis of 7 randomized controlled trials it was revealed that the use of copper-treated surfaces and textiles resulted to a 6-43% reduction in risk of hospital-acquired infections (inclusive of both bacterial and viral infections). (4) In studies that compared different viruses (HIV, Influenza, Norovirus), the responses were varied depending on the virus being tested. Thus, studies on other viruses may not be applicable for COVID-19. 	<p>This rapid review must be revisited as more evidence on the effectiveness of copper in reducing virus transmission may emerge.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, June 12). Rapid Review: What is known about the efficacy and cost-effectiveness of copper materials to reduce transmission of viruses? Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/b4c91fef9983c643188fce24796fb547b40f0841.pdf</p>

Intervention	Results	Recommendation	Reference
Continuation...	<p>(5) Laboratory studies indicate that viral infectivity over time decreases faster after exposure to copper-treated textile or surface compared to control.</p> <p>Gaps in Evidence:</p> <p>(1) For laboratory studies included in the review, the study quality was not appraised and had inconsistent findings. Three of the eight studies were conducted by an independent company producing copper-treated products.</p> <p>(2) In the laboratory studies reviewed, the findings were not directly comparable due to differences in the type of materials or concentration most effective to a wide variety of viruses, copper surfaces, testing protocols and time periods of evaluation.</p>		

Intervention	Results	Recommendation	Reference
<p><i>Cohort isolation</i></p> <p>What is the effectiveness of cohorting virus-positive residents to shared rooms in care facilities?</p> <p><i>This rapid review included 7 publications consisting of 2 syntheses and 5 guidance documents</i></p> <p><i>Last Update: June 12, 2020</i></p>	<p>Key Points:</p> <ol style="list-style-type: none"> (1) The quality of evidence is low. (2) Currently, there is no evidence on the effectiveness of cohorting COVID-19 virus-positive residents to shared rooms in long – term care facilities. (3) Guidelines from health authorities are consistent in recommending isolation of positive cases in single rooms, and cohorting when single rooms are not available, based on past practice, recommendations based on control of other infections and expert opinion. 	<p>There is still a need for more evidence on the effectiveness of cohorting COVID-19 virus positive cases to shared rooms.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, June 12). Rapid Review: What is the effectiveness of cohorting virus-positive residents to shared rooms in care facilities? Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/d95f846845fea8022e1d9704ef1a9db909c4f8fd.pdf</p>

Intervention	Results	Recommendation	Reference
<p>Alcohol</p> <p>What is the effect of the COVID-19 pandemic on alcohol use, poisonings, and alcohol-related deaths? What strategies have been used to mitigate alcohol abuse during the COVID-19 pandemic?</p> <p><i>This rapid review included 14 publications consisting of 12 single studies and 1 ongoing synthesis.</i></p> <p><i>Last Update: June 19,2020</i></p>	<p>Key Points:</p> <ol style="list-style-type: none"> (1) To date, evidences on the global population revealed differences in alcohol intake practices during the pandemic. Numerous studies showed an increase in uptake of alcohol, while other studies suggest more people have decreased their alcohol intake. (2) In general, studies reveal that a large portion of the population have not changed their alcohol intake. (3) Many of the studies did not document alcohol-related harms. In Canada about 99% of participants had not experienced injuries due to alcohol intake during the pandemic period. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) Majority of studies were cross-sectional studies disseminated through virtual platforms of company sponsored surveys that had small monetary incentive for participating individuals (2) There is inadequate evidence on the availability of harm reduction or treatment services for alcohol disorder during the COVID-19 pandemic. 	<p>Revisit this rapid review as evidences such as syntheses become available on COVID-19 and alcohol use, poisonings and related deaths.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, June 23). Rapid Review: What is the effect of the COVID-19 pandemic on alcohol use and alcohol-related harms? Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/90c030b02d4714b21ef9204ea1ddbba1a667f977.pdf</p>

Intervention	Results	Recommendation	Reference
<p>Psychiatric inpatient facilities</p> <p>What is known about best practices for infection prevention and control in inpatient psychiatric facilities?</p> <p><i>This rapid review included 14 publications consisting of 2 completed syntheses, 1 single study, 3 guidance documents and 8 case reports</i></p> <p><i>Last Update: June 26, 2020</i></p>	<p>Key points</p> <ol style="list-style-type: none"> (1) There is low quality of evidence available. (2) To date, there is inadequate evidence on effective infection control practices in inpatient psychiatric facilities and no guidelines informed by research evidence are available. (3) Interim guidelines from health authorities for inpatient psychiatric facilities cover the following recommendations: <ol style="list-style-type: none"> a. There are complex ethical considerations on enforcement of physical distancing measures if patient is non-compliant such as in the case of use of restraints. b. There is a need to adapt to the changes due to COVID-19 pandemic instead of suspending activities such as group therapy, family visits and others to ensure adequate mental health care support. c. There is potential for certain mental conditions to exacerbate due to the pandemic such as anxiety, paranoia and obsessive compulsive disorder. 	<p>Further evidence on best practices for infection prevention and control in inpatient psychiatric facilities are needed.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, June 26). Rapid Review: What is known about best practices for infection prevention and control in inpatient psychiatric facilities? Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/8c1cfdda4576be69be52ca078718a784ccb922e4.pdf</p>

