

Cochrane Special Collections

Coronavirus (COVID-19): infection control and prevention measures

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This Special Collection is one of two collections on COVID-19, and it focuses on infection control and prevention measures. See also the companion Special Collection: [Coronavirus \(COVID-19\): evidence relevant to critical care](#).

It is also available in [Simplified Chinese](#), [Farsi](#), [French](#), [Japanese](#), [Bahasa Malaysia](#), [Portuguese](#), [Russian](#), and [Spanish](#).

This Special Collection has been created in response to the COVID-19 pandemic and is regularly updated. It aims to ensure immediate access to systematic reviews most directly relevant to the prevention of infection. It includes reviews that are relevant to the [WHO interim guidance](#), as well as other potentially relevant reviews from three Cochrane Networks: [Cochrane Public Health and Health Systems](#); [Cochrane Musculoskeletal, Oral, Skin and Sensory](#); and [Cochrane Acute and Emergency Care](#), and also draws on the knowledge of Cochrane groups in affected regions. Many reviews in this collection have associated [Cochrane Clinical Answers](#) (CCAs), with links provided.

The different natures of pathogens and their modes of transmission compared with what is currently known about COVID-19 may limit the applicability of the evidence summarized in these reviews. Please note that the reviews included in this Special Collection summarize evidence, and their inclusion does not mean that the interventions reviewed have been shown to be an effective prevention measure.

Physical interventions to interrupt or reduce the spread of respiratory viruses

Viral epidemics or pandemics of acute respiratory infections like influenza or severe acute respiratory syndrome pose a global threat. Antiviral drugs and vaccinations may be insufficient to prevent their spread. This review assesses the effectiveness of physical interventions to interrupt or reduce the spread of respiratory viruses. *Associated Cochrane Clinical Answer: [Can physical interventions help reduce the spread of respiratory viruses?](#)*

Interventions to improve hand hygiene compliance in patient care

Free access

Healthcare-associated infection is a major cause of morbidity and mortality. Hand hygiene is regarded as an effective preventive measure. This review assesses the short- and long-term success of strategies to improve compliance to recommendations for hand hygiene, and to determine whether an increase in hand hygiene compliance can reduce rates of healthcare-associated infection. *Associated Cochrane Clinical Answers: [What are the effects of multimodal campaigns to improve hand hygiene of healthcare workers?](#) and [What are the effects of performance feedback, education, and olfactory/visual cues on hand hygiene of healthcare workers?](#)*

Improving adherence to Standard Precautions for the control of health care-associated infections

'Standard Precautions' refers to a system of actions, such as using personal protective equipment or adhering to safe handling of needles, that healthcare workers take to reduce the spread of germs in healthcare settings such as hospitals and nursing homes. This review assesses the effectiveness of interventions that target healthcare workers to improve adherence to Standard Precautions in patient care.

Personal protective equipment for preventing highly infectious diseases due to exposure to contaminated body fluids in healthcare staff

In epidemics of highly infectious diseases, such as Ebola Virus Disease or Severe Acute Respiratory Syndrome (SARS), healthcare workers are at much greater risk of infection than the general population, due to their contact with patients' contaminated body fluids. Contact precautions by means of personal protective equipment (PPE) can reduce the risk. This review evaluates which type of full body PPE and which method of donning or doffing PPE have the least risk of self-contamination or infection for healthcare workers, and training methods to increase compliance with PPE protocols. *Associated Cochrane Clinical Answer: [Which type of personal protective equipment \(PPE\), and which interventions to increase PPE use by healthcare workers, help reduce the spread of highly infectious diseases?](#)*

Gloves, gowns and masks for reducing the transmission of methicillin-resistant *Staphylococcus aureus* (MRSA) in the hospital setting

Free access

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a common hospital-acquired pathogen that increases morbidity, mortality, and healthcare costs. Its control continues to be an unresolved issue in many hospitals worldwide. This review assesses the effectiveness of wearing gloves, a gown or a mask when contact is anticipated with a hospitalized patient colonized or infected with MRSA, or with the patient's immediate environment. *Associated Cochrane Clinical Answer: [Do gloves, gowns, and masks reduce transmission of MRSA in the hospital setting?](#)*

Gowning by attendants and visitors in newborn nurseries for prevention of neonatal morbidity and mortality

Overgowns are widely used in newborn nurseries and neonatal intensive care units. It is thought that gowns may help to prevent the spread of nosocomial infection and serve as a reminder to staff and visitors to wash their hands before contact with the infant. This review assesses the effects of the wearing of an overgown by attendants and visitors on the incidence of infection and death in infants in newborn nurseries.

Behavioural interventions to promote workers' use of respiratory protective equipment

Respiratory hazards are common in the workplace. Depending on the hazard and exposure, the health consequences may include mild to life-threatening illnesses from infectious agents, acute effects ranging from respiratory irritation to chronic lung conditions, or even cancer from exposure to chemicals or toxins. Use of respiratory protective equipment (RPE) is an important preventive measure in many occupational settings. RPE only offers protection when worn properly, when removed safely and when it is either replaced or maintained regularly. The effectiveness of behavioural interventions either directed at employers or organizations or directed at individual workers to promote RPE use in workers remains an important unanswered question. This review assesses the effects of any behavioural intervention either directed at organizations or at individual workers on observed or self-reported RPE use in workers when compared to no intervention or an alternative intervention.

Chlorhexidine bathing of the critically ill for the prevention of hospital-acquired infection

Hospital-acquired infection is a frequent adverse event in patient care; it can lead to longer stays in the intensive care unit, additional medical complications, permanent disability or death. Prevalence of infection is particularly high in the intensive care unit, where people who are critically ill have suppressed immunity and are subject to increased invasive monitoring. Chlorhexidine is a low-cost product, widely used as a disinfectant and antiseptic, which may be used to bathe people who are critically ill with the aim of killing bacteria and reducing the spread of hospital-acquired infections. This review assesses the effects of chlorhexidine bathing on the number of hospital-acquired infections in people who are critically ill. *Associated Cochrane Clinical Answer: What are the effects of chlorhexidine bathing for preventing hospital-acquired infection in people admitted to intensive care units (ICUs)?*

Infection control strategies for preventing the transmission of methicillin-resistant *Staphylococcus aureus* (MRSA) in nursing homes for older people

Nursing homes for older people provide an environment likely to promote the acquisition and spread of methicillin-resistant *Staphylococcus aureus* (MRSA), putting residents at increased risk of colonization and infection. It is recognized that infection prevention and control strategies are important in preventing and controlling MRSA transmission. This review aims to determine the effects of infection prevention and control strategies for preventing the transmission of MRSA in nursing homes for older people.

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Image credit

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