

---

## **Institutional Biosafety Committee (IBC) Policy on Dengue Virus and Laboratory Information Acknowledgment Form**

- 1.0 Purpose:** The purpose of this Institutional Biosafety Committee (IBC) policy is to ensure that researchers working with dengue virus receive information about the risks of working with this virus and also to provide a copy of the laboratory acknowledgment form for personnel working with this virus.
- 2.0 Scope:** This policy applies to all members of the UW-Madison IBC, UW-Madison Office of Biological Safety (OBS), UW-Madison Principal Investigators (PI), and UW-Madison employees and staff, along with any additional personnel listed on the Biosafety protocol, as applicable.
- 3.0 Related Documents/Resources**
- UW-Madison, Office of Biological Safety - Institutional Biosafety Committee (IBC) Handbook; found on the OBS website ([www.biosafety.wisc.edu](http://www.biosafety.wisc.edu)).
  - UW-Madison, Office of Biological Safety - Biohazard Recognition and Control Handbook; found on the OBS website ([www.biosafety.wisc.edu](http://www.biosafety.wisc.edu)).
  - UW-Madison, Occupational Health Program, Document Control System, *Dengue Exposure Medical Response Guidance for the University of Wisconsin- Madison* (OH-GUI-033).
  - UW-Madison, Occupational Health Program, medical response plans for infectious agents used in research on campus – “*Dengue Exposure Medical Response Guidance for the University of Wisconsin- Madison*”. The plans can be accessed on the UW-Madison Occupational Health Program webpage at: [www.ehs.wisc.edu/occ-resources.htm](http://www.ehs.wisc.edu/occ-resources.htm) (EH&S Home > Occupational Health > Resources > Medical Response Plans).
  - U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), Dengue ([www.cdc.gov/24-7/protectingPeople/dengue/index.html](http://www.cdc.gov/24-7/protectingPeople/dengue/index.html); [wwwnc.cdc.gov/eid/article/13/2/06-0539\\_article.htm](http://wwwnc.cdc.gov/eid/article/13/2/06-0539_article.htm)).
  - U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC) and National Institutes of Health (NIH) - Biosafety in Microbiological and Biomedical Laboratories (BMBL), current version and/or any subsequent revisions.
  - U.S. Department of Health and Human Services, National Institutes of Health (NIH) - NIH Guidelines for Research Involving Recombinant DNA Molecules, current version and/or any subsequent revisions.
- 4.0 Definitions:** Not Applicable.
- 5.0 Roles and Responsibilities:** Not Applicable.



**6.0 Policy:** This policy requires researchers who conduct activities with dengue virus to consider IBC recommendations for work with the virus and to complete the “Understanding the Risks of Working with Dengue Virus” acknowledgment form (attached).

Also please see information pertaining to dengue under the UW-Madison, Occupational Health Program (OHP), “*Dengue Exposure Medical Response Guidance for the University of Wisconsin- Madison*” (OH-GUI-033) and OHP Medical Response Plans for Infectious Agents used in Research on Campus, accessed on the OHP webpage at: [www.ehs.wisc.edu/occ-resources.htm](http://www.ehs.wisc.edu/occ-resources.htm) (EH&S Home > Occupational Health > Resources > Medical Response Plans).

*Original signed & dated Policies are retained by the Office of Biological Safety*

---

Signature  
Professor Susan West, IBC Chair

Date  
06/05/2013

---

## Attachment 1

### Understanding the Risks of Working with Dengue Virus - University of Wisconsin-Madison

Dengue fever and dengue hemorrhagic fever are diseases caused by four closely related dengue viruses or strains. The research program led by principal investigator \_\_\_\_\_ involves the use of dengue viruses. Prior to working with dengue virus or dengue infected animals or tissues, lab members need to have their titer checked for previous dengue exposure.

The main symptoms of dengue fever are high fever, severe headache, severe pain behind the eyes, joint pain, muscle and bone pain, rash, and mild bleeding (e.g., nose or gums bleed, easy bruising). There is no specific medication for treatment of a dengue infection. Persons who think they have dengue should use analgesics (pain relievers) containing acetaminophen and avoid those containing aspirin. They should also rest, drink plenty of fluids, and consult a physician. If they feel worse (e.g., develop vomiting and severe abdominal pain) in the first 24 hours after the fever declines, they should go immediately to the hospital for evaluation.

Dengue hemorrhagic fever is a more severe form of dengue infection, which can be fatal. Dengue hemorrhagic fever is characterized by a fever that lasts from 2 to 7 days, with general signs and symptoms consistent with dengue fever. After the fever declines, additional symptoms may develop including persistent vomiting, severe abdominal pain, and difficulty breathing. As with dengue fever, there is no specific medication for dengue hemorrhagic fever. It may, however, be effectively treated by fluid replacement therapy if an early clinical diagnosis is made. Management often requires hospitalization.

The risk of laboratory-acquired infection with dengue virus is low when proper BSL-2 practices are followed. However, individuals who were previously infected with a dengue strain have a greater risk of more severe disease upon secondary infection with a different strain. Because of the potential seriousness of dengue hemorrhagic fever, persons who work with the dengue virus who have also tested positive for dengue infection should be particularly aware of the symptoms of dengue disease and associated risks. **Currently we do not have available a test that can distinguish between different serotypes.**

If an incident occurs which causes you to believe you have been exposed to dengue virus in the lab, or if you experience signs or symptoms of the disease, you should immediately inform your supervisor, seek medical attention, and follow any other procedures applicable to the lab in which you work.

**By signing below, I acknowledge that (1) I have read and understand the information above; (2) I have had the opportunity to discuss any questions or concerns with the PI or with my own physician; and (3) I may direct any future questions or concerns to the PI, to staff in the UW-Madison Occupational Health Program or Office of Biological Safety, to UW medical personnel who can be accessed free of charge through University Health Service at (608) 265-5600, or to my own physician.**

\_\_\_\_\_  
Signature of Lab Member

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

Printed Date:

Page 3 of 3

**Paper copies may be outdated and should not be relied upon as current, active IBC policy**

The Current version of this Policy is retained at the Office of Biological Safety and posted to biosafety.wisc.edu