

Preventing Infectious Diseases Among WPI Students

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Goal: To educate the WPI community on the transmission of infectious diseases and how to avoid them both on campus and off campus, especially in IQP/MQP project centers.

Direct Contact

A disease that is transmitted between an infected person and an uninfected person through touching.

Examples:

- **Whooping Cough (Pertussis):** a bacterial disease
 - Symptoms: runny nose, mild fever, sneezing, watery red eyes, exhaustion, severe coughing
 - Treatment: antibiotics
 - Prevention: vaccine



<http://www.centamedia.com/pb/images/newsarticles/whoopingCough.jpg>

- **Mononucleosis:** a viral illness that causes fatigue
 - Symptoms: swollen glands & tonsils, fever, sore throat, weakness
 - Treatment: throat lozenges, bed rest, Tylenol™
 - Prevention: don't share items, wash hands often



<http://medimages.healthopedia.com/large/oral-herpes.jpg>

Indirect Contact

A disease that is transmitted through contact with surfaces that is contaminated by an infected person.

Examples:

- **Severe acute respiratory syndrome (SARS):** an infectious respiratory illness
 - Symptoms: fever, cough, muscle aches, chills
 - Treatment: medicine to treat the symptoms
 - Prevention: avoid contact with infected people, wash hands often



<http://www.chinadaily.com.cn/english/doc/2004-05/22/am4005012145597585105.jpg>

- **Swine Flu (H1N1):** influenza caused by a virus related to a virus isolated from infected swine
 - Symptoms: fever, cough, sore throat, stuffy nose
 - Treatment: medicine to treat the symptoms
 - Prevention: vaccine, sanitize surfaces, stay away from infected people, wash hands often



<http://www.rpi.edu/~roeckx/Geol02/swine-flu.bmp>

Body Fluids

A disease that is transmitted through the waste, blood, or saliva and acquired through its ingestion.

Examples:

- **Cholera:** an acute intestinal infection
 - Symptoms: vomiting, watery stool, dehydration
 - Treatment: water and rehydration solutions
 - Prevention: drink bottled water, eat food that is cooked thoroughly, wash hands often



http://the.telegraph.co.uk/telegaph/multimedia/archive/01175/im_460_1175407r.jpg

- **Hepatitis A:** inflammation of the liver
 - Symptoms: vomiting, jaundice, liver pain, diarrhea, dark brown urine
 - Treatment: medicine to treat the symptoms
 - Prevention: vaccine, wash hands often, eat food that is cooked thoroughly



<http://english.people.com.cn/200606/28/images/062802.jpg>

Vector-Borne

A disease that is transmitted to humans by another organism like an insect or mammal.

Examples:

- **Malaria:** a disease caused by a parasite transmitted from the bite of mosquitoes
 - Symptoms: chills, high fever, sweating
 - Treatment: antiparasitic drugs
 - Prevention: long clothes, bug repellent, bed nets



<http://www.abc.net.au/health/200703/132846443853.jpg>

- **Yellow Fever:** a viral infection transmitted by mosquitoes
 - Symptoms: fever, headache, seizures, delirium, jaundice, vomiting blood
 - Treatment: medicine to treat the symptoms
 - Prevention: long clothing, bug repellent, bed nets, vaccine



<http://diseasesandymptoms.com/wp-content/uploads/2009/09/signs-symptoms-liver-disease-300x194.jpg>

General Ways of Prevention:

- Wash hands often and use hand sanitizer with at least 60% alcohol
- Wear long clothing and bug repellents
- Don't share items
- Make sure foods are thoroughly cooked and water boiled
- Stay away from sick people (3 – 6 feet)
- Maintain proper hygiene
- Immunization

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