The use of gloves does not eliminate the need for hand hygiene.

According to the Hand Hygiene Resource Center, nurses, doctors and other healthcare workers can contaminate their hands by doing simple tasks, including:

- taking a patient's blood pressure or pulse
- assisting patients with mobility
- touching the patient's gown or bed sheets
- touching equipment, including bedside rails, over-bed tables, IV pumps

According to the Centers for Disease Control and Prevention, healthcare professionals should avoid wearing artificial nails and trim natural nails to less than one-quarter inch if they care for patients at high risk of acquiring infections.

Improved adherence to hand hygiene (i.e. hand washing or use of alcohol-based hand rubs) has been shown to terminate outbreaks in health care facilities, to reduce transmission of antimicrobial resistant organisms (e.g. methicillin resistant staphylococcus aureus) and reduce overall infection rates.

The Centers for Disease Control maintains that good hand hygiene is the simplest, most effective measure for preventing nosocomial infections.

Nosocomial infections are infections that a patient acquires while in the hospital. Critically ill patients are most susceptible to becoming infected. The most common infections are caused by staphylococci and multi-drug resistant pathogens such as MRSA, VRE and resistant gramnegative rods. Patients can become ill with bloodstream infections, surgical site infections, urinary tract infections and pneumonia.

Patients often carry resistant bacteria on their skin. Patients with resistant bacteria like methicillin-resistant S. aureus (MRSA) or vancomycin-resistant enterococci (VRE) often carry the organism on many areas of their skin, even when they don't have any wounds or broken skin.

A scientific study performed in a hospital nursery found that babies acquired staphylococci more frequently when cared for by nurses who didn't wash their hands than babies cared for by nurses who washed their hands between patient contacts with an anti-microbial soap. Other studies have show that washing hands between patient contacts reduces the spread of bacteria in healthcare.

Nearly 22 million school days are lost due to the common cold alone. Some viruses and bacteria can live from 20 minutes to two hours or more on such surfaces as cafeteria tables, doorknobs and desks. A study of Detroit school children showed that washing hands at least 4 times a day can reduce stomach illnesses by more than 50 percent.