Intervention	Results	Recommendation	Reference
Continuation...	<p>d. Many of the patients have other medical comorbidities subjecting this population to higher risk of serious COVID-19 complications.</p> <p>Gaps in Evidence:</p> <p>(1) One study showed that mandatory supervised alcohol-based hand cleaning every four hours during an outbreak of respiratory infections reduced the number of infections. Applicability of this findings to COVID-19 is not known.</p> <p>(2) There were 7 case reports that described inpatient psychiatric facilities' experiences in managing the effects of COVID-19 but these reports did not indicate if (a) the interventions were effective in minimizing virus transmission and (b) if it had adverse effects on patient care or treatment of psychiatric conditions.</p>		

Intervention	Results	Recommendation	Reference
<p>Family Life</p> <p>What is known about the impact of the pandemic on working families with children?</p> <p><i>This rapid review included 38 publications consisting of 6 completed syntheses, 12 ongoing syntheses and 20 single studies.</i></p> <p><i>Last Update: July 22,2020</i></p>	<p>Key Points</p> <ol style="list-style-type: none"> (1) The quality of evidence span from low, moderate to high. (2) Current evidence in general convey that COVID-19 pandemic has placed a strain on families especially for female caregivers and children. This include reduced working hours for women with children and declining mental health outcomes for children. (3) There have been increasing gender gaps in employment as more women have experienced reduced hours and job losses more than men. (4) Among parents, mothers reduced work hours more than fathers. Reduced work hours is greater among primary school-aged children. (5) Findings also reveal higher levels of fear and anxiety among families with children than without. Parents’ concerns on their children’s isolation and screen time were also noted in one of the studies. (6) Syntheses’ findings show elevated levels of anxiety among children and youth with some elevated depression as well. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) The closure of schools and daycare centers may create a gap in the safety net for children who are at risk for abuse. (2) Impact of COVID-19 on mental health is based mostly on cross sectional surveys of moderate quality. 	<p>More syntheses that provide an overall insight into the overall experience of families and long term impacts from COVID-19 are needed.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, July 22). Rapid Review: What is known about the impact of the COVID-19 pandemic on families with children? Retrieved July 24, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/4fe4aca839e4a1bf3d8aa66e4dbc000ba4550b5c.pdf</p>

Intervention	Results	Recommendation	Reference
<p>Transmission by children</p> <p>What is the specific role of daycares and schools in COVID-19 transmission?</p> <p><i>This rapid review included 33 publications consisting of 4 new single studies, 1 update to included synthesis and 4 syntheses.</i></p> <p><i>Last Update: July 24,2020</i></p>	<p>Key Points</p> <ol style="list-style-type: none"> (1) There is moderate quality of evidence with consistent findings that reveal that young children are not a major source of transmission of COVID-19. (2) Analyses of infection clusters show that children get infected by way of community or home setting transmission where adults were most likely the index case than children. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) The prevalence of COVID-19 infection in children in daycare and schools are lower than the prevalence in adults working in daycare and school setting. (2) Across studies there seems to be a linear relationship between age and likelihood of contracting or transmitting COVID-19. 	<p>More studies on COVID-19 transmission in daycare and schools are needed.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, July 24). Rapid Review: What is the specific role of daycares and schools in COVID-19 transmission? Retrieved July 26, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/09e652c44a7de3cfc8d85e093cd20d8d90dc2ba.pdf</p>

Intervention	Results	Recommendation	Reference
<p>Wastewater Surveillance</p> <p>What is known about using wastewater surveillance to monitor the COVID-19 pandemic in the community?</p> <p><i>This rapid review included 24 publications consisting of 15 new single studies, 3 published versions of previously included preprints</i></p> <p><i>Last Update: July 29,2020</i></p>	<p>Key Points</p> <ol style="list-style-type: none"> (1) Many single studies point out that SARS COV 2 has been found in untreated wastewater in numerous jurisdictions. (2) Additional studies reveal that the concentrations of viral RNA were correlated with the number of cases in surrounding areas. (3) SARS COV 2 have been detected in untreated wastewater globally such as in USA, the Netherlands, Spain, Italy, Turkey, Chile, Brazil, Ecuador, Pakistan, India, Japan Australia and Israel. There were some studies that had correlated viral RNA to the known number of cases in the area. There are however variabilities in methodology employed in obtaining samples, testing and other procedures thus the quality of evidence has to be confirmed with a content-area expert. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) Currently, all published works have reported that wastewater-based surveillance is possible; however, there have been no evidence on the effectiveness or cost-effectiveness of this method for ongoing surveillance. 	<p>Evidence on the effectiveness or cost-effectiveness of waste water surveillance method is needed.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, July 29). Rapid Review: What is known about using wastewater surveillance to monitor the COVID-19 pandemic in the community? Retrieved July 31, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/44706b0d3da0a6286d0a06ecfdc8a822efbb9198.pdf</p>

