



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

Characteristics	
Risk Group	2 - Agents that are associated with human disease which is rarely serious and for which preventive or therapeutic interventions are often available.
Agent Type	Biohazard
Description	<p><i>Streptococcus agalaciae</i> is a facultative anaerobic, Gram-positive, non-motile, non-sporeforming, catalase-negative cocci. It is found in chains and large colonies of up to 50 cells. It is between 0.5-1.0 μm in size. It has a β-hemolytic on blood agar and has 9 different serotypes. The bacterium is known to cause mostly sepsis, pneumonia and meningitis in neonates. Neonates who are premature, underweight, immunocompromised are at higher risk of developing Group B streptococcal infection.</p> <p>ref: Streptococcus pyogenes. Genome. NCBI.</p>
Host Range	Humans (neonates, immunocompromized, elderly); cows, dogs, cats, rabbits, horses, guinea pigs, and goats
Exposure route	Aerosol/inhalation, direct contact, dairy products
Incubation period	< 7 days

Laboratory Hazards	
High Energy	Centrifugation, sonication, vortexing
Sharps	Needles, broken glass

Aerosols	Shaking, liquid culturing, pipetting, coughing, sneezing
Equipment	unknown
Exposed body	Skin, eyes, mucous membranes
Notes	

Laboratory Handling Guidelines	
Biosafety Level	2 - refer to Biosafety Manual; contact EH&S for a copy
Training	EH&S Biosafety Training; Lab specific training
Engineering controls	Use in BSL II only
PPE	Eye protection, gloves and lab coat
Waste	Biohazard - put in red biohazard bins

Agent Viability	
Disinfection	1% bleach, 70% ethanol
Survival outside host	The bacterium can survive for months on dry dust in buildings; milk at -20°C for 4 weeks; fish tissues at -70°C for > 9 months
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 30 second for bare skin contact; for broken skin wash with soap and water for 15 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	Decontaminate all wastes before disposal by incineration, chemical disinfection or steam sterilization

References	
Streptococcus agalaciae. https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment/streptococcus-agalactiae.html	

