|  |  |
| --- | --- |
| **CHARACTERISTICS** | |
| Morphology | Gram negative bacteria, coccobacilli or rods, 0.3-1.0 μm in diameter and 1.0-2.0 μm in length. They do not sporulate and are non-motile. |
| Disease | Infected bites or scratches from animals, usually cats and dogs, resulting in local cellulitis and can lead to absess. |
| Zoonosis | None. |

|  |  |
| --- | --- |
| **HEALTH HAZARDS** | |
| Host Range | Animals (dogs and cats), birds, ticks, lice, flies, cockroaches. |
| Modes of Transmission | Transmission occurs primarily by bites and scratches of infected animals, animal licks on injury site, respiratory droplets, and infected meat. |
| Signs and Symptoms | Substantial local cellulitis, sometimes accompanied with low fever, appear. If this infection progresses, subcutaneous abscess, osteomyelitis, pneumonia, endocarditis, septic arthritis, pericarditis, brain abscess, liver abscess, renal abscess, bacteremia/septicaemia, conjunctivitis, and lymphangitis may develop. |
| Infectious Dose | Unknown. |
| Incubation Period | Less than 24 hours. |

|  |  |
| --- | --- |
| **MEDICAL PRECAUTIONS/TREATMENT** | |
| Prophylaxis | Antibiotics such as penicillin or derivative are given with clinical observation of infected bites. |
| Vaccines | None. |
| Treatment | Give appropriate antibiotic therapy. |
| Surveillance | Monitor for symptoms. |
| MSU Requirements | Report any exposures. |

|  |  |
| --- | --- |
| **LABORATORY HAZARDS** | |
| Laboratory Acquired Infections (LAIs) | 2 cases have been reported. |
| Sources | Infected bite wounds and abscesses, pus, bronchial secretion, CSF, and blood, cultures, frozen stocks, other samples described in IBC protocol. |

|  |  |
| --- | --- |
| **RISK GROUP & CONTAINMENT REQUIREMENTS** | |
| Risk Group 2 | Agents that are associated with human disease which is rarely serious and for which preventive or therapeutic interventions are often available. |
| BSL2 | For all procedures involving suspected or known infectious specimen or cultures. |
| ABSL2 | For all procedures utilizing infected animals. |

|  |  |
| --- | --- |
| **VIABILITY** | |
| Disinfection | Phenolic disinfectants, 1% sodium hypochlorite, 70% ethanol, formaldehyde, glutaraldehyde, iodophore, and peracetic acid. |
| Inactivation | Inactivated by moist heat (60 minutes at 121oC) and dry heat (1 hour at 160-170oC), UV, microwave, gamma radiation. |
| Survival Outside Host | May survive in air (5% after 45 min), in distilled water and ocean water (14 days at 4°C, less than 24 hours at 37°C), and in pig slurry (3 days at 4°C and 6 days at 37°C). It may also survive in blood. |

|  |  |
| --- | --- |
| **SUPPLEMENTAL REFERENCES** | |
| BMBL | <https://www.cdc.gov/labs/BMBL.html> |
| NIH Guidelines | <https://osp.od.nih.gov/wp-content/uploads/NIH_Guidelines.pdf> |
| Canada PSDS | <https://www.canada.ca/en/public-health/services/laboratory-biosafety-biosecurity/pathogen-safety-data-sheets-risk-assessment/pasteurella.html> |

|  |  |
| --- | --- |
| **SPILL PROCEDURES** | |
| Small | Notify others working in the lab. Remove PPE and don new PPE. Cover area of the spill with absorbent material and add fresh 1:10 bleach:water. Allow 20 minutes (or as directed) of contact time. After 20 minutes, cleanup and dispose of materials. |
| Large | * Immediately notify all personnel in the lab and clear all personnel from the area. Remove any contaminated PPE/clothing and leave the lab. * Secure the area by locking doors, posting signage and guarding the area to keep people out of the space.   For assistance, contact MSU's Biosafety Officer (406-994-6733) or Safety and Risk Management (406-994-2711). |

|  |  |
| --- | --- |
| **EXPOSURE PROCEDURES** | |
| Mucous membrane | Flush eyes, mouth, or nose for 5 minutes at eyewash station. |
| Other Exposures | Wash area with soap and water for 5 minutes. |
| Reporting | Immediately report incident to supervisor, complete a [First Report of Injury](https://firstreportinjury.mus.edu/) form, and submit to Safety and Risk Management. |
| Medical Follow-up | **During business hours:**  Bridger Occupational Health 3400 Laramie Drive Weekdays 8am -6pm. Weekends 9am-5pm  406-577-7674  **After business hours:**  Bozeman Deaconess Hospital Emergency Room  915 Highland Blvd |

|  |  |
| --- | --- |
| **PERSONAL PROTECTIVE EQUIPMENT (PPE)** | |
| Minimum PPE Requirements | Lab coat, disposable gloves, safety glasses, closed toed shoes, long pants |
| Additional Precautions | Additional PPE may be required depending on lab specific SOPs and IBC Protocol. |