1. Advance Preparations

- Conduct an infection risk assessment of your facility. Prioritize the risks and identify factors that could increase or decrease them.
- Carry out regular infection control rounds. Determine the effectiveness of prevention measures against identified risks. Update the assessment to include newly identified risks.
- Provide patients with information on the prevention of, symptoms of and recommended response to surgical site infections as part of their discharge instructions.
- Enlist surgeons in surveillance. Supply them with post-discharge SSI reporting forms to complete and return should an infection occur. The forms should request:
  - patient's name
  - date of service
  - surgeon's name
  - procedure
  - date infection was detected
  - infection site
  - whether and when the wound was cultured, and to whom it was sent
  - implants the procedure used (if any)
  - antibiotics the patient was prescribed (if any)
  - appearance of the wound and drainage
  - whether the infection was resolved
  - SSI classification by CDC criteria (see below)
- Monitor collected post-discharge outcome data and investigate reported SSIs to identify potential infection risk factors.

2. In the Event

- Two or more reported SSIs that involve the same organism, procedure, personnel, room or other common factors may indicate a trend, which could be an early indicator of an outbreak.
- If it is determined that an identified trend may be an outbreak, notify the medical director, infection prevention staff, administration, risk manager, department heads, employee health coordinator and other concerned parties.
- Initiate a special investigation to identify the sources, pathogens, hosts and mode of transmission of the infections; to determine the magnitude of the potential outbreak; and to enact prevention and control measures.
- Retain a certified infection control practitioner (CIC) to lead the investigation.
- Review post-discharge SSI reporting forms, culture reports, patients' charts and other available documentation, seeking possible factors for infection in the perioperative process as well as in patients' pre-op conditions.
- Using your infection risk assessment as a starting point, examine the details of each infected patient's surgical experience. Break the process down, to the greatest extent possible, into its component parts.
- Collect epidemiological specimens as needed. It may be necessary to culture the surgical environment, equipment used or attending personnel based on the investigation's findings.
- Interview perioperative personnel, patients and patients' family members as necessary.
- Consult clinical literature or the Centers for Disease Control and Prevention as needed.
- Develop criteria to determine whether and which other patients may be at similar risk and should be examined.
- Encourage surgeons, facility staff and others to report new or additional cases immediately.
- Develop a possible hypothesis for the source, cause and transmission of the SSI outbreak and determine how well it conforms with the reportings of clinical literature.

3. Following Up

- Immediately establish infection control and prevention measures based on the investigation's findings.
- Communicate the investigation’s conclusions to your facility’s medical director, infection prevention staff, administration, risk manager, department heads, employee health coordinator and other concerned parties.
- Monitor the efficacy of the enacted control and prevention efforts, judging by whether SSIs of similar nature to those investigated recur.
- Integrate the investigation’s findings into your facility’s quality improvement efforts and measure their effectiveness in preventing future outbreaks.