What is MRSA?
MRSA is a *Staphylococcus aureus* resistant to B lactam drugs including Meticillin, Flucloxacillin, Penicillins, Cephalosporins and other related drugs. Some strains are also resistant to other groups of antibiotics such as Macrolides (e.g. Erythromycin), Aminoglycosides (e.g. Gentamicin) and Quinolones (e.g. Ciprofloxacin).

Where has it come from?
Some strains of *Staph. aureus* have become resistant to many antibiotics as a result of heavy antibiotic use over the past 30 years. The continued use of antibiotics is resulting in these resistant strains becoming more common within hospital settings.

Why is it important?
Both ordinary *Staph. aureus* and MRSA are potentially pathogenic i.e. able to cause infection. However when MRSA does cause an infection it can be very difficult to treat because of resistance to most available antibiotics. Often the only agent active against MRSA is vancomycin, which has to be given intravenously and is potentially toxic. It is therefore better to control the spread of this organism, and minimise the risk of patients developing an infection.

Hospital in-patients are often receiving antibiotics which, by killing their normal bacteria, allow resistant organisms such as MRSA to colonise their skin. They are also more likely to develop an infection because they are unwell or debilitated and may have invasive procedures such as catheterisation which further increases the risk of infection.

Patients may become infected in hospital if MRSA is spread from another infected or colonised patient. Or patients who are already colonised when admitted may develop an infection whilst in hospital. **Screening** aims to identify patients who are colonised on admission and eradicate the MRSA so they do not infect themselves or other patients.

What infections does MRSA cause?
MRSA is likely to cause the same type of infections as ordinary *Staph. aureus*: i.e. usually skin and wound infections, sometimes urinary tract infections. More rarely MRSA may cause deep infections such as abscesses, bone infections or septicaemia: these can be extremely difficult to treat.

How does it spread?
Like any *Staph. aureus*, MRSA can be carried in the nose, throat and/or on the skin of people without causing any infection (colonisation). Failure to follow hygiene procedures, such as not washing hands properly, may allow MRSA to spread from one patient to another.
Some people are heavy shedders of *Staph.aureus*, including MRSA. Even with good hygiene practice, if an individual member of staff carries MRSA in their nose they may spread it to patients during contact with them.

MRSA can also survive in the environment. Dust is largely made up of human skin scales: *Staph. aureus*, including MRSA, can be shed from carriers on these scales and survive for long periods if dust is allowed to collect. Patients and staff can become colonised from this source. It is therefore important to regularly clean (damp dust) surfaces, push buttons etc to prevent a build up of dust where MRSA may persist.

However, the commonest way of spreading MRSA is on the hands, so **thorough hand washing** using soap and water after any contact with patients or potentially contaminated surfaces is the best way to reduce the risk of spread. Alcohol gel may also be used on visibly clean hands in between handwashing.

**Will it harm me?**

Fit healthy individuals are unlikely to develop infections due to MRSA. If they do then they are usually superficial wound infections which often clear without antibiotics anyway.

**I'm pregnant, will it harm my baby?**

MRSA is no more likely to harm a baby in the uterus, or when newborn, than any other *Staph. aureus*. These organisms are carried by a considerable proportion of the population and are not associated with damage to, or loss of, the baby

**What about my family?**

Family members at home are at no more risk of acquiring infection with MRSA than with *Staph.aureus* which many people commonly carry anyway, regardless of their age. Because they are not vulnerable or exposed to antibiotics in the same way as hospital patients are, they are unlikely to become colonised with MRSA.

**Further advice and information**

For further advice and information regarding MRSA please contact the Infection Control Nurse on 01595 743000 Ext. 3649

If you need advice about your own health at work, please contact the Occupational Health Department on 01595 743080.

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**If you need this leaflet in a different language or format, please phone 01595 743340**

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