What is *Staphylococcus aureus* and MRSA?

*Staphylococcus aureus* is a bacterium (germ) that commonly lives on the skin or in the nose or mouth of people (this is called colonisation). It is often referred to as staph or golden staph. When staph becomes resistant to commonly used antibiotics (meaning the antibiotics are no longer effective) it is called *methicillin-resistant Staphylococcus aureus* (MRSA).

Most of the time MRSA does not cause any problems and those who are colonised with it do not look or feel different from anyone else. However, like all staph, MRSA can cause infection if it gets into the body. This can occur when you scratch or cut your skin, or if you have undergone surgery or invasive procedures in hospital. MRSA infections are often more difficult to treat than other staph infections due to the reduced number of antibiotics available.

MRSA is a notifiable condition in Western Australia (WA). This means that when a laboratory identifies MRSA it must be reported to the Department of Health. The Department closely monitors the number of MRSA cases occurring in WA.

What is CA-MRSA?

Although MRSA is often associated with infection in hospitals, community-associated MRSA (CA-MRSA) often cause infections in healthy people living in the community, who have not been in hospital or had any medical procedures. It can spread to others who are in close contact with a person who has CA-MRSA, especially those who share the same household. CA-MRSA usually causes skin infections, for example boils, that often occur again following initial treatment. Less commonly, it can cause serious infections like pneumonia and septicaemia (blood poisoning).

How is CA-MRSA spread?

MRSA is usually spread from person to person through close contact with another person who is colonised or infected with MRSA. It may also spread by having contact with items contaminated by a person with MRSA, such as towels or wound dressings, or from touching surfaces that are contaminated with MRSA. It is not usually spread through the air.

What are the signs and symptoms of CA-MRSA infection?

People with skin infections may have redness, swelling, pain, heat and the presence of pus. Sometimes the infection may look like an insect bite at the start. Symptoms of serious infection, which can be life-threatening and require urgent medical attention, may include feeling generally unwell, high fever, shivering and shortness of breath.

How do I get treated?

Any infection caused by MRSA must be treated by a doctor, who should take a swab from the infected site to make sure the right antibiotics are given if needed. Remember, a lot of the usual antibiotics used for treating staph will not work for MRSA. Once treatment is started, you should see improvement within 48 hours. If your infection does not get better, or if it worsens, you need to seek prompt medical attention.
Can I get rid of CA-MRSA?
Your doctor or nurse may talk to you about decolonisation, especially if you are having infections that occur more than once, are at risk of infection due to other existing medical conditions such as diabetes, cancer or conditions that weaken your immune system, are planning to have an operation, or you are a healthcare worker or carer. Decolonisation is when topical treatments are used to try and get rid of the MRSA you have on your body. This treatment is different to the antibiotics that you may have taken and involves the use of an antiseptic body wash and nasal antibiotic ointment for 5 days.

Currently, there is no vaccination available to prevent you from acquiring CA-MRSA.

How can I prevent the spread of CA-MRSA?
The pus from these infections is very infectious. If your hands or other surfaces become contaminated, this will increase the risk of spread. You should always:
- wash your hands with soap and water regularly, especially after contact with your wound or dressing or use an alcohol-based hand rub on clean hands
- keep skin infections or wounds covered at all times until completely healed
- maintain good personal hygiene by regular bathing/showering and changing clothing
- wash bed linen and towels regularly, preferably using a hot wash and detergent
- keep your home environment clean with regular cleaning and/or vacuuming.

Do not share personal items such as clothing, towels, toothbrushes or razors.

If you follow this advice, there is little risk of spreading CA-MRSA to your friends, work colleagues or casual contacts. You do not have to avoid contact with your family or friends and you can return to work once you have started treatment for your infection.

What should I tell my household contacts?
Household contacts are people who live in your house on a regular basis. CA-MRSA can spread easily to others in the same household. However, just because a person lives in your household this does not mean they will get CA-MRSA. You should inform your doctor if there have been repeated skin infections in others living in your household.

Tell other people in your household that you have a CA-MRSA infection and share this information sheet with them. They should discuss this information with their doctor, especially if they have a history of skin infections or are planning an operation. If they have other existing medical conditions, their doctor will advise them if they are at increased risk of MRSA infection, for example, those with diabetes, cancer, or conditions that weaken their immune system. If any of your household contacts are carers or healthcare workers, they need to discuss this with the infection prevention and control professional at their workplace.

What should I do if I require admission to hospital?
If you have a history of infection or colonisation with any type of MRSA, you should let the staff at the hospital know. This will assist them in providing the appropriate care for you and ensure appropriate antibiotics are prescribed if required.

Where can I find more information on CA-MRSA?