Staphylococcus aureus infection

*Staphylococcus aureus* (often referred to as ‘staph’ or ‘golden staph’) is a common bacterium. About 30 percent of people carry it either on their skin or in their nose, mostly without it causing any problems. However, sometimes the bacteria get inside the body and cause infection.

Staph most commonly causes skin infections such as boils and impetigo (school sores) but it also sometimes causes serious infections like septicaemia (blood poisoning) and pneumonia.

There are many different strains of staph. Some strains are resistant to the antibiotic called methicillin, and often other antibiotics as well. This is called methicillin resistant *Staphylococcus aureus* (MRSA) and is more difficult to treat. MRSA is a common cause of infection in hospitals. Some strains of MRSA also spread quite easily between healthy people living in the community. These strains are often quite different to the MRSA strains found in hospitals.

**Signs and Symptoms:**

People with skin infection may have redness, swelling, pain, heat, and/or pus-filled lesions such as boils or abscesses.

Symptoms of serious infection depend on where the infection is in the body, but may include feeling generally unwell, high fever, uncontrollable shakes, and/or shortness of breath.

**Treatment:**

Your doctor will advise on the best treatment for your infection. Draining pus is often the only treatment that is needed and the person often feels better after this. Drainage of skin boils or abscesses should only be performed by a doctor or other appropriately trained health worker.

Sometimes antibiotics are required. If you are given an antibiotic, take all of the doses as instructed by the doctor or pharmacist, even if the infection is getting better. It is possible for an infection to come back after it appears cured if the full course of antibiotics is not completed. Stopping antibiotics too early can also lead to the bacteria becoming resistant to that antibiotic.

**Transmission:**

Staph is usually spread through direct contact with a person who has a skin infection or is carrying the bacteria on their skin or in their nose. This can occur in the community by close skin to skin contact, sharing items such as towels or clothes, or touching surfaces that someone else has touched. In hospitals spread may occur when hands are not washed. Household pets can sometimes carry strains of MRSA that can infect humans, especially if there is someone in the household already infected.

**Who is at risk?**

Staph skin infections can affect anyone. Crowding and frequent skin to skin contact can increase the risk of infection, so outbreaks tend to happen in hospitals and other health care facilities, schools, dormitories, military barracks, households, jails, and childcare centres. People who have health problems such as diabetes or a poor immune system or who have broken skin (eg. due to cuts, insect bites, dermatitis, recent surgery or intravenous ‘drips’) are more likely to get an infection.

**How is it diagnosed?**

Staph infections are often diagnosed on their appearance and the presence of any other symptoms (eg. fever). To confirm the diagnosis and check what strain of staph is causing the infection, your doctor will need to take a swab or sample from the boil, wound, blood, or other site of infection for laboratory testing.

**Prevention:**

Hand washing is the single most important way to prevent the spread of staph infections. Wash hands regularly with soap and running water for 15-30 seconds and dry thoroughly with a clean towel or disposable paper towels, especially:

- before and after touching/changing a dressing on an infected area
- after going to the toilet
- after blowing your nose
- before handling or eating food
- after touching animals, particularly domestic pets.

If running water is not immediately available hands can be cleaned with alcohol hand gel or wipes; however these will only be effective if hands are not visibly dirty.

Cover boils or other skin infections with a waterproof dressing. Don’t handle food that others might eat or be in contact with if you have skin infections or open wounds that cannot be kept covered.
Don't share personal items such as clothes, towels or grooming items such as nail scissors, tweezers, razors and toothbrushes. If you share a bed with someone, keep sores or wounds covered overnight.

Tell other people in your household if you have a staph infection and share this information sheet with them. They should see their doctor if any infections develop.

Control

Schools and childcare

Measures to prevent spread in schools and childcare include:

- ensure teachers, children and families understand the importance of hand washing
- make hand washing products (soap dispensers, running water and paper towels) available and accessible
- allow time for hand washing (particularly before eating and after going to the toilet)
- temporarily exclude children from school or child care if skin infections or open wounds cannot be kept covered, until either healed or drainage can be contained using a waterproof dressing
- clean surfaces such as counters, desks and toys daily with fresh warm water and neutral detergent daily and whenever visibly contaminated.

Sporting groups

In addition to general hygiene such as regular hand washing, measures to prevent spread in sporting groups include the following:

- People with skin infections or open wounds that cannot be kept covered shouldn’t participate in contact sports until either healed or drainage can be contained using a waterproof dressing.
- People with skin infections or open wounds shouldn’t use common spas or saunas.
- People with uncovered skin infections or wounds shouldn’t share any sports equipment that is in contact with the skin.

Hospitals

General precautions are taken to prevent the spread of infections including staph in hospitals. Specific measures to prevent the spread of MRSA may include isolating patients who carry MRSA or have an MRSA infection.

Help and assistance:

Please consult your doctor for diagnosis and treatment of any suspected infection.

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