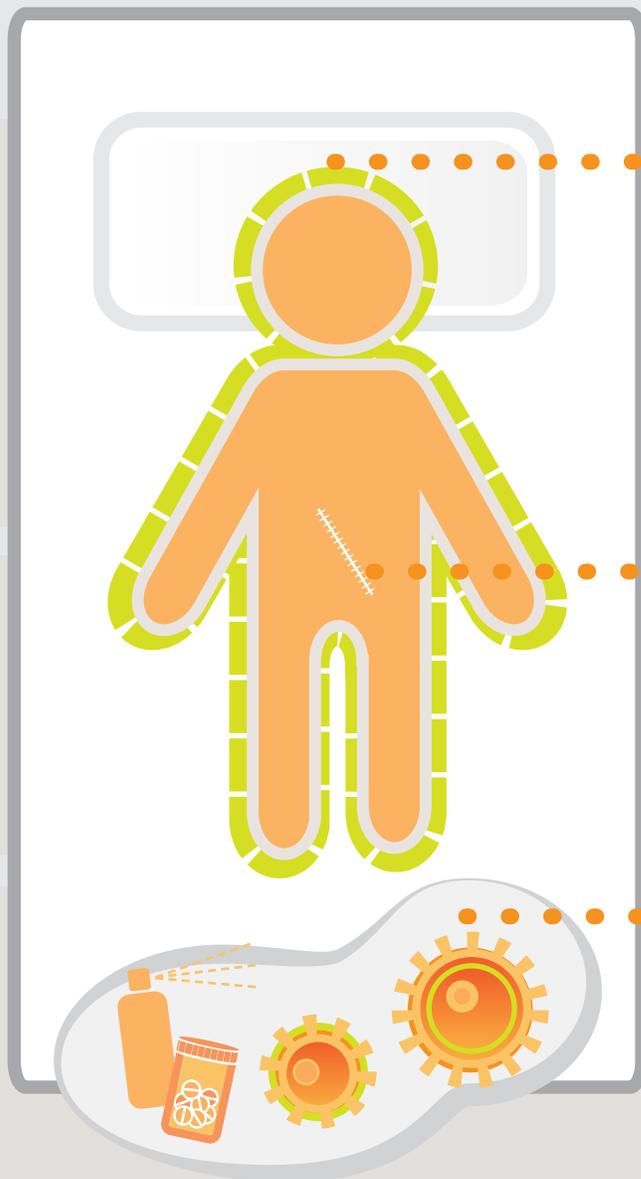


# 3 Reasons Hospitalized Patients are Vulnerable to HAIs



## 1 Compromised immune system.

The immune system is the body's natural defense against infections. It is an army armed with many weapons. **Antibodies**, which kill bacteria, are produced by the tonsils and thymus. The **lymphatic system** filters bacteria and other pathogens out of body fluids. **Bone marrow** produces white blood cells which also destroy pathogens. Finally, the **spleen** filters blood and also destroys pathogens. Damage to this system means the body is less able to fight off germs.

## 2 Open wounds or incisions.

Any time the body's main protective barrier, the skin, is broken, there is an opportunity for bacterial infection. Careful hand hygiene, wound care, and environmental infection control are vital to reduce the "bioburden," or amount of germs present.

## 3 Presence of resistant pathogens.

A good analogy for resistant pathogens is an armored tank. Inside a healthcare environment, pathogens are bombarded with antibiotics and disinfectants. Those pathogens that survive these attacks have a genetic advantage, an "armor" that allowed them to survive, which they pass on to future generations. This results in very strong pathogens, sometimes called "super bugs."