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## Staph Infection: Hospitals Battle Against A Deadly Menace

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# Staph Infection: Hospitals Battle Against A Deadly Menace

Mckenzie Lamos (Mentor: Rob Wilson, Ph.D)

## Introduction:

- Staphylococcus aureus can be found in healthy individuals, but can cause serious problems when it moves into the bloodstream.
- Symptoms range from a skin rash, low blood pressure, and fever.
- Patients in the ICU or that have chronic conditions such as diabetes or cancer are at a greater risk of getting the infection.
- The principal mode of transmission is through the contaminated hands of hospital staff.
- This bacteria is very adaptable and can easily become resistant to many antibiotics and treatment methods.



The bacteria spreads easily from physician to patient.

## Conclusion:

- Preventative measures must be taken to decrease the number of cases and the spread.
- Reinforcement of these measures is essential so prevention is effective long term.
- With doctors fearing the bacteria may become untreatable, prevention (especially in hospital settings) is extremely important.
- Education of hospital staff and patients is vital for the decline in cases.

## Research Findings:

- Over 119,000 patients had a bloodstream staph infection and nearly 20,00 of those died.
- Hand hygiene is one of the most important actions that needs to be continually addressed and reinforced.
- Proper protective wear should be worn by medical staff as well as isolating patients in separate rooms when necessary.
- Vancomycin remains the standard reference treatment for bloodstream infections.
- New IV treatment options such as ceftaroline are being clinically tested.



Skin rash and boil caused by staph infection.



Hand washing is an important preventative measure.

## Sources:

- The CDC “*Staphylococcus aureus* in Healthcare Settings.”
- The CDC “Strategies to Prevent Hospital-onset *Staphylococcus aureus* Bloodstream Infections in Acute Care Facilities.”
- Stapelton, Paul and Taylor, Peter. “Methicillin resistance in *Staphylococcus aureus*.” US National Library of Medicine and National Institute of Health.



Although progress is being made, year to year progression is now on a slow decline.