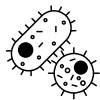


The following is general information for those involved in the laboratory-based research of dengue.¹⁻⁴
Contact occupational.health@cuanschutz.edu if you have any questions.

ABOUT DENGUE VIRUS



Dengue, commonly referred to as dengue fever or break bone fever, can be caused by any one of the four related dengue flaviviruses (Dengue 1, 2, 3, 4). Dengue is a mosquito-borne zoonotic disease, meaning transmission of dengue often occurs through the bite of an infected mosquito. Infection may also occur through laboratory contact with infected blood, organs, or tissue.

EXPOSURE TO DENGUE VIRUS

- Dengue can be transmitted through blood, semen, vaginal fluids, and breast milk
- Accidental exposure to dengue may occur through
 - Needle stick
 - Contact with broken skin (direct or indirect)
 - Contact with mucous membrane (direct or indirect)

DENGUE VIRUS INFECTION

- Most people infected with dengue experience mild symptoms or are asymptomatic
- Symptoms
 - Fever
 - Headache
 - Muscle or joint ache
 - Pain behind eyes
 - Nausea and vomiting
 - Rash
- Symptoms typically appear about 4-10 days after exposure and last about 2-7 days
- Those who are infected with dengue a second time are at **higher risk of severe dengue**
- Symptoms of severe dengue
 - Abdominal pain
 - Vomiting
 - Blood in vomit/ stool
 - Weakness
 - Fatigue
 - Death

DENGUE VIRUS INFECTION PREVENTION



- Personal protective equipment (PPE) for work with dengue includes but is not limited to:
 - Laboratory coats, gloves; safety glasses
 - Special practices may be recommended based on risk assessment
 - Do not reuse PPE used for work with biohazards and dispose of all PPE as biohazardous waste
 - Always wash your hands after removing gloves and after handling biohazards
- Prevention and Treatment
 - There is no widely used vaccine or medicine available in the United States for the prevention or treatment of dengue

DENGUE EXPOSURE SAFETY

Follow proper exposure reporting protocols

- If you are injured on the job, promptly report the incident to your supervisor
 - Immediately call or email Occupational Health (303) 724-9145 during business hours
 - Outside of normal hours seek medical attention at emergency department or other healthcare provider
 - Fill out incident report for exposure to biological hazards
 - File a claim with University Risk Management
 - <https://www.cu.edu/risk/file-claim>
- Minor cuts and abrasions should be immediately cleansed with antibacterial soap
 - Protect injuries from exposure

Tell your physician you work with dengue

- Whenever you are ill, mention to your physician that you work with dengue

Sources

1. Centers for Disease Control and Prevention. About Dengue. May 14, 2024. Accessed December 30, 2024. www.cdc.gov/dengue/about/index.html.
2. Boston University Office of Research. Dengue virus agent information sheet. Accessed December 30, 2024. www.bu.edu/research/ethics-compliance/safety/rohp/agent-information-sheets/dengue-virus-agent-information-sheet/.
3. Center for Disease Control and Prevention. Dengue CDC yellowbook 2024. May 1, 2023. Accessed December 30, 2024. <https://wwwnc.cdc.gov/travel/yellowbook/2024/infections-diseases/dengue#transmission>.
4. World Health Organization. Dengue and severe dengue. April 23, 2024. Accessed December 30, 2024. www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue.

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For more information, refer to the Occupational Health website:

<https://research.cuanschutz.edu/ehs/home/divisions/occupational-health>
or contact Occupational Health at occupational.health@cuanschutz.edu

