This leaflet contains information about MRSA - what it is and how it affects patients in hospital and the people around them.
What is MRSA?

There are lots of micro-organisms (germs) on our skin and in air we breathe, the water we drink and the food we eat. Most of them are harmless, some are beneficial and a very small proportion can cause harm. Staphylococcus aureus is a common germ that is found on the skin and in the nostrils of about a third of healthy people. It can cause harm if it enters the body, for example through cuts and sores.

Meticillin (previously known as methicillin) is a type of penicillin, an antibiotic that is used to treat infections. MRSA stands for meticillin (M) resistant (R) Staphylococcus (S) aureus (A). MRSA are types of Staphylococcus aureus that have developed resistance to meticillin and some other antibiotics used to treat common infections. Strains of MRSA were first found in the 1960s following widespread use of antibiotics (including meticillin), and occur in many countries.

Some people carry MRSA on their skin and in their nostrils quite harmlessly. Some people carry MRSA for just a few hours or days, but other people carry MRSA for weeks or months. They don’t know that they carry MRSA because they have no symptoms and it does not harm them. This is called ‘colonisation’.

MRSA and other types of MRSA cause problems in hospitals. Complicated medical treatments, including operations and intravenous lines (drips), provide opportunities for germs to enter the body. MRSA and other types of Staphylococcus aureus can cause local skin infections such as boils, and in more vulnerable patients, they can cause more serious infections in wounds, bones, lungs and blood (bloodstream infections).
How do you know if someone has MRSA?

People who carry MRSA do not look or feel different from anyone else. The MRSA does not harm them and they have no symptoms of infection. When patients come into hospital, a nurse may take swabs for laboratory tests to check for MRSA.

Patients who have an infection may develop signs and symptoms, such as a high temperature or a fever. An infected wound may become red and sore and discharge pus. Many different germs can cause these signs and symptoms. Laboratory tests can show whether MRSA or other germs are the cause.

How do hospital staff care for patients with MRSA?

A nurse may take swabs from different parts of the patient's body to check if MRSA is present.

People who carry MRSA or have an MRSA infection can be treated with antibiotics. Hospitals have policies for treatment and these policies vary according to the local situation, the condition of the individual patient, and if the patient is likely to need further or repeated hospital care.

You can ask your nurses about local policies.

A patient who carries MRSA may be treated with antiseptic shampoo and body wash, which reduce or remove MRSA from hair, skin and nostrils.

A patient who is infected with MRSA is usually treated with an antibiotic which is given through an intravenous line (drip).
How does MRSA spread?
If people have MRSA on their hands, they can transfer it to people and objects that they touch. Other people can then pick it up on their hands and pass it on to others.

How do hospital staff stop MRSA spreading?
Hospital staff take special precautions with patients who have MRSA in order to stop it spreading to other people (see box).

Simple hygiene measures reduce the risk of spreading MRSA
- Everyone should clean their hands before and after touching patients.
- Hands can be cleaned with soap and water, or alcohol hand rubs.
- Staff will wear gloves and aprons when they care for a patient who has MRSA.
- Patients who have MRSA may be moved to a room on their own or into a separate area for people who have MRSA.

Do patients have to stay longer in hospital because they have MRSA?
Patients who carry MRSA do not usually have to stay longer in hospital. Patients who have an MRSA infection or any other infection may have to stay in hospital until it shows signs of clearing up.
They may stay until they have completed their course of antibiotics or they may need to continue treatment when they go home.
A patient who has MRSA can go home or be cared for safely in a nursing home or residential home, using simple hygiene measures (see box).

Can MRSA harm friends and family visiting patients in hospital?

MRSA does not usually affect healthy people. It does not usually harm elderly people, pregnant women, children and babies. But it can affect people who have serious health problems, and people who have chronic skin conditions or open wounds.

Visitors can reduce the risk of spreading MRSA to other people if they do not sit on beds and if they clean their hands at the end of their visit. Nurses can give you advice, which reflects the hospital’s policy. You should ask nurses for advice if:

• Someone who has a long-term health problem wants to visit a patient who has MRSA.
• A patient who has MRSA wants to visit another patient in the hospital.

How is MRSA monitored?

Infection and prevention control teams monitor levels of MRSA in their own hospitals. NHS hospitals in England send information about MRSA and healthcare infections (the most serious MRSA infections) to the Health Protection Agency. The agency publishes figures for individual NHS trusts, for regions and for England (see further information). Hospital staff can compare their own progress in reducing MRSA with progress in other trusts, regionally and nationally.
What does the Health Protection Agency do?

The Health Protection Agency's role is to provide an integrated approach to protecting UK public health through the provision of support and advice to the NHS, local authorities, emergency services, other arms length bodies, the Department of Health and the devolved administrations.

Further information about MRSA

_**Staphylococcus aureus** (including MRSA)_

The HPA has an information sheet "Frequently Asked Questions" at www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/StaphylococcusAureus/GeneralInformation/staphFrequentlyAskedQuestions/


The Infection Prevention Society and Department of Health have published "Advice for those affected by MRSA outside of hospital" at www.clean-safe-care.nhs.uk/ArticleFiles/Events/MRSA_Advice.pdf

NHS choices has a section on MRSA at www.nhs.uk/Conditions/MRSA/Pages/Introduction.aspx

The Centers for Disease Control, Atlanta, Georgia, has information about MRSA in healthcare settings at www.cdc.gov/ncidod/dhqp/ar_MRSA_spotlight_2006.html

The Royal College of Nursing is updating its guidance on MRSA which will be published in spring 2010 at www.rcn.org.uk/ipc
Patient safety
The National Patient Safety Agency launched its ‘cleanyourhands’ campaign in July 2003. This campaign aims to help the NHS in England and Wales to reduce the spread of healthcare associated infection. The campaign is now in its fourth year in NHS acute hospitals and will shortly be entering its second stage in NHS primary care, mental health, ambulance and care trusts.
www.npsa.nhs.uk/cleanyourhands/

The World Health Organization launched ‘SAVE LIVES: Clean Your Hands’ on 5 May 2009 to support healthcare workers to improve hand hygiene and stop the spread of infection. This is part of its campaign ‘Clean care is safer care’.
www.who.int/gpsc/5may/en/index.html

Data
The Health Protection Agency publishes data on MRSA bloodstream infections for trusts, regions and England.
www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/StaphylococcusAureus/

Guidelines
Coia JE, Duckworth GJ, Edwards DI et al
Guidelines for the control and prevention of meticillin-resistant Staphylococcus aureus (MRSA) in healthcare facilities.
Journal of Hospital Infection 2006; 63 (supplement 1).