### STAPHYLOCOCCUS SPP. INFECTIONS

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<td>Mammals, including humans; birds; reptiles</td>
<td>Opportunistic pathogens often involving breaks in the skin. Ubiquitous, and live free in the environment and commensal parasites of skin and upper respiratory tract. Droplet, direct/indirect contact transmission can occur.</td>
<td>Can affect every organ system and clinical signs depend upon organ affected. Common cause of dermatitis. Fever, anorexia, pain, abscesses and infections of the skin, eyes, ears, respiratory system, mammary glands, genito-urinary tract, skeleton, joints. Toxins may produce signs of food poisoning.</td>
<td>Depends upon organ(s) affected and immune status of host.</td>
<td>Antibiotics: First-choice antibiotics (pending culture and sensitivity testing) include cephalosporins and fluoroquinolones. Antibiotic resistance is common so sensitivity testing is recommended.</td>
<td>Appropriate wound care. Frequent hand washing. Sanitation of environment. Avoid abrasions or injury to skin. Isolate animals under treatment. Appropriate PPE for animal caretakers.</td>
<td>Yes</td>
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*Fact Sheet compiled by:* June Olds  
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*Fact Sheet Reviewed by:* Tim Frana, Ryan Colburn  

**Susceptible animal groups:** All mammals, including humans; birds; reptiles.  
**Causative organism:** *Staphylococcus* spp. of various species, but not MRSA. *Staphylococcus* spp. are Gram positive, facultative anaerobic cocci occurring typically in clusters, although pairs and short chains do occur.  
**Zoonotic potential:** Yes  
**Distribution:** Worldwide, ubiquitous.  
**Incubation period:** Interval of 2-10 days although signs of poisoning from food contaminated with toxins may occur within 30 minutes and up to 6 hours following ingestion.  
**Clinical signs:** Depending upon organ system affected, and if bacteremia and septicemia occur, clinical signs may include: pneumonia, endocarditis, meningitis, osteomyelitis – all organs are susceptible. Dermatitis is common.  
**Post mortem, gross, or histologic findings:** Purulent inflammation of any organ can be produced. Skin: (Staph pyoderma), abscesses, cellulitis, necrotizing dermatitis. It is also a common cause of pneumonia, endocarditis, osteomyelitis, urinary tract infection, septicemia, mastitis, and meningitis.  
**Diagnosis:** Clinical picture and/or gross presentation of skin lesions (pyoderma) observed. Inflammatory leukogram is often present. Cytology and Gram stain may be suggestive. Culture and sensitivity testing of
affected tissues should be performed for definitive diagnosis.

**Material required for laboratory analysis:** Culture (aerobic) of affected tissues with media designed for facultative anaerobe.

**Relevant diagnostic laboratories:** Any lab capable to perform microbiology culture/sensitivity testing should be able to identify this organism.

**Treatment:** Appropriate antibiotics can be guided by culture and sensitivity testing.

**Prevention and control:** Appropriate antibacterial disinfectants that list efficacy against *Staphylococcus* should be used. Clean environments reduce skin contamination and decreasing risk of skin trauma reduces entry point. Clean environment with dilute bleach solution to the extent possible.

**Suggested disinfectant for housing facilities:** Use disinfectants that list efficacy against *Staphylococcus*. Clean environment with dilute bleach solution to the extent possible.

**Notification:** None

**Measures required under the Animal Disease Surveillance Plan:** None

**Measures required for introducing animals to infected animal:** Clear infection and sanitize environment to the extent possible prior to introductions.

**Conditions for restoring disease-free status after an outbreak:** Resolution of infection in affected animals, sanitation of environment.

**Experts who may be consulted:** These are common bacterial pathogens, most diagnostic laboratories and bacteriologists should be familiar with the diseases associated with these bacteria.

**References:**