



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>Providencia rettgeri</i> is a Gram-negative, motile, rod-shaped bacterium. They are found ubiquitously in natural environments. <i>P. rettgeri</i> causes different disease in humans depending on the route of exposure; many of these exposures go undocumented. However, there is a large interest in its use as a eukaryotic pathogen for pest control. This organism has sporadic antibiotic resistance to some modern medications.</p> <p>ref: A Case of Wound Infection with <i>Providencia rettgeri</i> and Coincident Gout in a Patient from Guam. Hawaii J Med Public Health. 2015; Isolation of insect pathogenic bacteria, <i>Providencia rettgeri</i>, from <i>Heterorhabditis</i> spp.</p>
Host Range	Humans; animals
Exposure route	Aerosol/inhalation; mucous membrane contact
Incubation period	unknown

Laboratory Hazards	
High Energy	Centrifugation, sonication, vortexing

Sharps	
Aerosols	Shaking, liquid culturing, pipetting, coughing, sneezing
Equipment	Can adhere to laboratory equipment from 24 hours to 120 days
Exposed body	oral and nasal respiratory tracts;
Notes	unknown

### 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	10% bleach; 70% ethanol
Survival outside host	
Engineering controls	BSC; 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

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