

## Mosquitoes that Transmit Infectious Diseases

*Aedes albopictus*  
(Asian tiger mosquito;  
*Aedes* family)

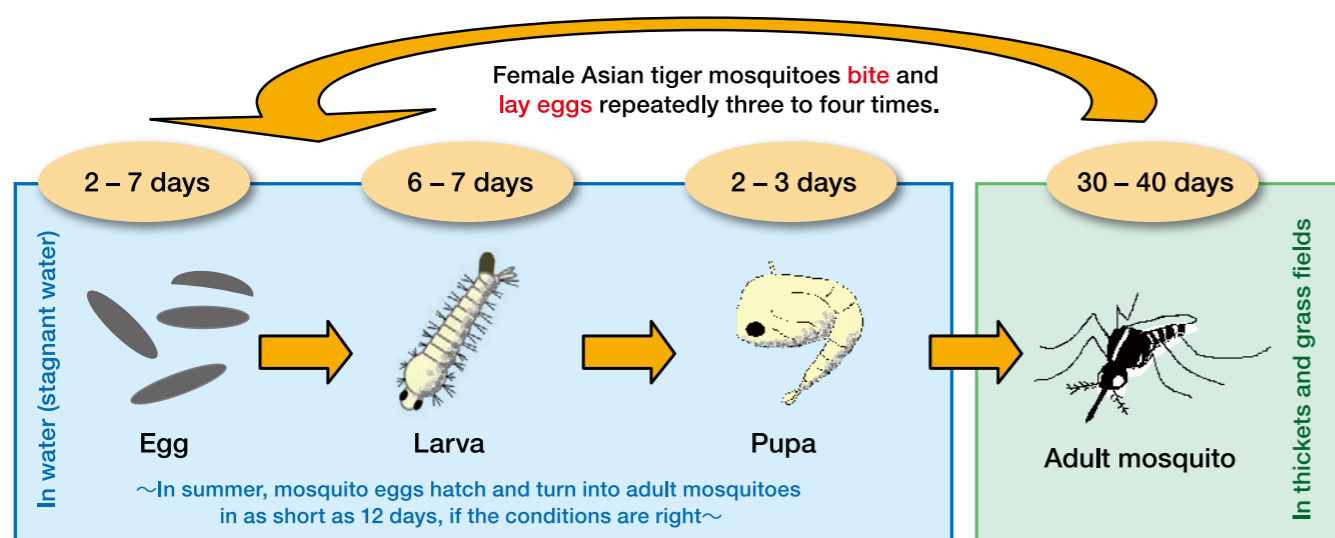


In addition to Dengue fever, the Asian tiger mosquito also transmits Zika virus disease, Chikungunya fever and West Nile fever.

The *Aedes aegypti* mosquito, also known as the yellow-fever mosquito, is found in various foreign countries and is a vector of mainly Dengue fever and Zika virus disease. It has not been found in Tokyo as yet, but has been caught near an international airport in Japan in the past.

Other mosquitoes that transmit infectious diseases mainly include the *Culex pipiens* (common house mosquito; vector of West Nile fever), *Culex pipiens f. molestus* (London Underground mosquito; vector of West Nile fever), *Culex tritaeniorhynchus* (vector of West Nile fever and Japanese encephalitis) and *Anopheles* (vector of malaria).

## Life Cycle of the Asian Tiger Mosquito



## Related Information on the Website of the Tokyo Metropolitan Government (in Japanese)

- **Measures against infectious disease vector mosquitoes (Bureau of Public Health, Tokyo Metropolitan Government)**  
Information about Tokyo Metropolitan Government's measures against mosquitoes that transmit infectious diseases, pamphlets, etc.  
<https://www.hokeniryo.metro.tokyo.lg.jp/kankyo/eisei/baikataisaku/index.html>
- **The Tokyo Metropolitan Government's measures against infectious disease vector mosquitoes (Tokyo Metropolitan Institute of Public Health)**  
Surveillance results of infectious disease vector mosquitoes, etc.  
[https://www.tmiph.metro.tokyo.lg.jp/kj\\_kankyo/mosq/](https://www.tmiph.metro.tokyo.lg.jp/kj_kankyo/mosq/)
- **Mosquito-borne infectious diseases (Tokyo Metropolitan Infectious Disease Surveillance Center)**  
Types and symptoms of infectious diseases transmitted by mosquitoes, high-risk locations, etc.  
<https://idsc.tmiph.metro.tokyo.lg.jp/diseases/mosquito/>

## Consultation & Inquiries

For consultation and inquiries about mosquitoes, please contact **the department in charge of rodent, insect and pest control in your ward (ward office, health center) or municipality (city hall, town and village office)**. Residents of municipalities (excluding Hachioji and Machida) may also contact **the office in charge of environmental health in the living environment safety division of the municipal health center**.