Intervention	Results	Recommendation	Reference
<p>Congregate living settings</p> <p>What factors increase the risk of COVID-19 outbreaks in congregate living settings? Do people who contract COVID-19 from outbreaks in congregate living setting have worse outcomes than community-dwelling adults?</p> <p><i>This rapid review included 15 publications consisting of 1 completed synthesis, 8 single studies and 4 case reports.</i></p> <p><i>Last Update: July 31 ,2020</i></p>	<p>Key Points</p> <ol style="list-style-type: none"> (1) To date, there is no evidence that directly provides an association as to whether factors in congregate living settings may increase or reduce risk of COVID-19 transmission. There is an assumption that crowding and shared facilities in these settings may contribute to higher risk for COVID-19 transmission but this has yet to be revealed in evidence. (2) There is evidence comparing outcomes between congregate living residents (persons living in prison and shelters) versus community-dwelling residents. This was shown in two Canadian studies which resulted in a higher rate of COVID-19 infection in congregate settings such as in shelters and prisons as compared to the general population (a percentage of 2 to 18 times higher). It is to be understood that congregate settings are testing universally and with higher testing rates which potentially may lead to higher prevalence findings in these places. The quality of evidence is high and consistent. (3) A systematic review revealed factors in prison settings that contribute to spread of infections other than COVID-19. Recommended mitigation strategies include health communication, reduction of overcrowding, limited shared spaces, public health measures such as hand hygiene, screening, testing, contact tracing and isolation. The abovementioned interventions are difficult to apply in a prison setting. 	<p>More evidence is needed on the factors present in congregate living settings that may contribute to an increase or reduced risk of COVID-19 transmission. Furthermore, studies on other similar settings other than prisons/detention centres, homeless shelters and migrant worker dormitories is also needed to capture a holistic view of COVID-19 outbreaks in these areas.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, June 26). Rapid Review: What factors increase the risk of COVID-19 outbreaks in congregate living settings? How do outcomes compare to outbreaks in community settings? Retrieved July 21, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/15b504b842bc07fbae849e20e225ed9610889b3e.pdf</p>

Intervention	Results	Recommendation	Reference
Continuation...	<p>(4) Mitigation strategies focus on infection prevention and control measures tailored to prison and shelter settings. The effectiveness of the interventions has not yet been explored in this context of congregate settings.</p> <p>Gaps in Evidence:</p> <p>(1) Evidence is limited to prisons/detention centers, homeless shelters and migrant worker dormitories. Applicability to other similar settings is not known.</p> <p>(2) The extent of how the identified infections were acquired in these settings is not known given that there are various ways virus transmission is possible in congregate settings not only limited to the place but also in its interaction with the community.</p>		

Intervention	Results	Recommendation	Reference
<p>Surface Transmission</p> <p>What is known about how long the virus can survive with potential for infection on surfaces?</p> <p><i>This rapid review included 34 publications consisting of 3 completed syntheses, 2 ongoing syntheses, and 29 single studies</i></p> <p><i>Last Update: July 31,2020</i></p>	<p>Key Points:</p> <ol style="list-style-type: none"> (1) The evidence quality is moderate with consistent findings. (2) To date, there is inconclusive evidence on the length of time SARS COV2 can be detected in surfaces and the likelihood of infectivity of the virus once detected. (3) The length of time SARS COV2 can remain in surfaces are varied in the different studies reviewed. However, it has been reported that SARS COV2 can remain viable longer on smoother surfaces such as plastics or steel than cardboard or cotton. <p>Gaps in Evidence:</p> <ol style="list-style-type: none"> (1) Studies varied in the type or location of the tested sample, the time since a confirmed case was in the setting, the cleaning procedures used and the time since the last cleaning. Majority of these studies were conducted outside laboratory settings. (2) In a laboratory conducted study, it has been found that SARS COV2 virus was detectable up to 7 days on some surfaces. However, there were variations on the concentrations used and testing procedures. The applicability of these studies to the real world setting is not established. 	<p>More studies that focus on COVID-19 virus infectivity upon detection in surfaces is needed.</p>	<p>The National Collaborating Centre for Methods and Tools, M. (2020, July 31). Rapid Review: What is known about how long the virus can survive with potential for infection on surfaces? Retrieved July 31, 2020, from https://www.nccmt.ca/uploads/media/media/0001/02/99b4f56becdeee0c75d93964e989288dfbc561ed.pdf</p>