

## ***PVL- Staphylococcus aureus*** **Information for Patients**

### ***What is PVL Staphylococcus aureus?***

*Staphylococcus aureus* ('SA') is a bacterium (germ) that commonly lives on healthy skin. About one third of healthy people carry it quite harmlessly, usually on moist surfaces such as the nostrils, armpits and groin. This is known as colonization. Some types of *Staphylococcus aureus* produce a toxin called Panton-Valentine Leukocidin (PVL) and they are known as PVL-SAs. (Panton and Valentine were two doctors who first found this chemical which can kill white blood cells called leukocytes – hence 'leukocidin').

### ***What type of illness does it cause?***

All SAs, including PVL-SAs, can cause harm if they get an opportunity to enter the body, for example through a cut or a graze. They can cause boils or skin abscesses and are occasionally associated with more serious infections of the lungs, blood, joints and bones. Some SAs such as PVL-SA are more likely to cause infections than others.

### ***How do you catch PVL-SA?***

Anyone can get a PVL-SA infection. Infection can occur in fit, healthy people. PVL-SA can be picked up by having:

- skin-to-skin contact with someone who is already infected, for example close family or during contact sports, or
- contact with an item or surface that has PVL-SA on it from someone else, for example shared gym equipment, shared razors, shared towels.

### ***How is PVL-SA treated?***

Boils and abscesses should be drained by incision by a doctor or nurse. Some infections may be treated with a course of antibiotics. In addition, the PVL-SAs carried on your skin may be eliminated with a five day skin treatment (washes, creams and shampoos). This is done to reduce the chances of you getting repeated infections and reduce the chances of you spreading PVL-SAs to others. In some patients this skin treatment may not be entirely successful, but the more carefully you follow the instructions, the more likely you are to clear the PVL-SAs from your skin. Your GP may recommend checking members of your household and close contacts, e.g. partners/children, in case they are also carrying PVL-SAs, and offering them skin treatments where necessary.

### ***How do I prevent passing PVL-SAs to other people?***

- You need to keep infected areas of your body covered with clean, dry dressings or plasters. Change these regularly and as soon as discharge seeps to the surface. It is important that fluid or pus from infected skin is contained, because it has large numbers of PVL-SAs that can spread to others.
- Do not touch, poke or squeeze infected skin. This contaminates your hands and can push the PVL-SAs deeper into the skin. Contact your GP surgery if you have a boil or abscess that needs draining.

- Cover your nose and mouth with a tissue when you cough or sneeze, particularly if you have a cold, because PVL-SAs can live in your nose. Throw the tissue in the bin at once and then wash your hands.
- Wash your hands frequently with liquid soap and water, and **especially** after changing your plasters, dressings, and bandages or touching infected skin.
- Encourage others at home to wash their hands regularly with liquid soap.
- Use a separate towel and keep it separately, so others don't use it by mistake. Have it washed frequently in a hot wash.
- Regularly vacuum and dust (wiping with a damp cloth) your bedroom, bathroom, kitchen and other rooms, as well as personal items and shared items, such as keyboards. Household detergent is adequate for cleaning.
- Clean your sink, taps and bath after use with a disposable cloth and household detergent, then rinse clean and throw away the cloth.

### ***Can I go to work or school when I have a PVL- SA infection?***

- You should not work as a carer in a nursery, hospital, residential or care home or similar place until your skin has healed and you have permission to return to work from your local occupational health department, GP or manager.
- You should not work in the food industry, e.g. waitress, chef, food production, until your skin has healed and you have permission to return to work from your local occupational health department or GP.
- You may carry on with other types of work, provided you keep infected skin areas covered with clean, dry dressings. If you are not sure about working, contact your local occupational health department or your GP.
- Children can only go to school if they are old enough to understand the importance of good hand hygiene, and if their infected skin is covered with a clean dry dressing which will stay dry and in place until the end of the school day. Children should not take part in contact sports, or use communal gym equipment until their skin is healed. The GP's advice is essential, and school management should be informed.
- People who have eczema or a more generalised skin condition should remain off work or school until treatment has been completed for both the eczema or skin condition and the PVL-SA infection. You need to continue treating your skin to keep it in good condition. In the long term this helps to reduce the risk of spread of PVL-SA to others.

### ***Can I go to swimming pools, gyms or sports facilities when I have a PVL- SA infection?***

- You should not use communal facilities for example gym equipment, saunas, swimming pools, or have a massage, manicure or similar until your skin has healed.

### ***How do I prevent becoming infected again?***

- You should take good care of your skin. If you suffer from eczema, discuss the best treatment for this with your GP
- Keep all cuts and grazes clean with liquid soap and water, apply disinfectant cream, and cover with dry dressings until scabbed over or healed
- Shower or bathe daily
- Put on clean clothes daily and wash bedclothes and towels on a regular basis using normal washing detergent but at the highest temperature the materials will allow
- Do not share personal items such as towels, razors, toothbrushes, water bottles, and facecloths
- In shared facilities, such as gyms, use fresh towels. Only go when skin lesions have healed and put a towel between your skin and the equipment. Importantly, shower afterwards and use a separate (second) clean towel to dry yourself. Wash any towels which you have taken to shared facilities after each visit
- Seek medical help at the first sign of infection in a cut, such as redness, swelling, pain, or pus
- If you are found to carry PVL-SA persistently on your skin or nose, or if you suffer from repeated infections, you may be prescribed a further course of skin treatment. If this fails to eliminate it and you suffer repeated infections then you may be prescribed antibiotics and skin treatment together. Sometimes the skin treatment will be extended to your household or close contacts. In these circumstances it is important that all affected people in a household or social group are treated at the same time
- If you have a further infection of any type, if you are admitted to hospital unexpectedly, or if you are going to be admitted to hospital for an operation, always tell the doctor or nurse looking after you that you have had a PVL-SA infection. This will ensure that you receive appropriate treatment.

**Further information about PVL-SA is available on the HPA website at:**

<http://www.hpa.org.uk>