## Get Rid of Mosquitoes for Safety and Peace of Mind!

—Measures against Mosquitoes that Transmit Infectious Diseases—



In 2014, an outbreak of Dengue fever was confirmed in Japan for the first time in 70 years, and in February 2016, Zika virus disease was included among Class 4 infectious diseases. Both Dengue fever and Zika virus disease are infectious diseases that are contracted from being bitten by a virus-carrying mosquito. To prevent the spreading of these mosquito-borne diseases, it is important for all citizens of Tokyo to make regular efforts to keep mosquitoes from breeding.

## Dengue Fever and Zika Virus Disease

Dengue fever and Zika virus disease are infectious diseases that occur from being bitten by a mosquito infected by the Dengue virus or Zika virus. The vector mosquito is mainly the *Aedes albopictus*, commonly known as Asian tiger mosquito. The virus is repeatedly transmitted between people and mosquitoes, and the number of infected persons thus increases. There is no specific treatment at present, and it is only possible to treat the symptoms of the diseases.

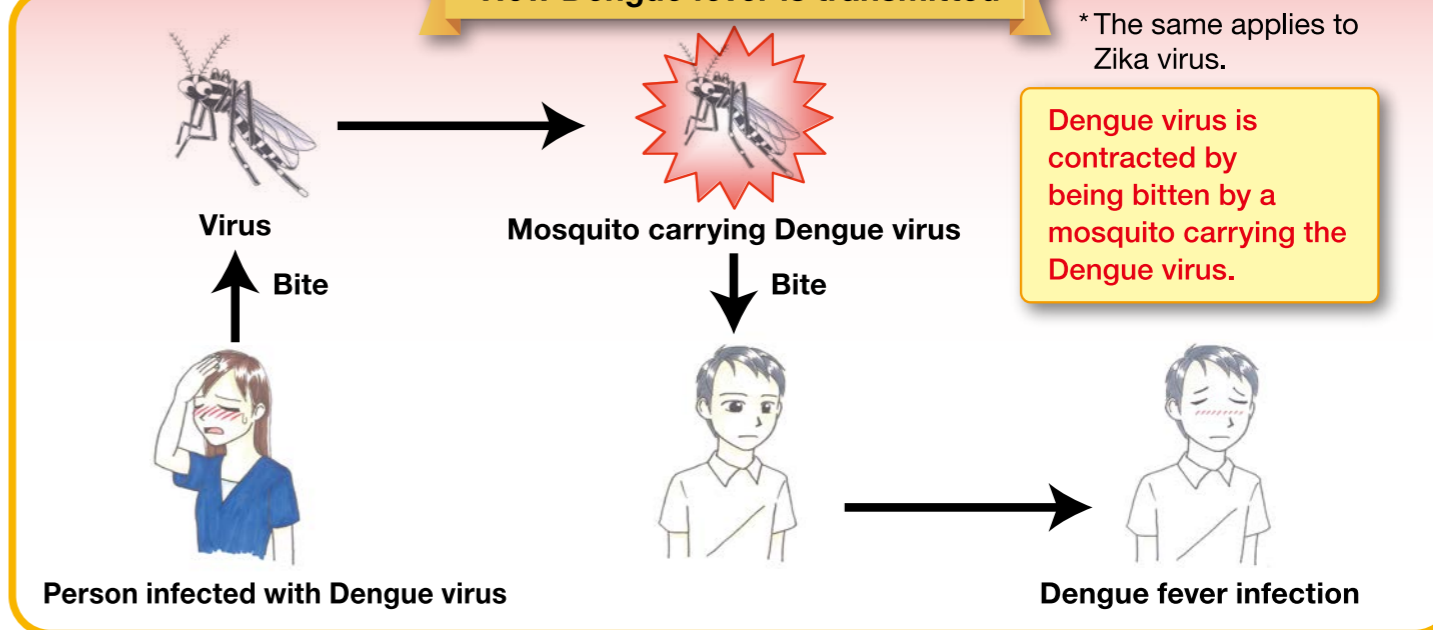
### ■ Symptoms of Dengue fever

Symptoms such as high fever (38 - 40°C), headache, joint pain, muscle pain, and rash begin to appear following an incubation period of 2 to 14 days (3 to 7 days in most cases) after being bitten. These symptoms abate in about a week in most people.

### ■ Symptoms of Zika virus disease

Symptoms such as high fever (no higher than 38.5°C in most cases), headache, joint pain, rash, and conjunctivitis begin to appear following an incubation period of 2 to 12 days (2 to 7 days in most cases) after being bitten. The symptoms are lighter than those of Dengue fever and abate in about 2 to 7 days in most people.

### How Dengue fever is transmitted



## Preventing Mosquito-borne Infectious Diseases

There is no effective vaccination against Dengue fever or Zika virus disease. Therefore, to prevent infection, it is important not to be bitten by a mosquito. Avoid being bitten by taking appropriate measures to reduce Asian tiger mosquitoes and other such mosquitoes.



