Agent Summary – Tetrodotoxin (BMBLS)

1. Precaution

Tetrodotoxin are paralytic marine toxins that interfere with normal function of the sodium channel in excitable cells of heart, muscle and neuronal tissue.

Animals exposed to 1-10 μg/kg toxin by parenteral routes typically develop a rapid onset of excitability, muscle spasm, and respiratory distress; death may occur within 10-15 minutes from respiratory paralysis. Humans ingesting seafood contaminated with tetrodotoxin show similar signs of toxicity, typically preceded by paresthesias of the lips, face and extremities.

Ingestion, parenteral inoculation, skin and eye contamination, and droplet or aerosol exposure of mucous membranes are the primary hazards to laboratory and animal care personnel.

2. PPE: follow SOP #2.0 donning and doffing procedure
3. Lab area: ________________________________
4. Animal holding area: __________________________
5. Animal procedure area: _________________________