

SOP Number: IBC-PP-033

Title: *Edwardsiella ictaluri* and *Edwardsiella piscicida* Biosafety Level Recommendations

Effective Date: April 20, 2011

Revision Number: 3

Purpose

The purpose of this policy is to document and describe under what biosafety levels *Edwardsiella ictaluri* may be used.

Background

E. ictaluri causes enteric septicemia of catfish (ESC). ESC is an economically significant disease in farm-raised channel catfish.

E. ictaluri is ubiquitous in the southeastern part of the United States especially in Mississippi, Alabama, Arkansas, Georgia, Florida and Louisiana. It emerged as a new bacterial infectious disease in the mid 1970's. Significant economic impact was not felt until the mid 1980's.

E. ictaluri is considered a primary pathogen and meets the definition of a risk group 2 organism as defined by the World Health Organization: a pathogen that can cause human or animal disease but is unlikely to be a serious hazard to lab workers, the community, livestock or the environment. Lab exposures may cause serious infection but effective treatment and preventative measures are available and the risk of spread of infection is limited. *E. ictaluri* does not cause disease in humans.

Procedure

1. Locations in which non-exotic *E. ictaluri* may be used at BSL-1 would include MSU laboratories, the CVM R1000 aquaria rooms and the wet labs in building 1584 at the Thad Cochran National Warmwater Aquaculture Center at the Delta Research and Extension Center.
2. Researchers wanting to work with non-exotic *E. ictaluri* are required to register with the IBC via email.
3. This email will include the following information:
 - a. A project summary;
 - b. the source of the *E. ictaluri*
 - c. a description of waste disposal and decontamination procedures
4. Researchers working in the above listed locations with non-exotic *E. ictaluri* will follow BSL-1 practices including decontamination of all wastes.
5. Researchers working with strains not found in the US will be required to submit an IBC application and meet the containment requirements as determined by the IBC.
6. Researchers wanting to use *E. ictaluri* in any location other than the ones stated in 1 must contact the Biosafety Officer for guidance.

7. Genetic manipulation of *E. ictaluri* does not fall under this policy. The containment level will be decided based on the *NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules*. A full IBC application may need to be submitted based on the planned alterations.
8. On October 18, 2017, the IBC voted to downgrade the biosafety level of *Edwardsiella piscicida*. All of the requirements in Procedures 1 through 7 apply to this species as well.

Revised 12/4/2014 and approved 2/18/2015
Revised 10/18/2017 and approved 11/15/2017

Reviewed:

Biological Safety Officer	Date
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Approved:

IBC Chair	Date
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