



All hospitals in Victoria are required to report information on patients having certain types of surgery, including whether the patient developed an infection after the surgery. Developing an infection after surgery can have serious and long term consequences for patients.

There are different types of surgical site infections (SSI) and we concentrate on the most serious ones. As our surveillance occurs on patients in hospital, we can't capture information on every infection, however almost all patients with a serious infection are readmitted to hospital and their infections reported to VICNISS.

There are a variety of factors which predispose a patient to developing an infection after surgery, some related to the type of surgery and some related to the patient.

Risk of infection

Some patients having surgery have more risk of an infection than others. For example obesity and smoking increase infection risk, as does having a lengthy operation. Some factors can be altered and some can't. Patients may be advised to stop smoking or lose weight before surgery, whereas a long surgery may be unavoidable.

Surveillance of infections occurring as a result of surgery



Risk adjustment or risk stratification

To allow us to compare infection rates at different times and different hospitals we use a technique known as risk adjustment or risk stratification. This places patients into different risk categories and makes it possible to compare patients with approximately equal risk of infection. For example patients who have longer surgeries are more at risk.

The simplest risk stratification places patients into 3 categories depending on their general health (using a numeric scale assigned by anaesthetists prior to surgery), the time taken to complete their surgery; and whether the surgery was “clean” or “dirty” – an example of dirty surgery is surgery which involves cutting into the bowel.

This allows us to classify patients as Low, Medium or High risk.

Data on infections are regularly reported back to hospital staff, the Department of Health and Human Services (DHHS) and the public. Information on infection rates and related factors in Victoria collated by VICNISS can be found at the following links:

Information about rates of SAB infection in Victoria can be found:

vicniss.org.au/resources/annual-reports/
vicniss.org.au/resources/surveillance-data-for-victoria/
vahi.vic.gov.au/quality-and-safety/healthcare-associated-infections

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