

## **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 sexual partners, 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 reduced with a five-day skin treatment (washes, creams and shampoos). This is done to reduce the chance of you getting repeated infections and reduce the chance of you spreading PVL-SAs to others. In some patients this skin treatment may not be

Adapted from Guidance on the diagnosis and management of PVL-associated Staphylococcus aureus infections (PVL-SA) in England 2008, available at:

[https://assets.publishing.service.gov.uk/media/5a749fb7e5274a44083b82c1/Guidance\\_on\\_the\\_dia](https://assets.publishing.service.gov.uk/media/5a749fb7e5274a44083b82c1/Guidance_on_the_dia)

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 or public health team 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. Nightwear should be changed when bed clothes/linen are washed/changed.
- Do not touch, poke or squeeze infected skin. This contaminates your hands and can push the PVL-SAs deeper into the skin.
- Contact your primary care physician or attend local ED 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.
- Clean your hands frequently with alcohol hand gel or 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 and water or apply alcohol hand gel.
- Avoid sharing personal belongings (clothing, towels, linen, etc.).
- Clothing, bedding and towels should be washed at the highest temperature the materials will allow, washing machines should not be overloaded. Do not place in a mixed wash with clothing from others outside the setting. When placing laundry in the washing machine, ensure gloves are used and that there is no contact when handling contaminated laundry.
- 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.

Adapted from Guidance on the diagnosis and management of PVL-associated *Staphylococcus aureus* infections (PVL-SA) in England 2008, available at:

[https://assets.publishing.service.gov.uk/media/5a749fb7e5274a44083b82c1/Guidance\\_on\\_the\\_dia](https://assets.publishing.service.gov.uk/media/5a749fb7e5274a44083b82c1/Guidance_on_the_dia)

- Clean all washable surfaces including worktops, sinks, 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**

If you work in an 'at-risk group' the Infection Prevention & Control Team (IPCT) or Public Health Team will advise on exclusion from work or school. At risk groups include:

- Healthcare workers and Residential/Care home staff.
- Food industry workers.

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 may continue to attend school as long as they are supported with appropriate hand hygiene measures and infected areas are completely covered.

### **Can I go to swimming pools, gyms or sports facilities when I have a PVLSA 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

Adapted from Guidance on the diagnosis and management of PVL-associated *Staphylococcus aureus* infections (PVL-SA) in England 2008, available at:

[https://assets.publishing.service.gov.uk/media/5a749fb7e5274a44083b82c1/Guidance\\_on\\_the\\_dia](https://assets.publishing.service.gov.uk/media/5a749fb7e5274a44083b82c1/Guidance_on_the_dia)

allow. Nightwear should be changed when bed clothes/linen are washed/changed.

- 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. After each visit, wash any towels which you have taken to shared facilities.
- 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.