The University of Texas at Tyler
Environmental Health and Safety
BIOLOGICAL AGENT REFERENCE SHEET

Characteristics	
Risk Group	1- Agents that are not associated with disease in healthy adults.
Agent Type	Bacteria
Description	*Staphylococcus* epidermidis is a Gram-positive cocci and part of normal human flora and less commonly the mucosal flora. Not usually pathogenic, but those with compromised immune systems are at risk of developing infection. A frequent contaminant of clinical samples sent to diagnostic laboratories. *S.* epidermidis has the ability to form biofilms on plastic devices, creating a nosocomial risk. Harm to reproductive health could occur if exposed. *S*. epidermidis is highly resistant to many antibiotics including penicillins and cephalosporins. - ref: Pseudomonas aeruginosa. Genome. NCBI.
Host Range	Humans, other mammals and avians
Exposure route	Direct Contact, mucous mebranes, percutaneous
Incubation period	unknown

Laboratory Hazards	
High Energy	Centrifugation, sonication, vortexing
Sharps	infected broken glass or needles

Aerosols	Shaking, liquid culturing, pipetting
Equipment	Easily adhere to and stay on unsanitary equipment
Exposed body	Skin, eyes, mucous membranes
Notes	

Laboratory Handling Guidelines	
Biosafety Level	1 - refer to Biosafety Manual; contact EH&S for a copy
Training	EH&S Biosafety Training; Lab specific training
Engineering controls	BSC if working with liquids; bench top
PPE	Eye protection, gloves and lab coat
Waste	Biohazard - put in red biohazard bins

Agent Viability	
Disinfection	10% bleach
Survival outside host	Micrococci are resistant to drying and moderate temperature changes, being able to live on human skin for up to one year. They do not survive well in natural soil.
Engineering controls	BSC if working with liquids; lids while working with high energy equipment
PPE	Eye protection, gloves, long sleeve or lab coat
Waste	Biohazard - put in red biohazard bins

Exposure and Spill procedures	
Mucous membranes	Flush eyes, nose, mouth/throat for 15 minutes
Skin contact	Wash with soap and water for a minimum of 20 second for bare skin contact; for broken skin wash with soap and water for 30 minutes.
Minor (small) spills	Notify all persons present in the area. Allow aerosols to settle. While wearing protective clothing, gently cover the spill with absorbent paper towel and apply appropriate disinfectant, starting at perimeter and working towards the centre. Allow sufficient contact time before clean up.
Major (large) spills	Contact EH&S immediately; after-hours contact University Police
Waste	Biohazard - put in red biohazard bins

References
EH&S. Cornell University. https://sp.ehs.cornell.edu/lab-research-safety/bios/bars/Documents/BIO_BARS_Staphylococcus_epidermidis.pdf