

### Post-Exposure Plan for Mycobacterium marinum

#### **Background**

*M. marinum* is found in soil, water, and biofilms, and causes skin and soft tissue infections. It enters through cuts or abrasions, often from fish tanks or aquatic environments. No person-to-person transmission has been reported.

#### **Laboratory Hazards & Controls**

- Routes: Aerosols, mucous membrane contact, ingestion, contaminated sharps
- Disinfectants: 2% alkaline glutaraldehyde, 5% phenol, 1% sodium hypochlorite
- PPE: Lab coats, gloves, eye protection and any additional PPE
- Best Practices: Review work practices

#### **High-Risk Individuals**

- Immunocompromised
- Individuals with open wounds

#### Immediate Action by Route of Exposure (UCR Protocol)

#### **Needlestick, Animal Bite, or Laceration:**

Immediately wash the affected area thoroughly with soap and running water. Do not apply disinfectants or alcohol to broken skin.

#### Mucous Membranes (Eyes, Nose, Mouth):

If exposure occurs via splash or spray:

- Eyes Flush with clean water at an eyewash station for 10–15 minutes.
- Mouth Rinse out thoroughly without swallowing. Repeat rinse if needed.
- Nose Blow nose gently and wash external area with water if appropriate.

#### Inhalation:

If potentially contaminated materials were aerosolized:

- Rinse mouth twice with water and spit. Do not swallow.
- Leave the area and report to your supervisor.

#### **After First Aid:**

All suspected exposures related to research activities must be reported immediately to UCR's EH&S at 951-827-5528 and to the Campus Biosafety Officer via <a href="mailto:ehsbiosafety@ucr.edu.">ehsbiosafety@ucr.edu.</a>

Employees and students should also contact Occupational Health at 951-827-8220 for medical consultation and follow-up.

If exposure involves Mycobacterium marinum, treating medical providers should be informed. The typical incubation period is 14–21 days, and symptomatic individuals should be evaluated and tested accordingly.

#### For after-hours exposure: nearest urgent care or ER

Inform provider of possible M. marinum exposure (incubation 14–21 days)

#### **Medical Follow-Up & Testing**

- Symptomatic individuals may need a culture to confirm infection
- Treatment is based on clinical evaluation and lab confirmation

#### **UCR Reporting Protocol**

- Complete Supervisor Incident Report via Work Related injury
- EH&S Incident Report
- Employees Seek Medical Treatment
- Students should also notify or visit Student Health Services at 951-827-3031.

#### **Final Reminders**

- All personnel must be trained in relevant biosafety practices
- PIs must ensure all team members understand zoonotic risks and infection signs

#### References:

- ILAR Journal (1995) 37(4): 159-173
- Thune RL et al., <u>Annual Review of Fish Diseases (1993)</u>
- Ostrander GK. *The Laboratory Fish.* Academic Press, 2000
- UC Davis Guidance, Revised 07/2014
- UC Risk and Safety Solutions: <a href="https://ehs.ucop.edu/rs">https://ehs.ucop.edu/rs</a>

# Acknowledgement of Combined Guidance: Care, Use, and Exposure Response for Fish in Research

By signing below, I acknowledge that I have reviewed, understood, and agreed to follow the requirements outlined in the *Combined Guidance: Care, Use, and Exposure Response for Fish in Research*. This includes responsibilities related to animal care, zoonotic disease prevention, and appropriate first aid and exposure reporting procedures.

Name (Print)	Identification*	Signature	Date	Supervisor / Principal Investigator

## [Type here]

\*Identification: Provide your UCR Student ID, Employee ID, UCR NetID, UCR Email, or Date of Birth.