Mosquitoes live in places like this

## Larvae Control [How to Keep Mosquitoes from Breeding]

The most effective way to reduce mosquitoes is to get rid of mosquito larvae that live in water (larvae control). Asian tiger mosquitoes live within a very small area, and breed even in small pools of water. Places where people are likely to get bitten are frequently near stagnant water, which provides a breeding ground for mosquitoes, or a thicket, which is an ideal habitat for adult mosquitoes. Take measures against mosquito sources in reference to the drawing below, and prevent mosquitoes from breeding.

### Larvae control

- Get rid of stagnant water.
- Clear away unnecessary objects.
- Clean possible mosquito sources around your house and empty old water once a week.
- ★ These measures are effective in preventing mosquitoes from breeding, regardless of the type, use or location of your house.

## Adult Mosquito Control [How to Prevent Getting Bitten]

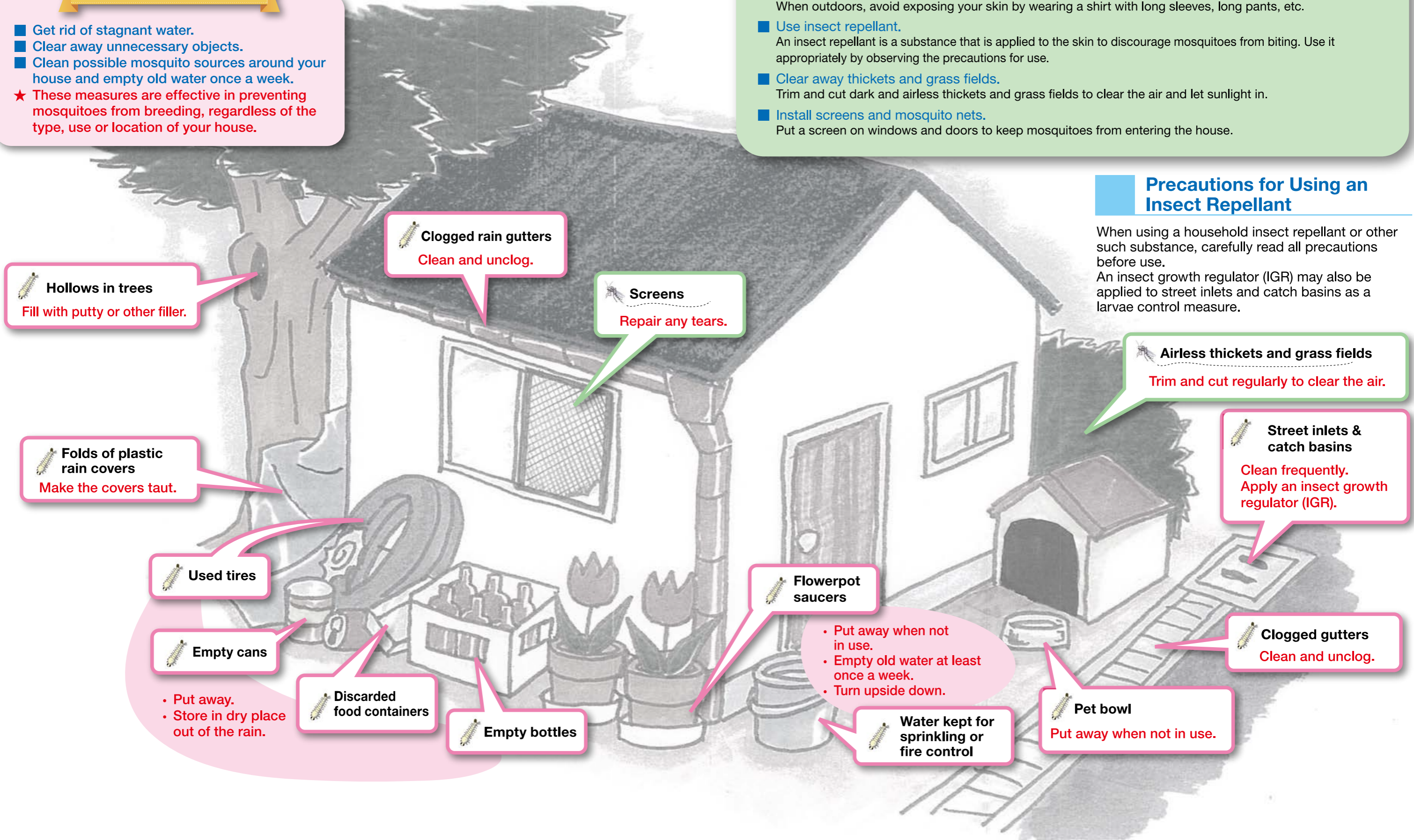
Asian tiger mosquitoes live in thickets and grass fields, and tend to bite mostly during the daytime. Therefore, when spending time outdoors, you should take measures not to get bitten. It is also a good idea to cut thickets and grass fields that provide comfortable habitats for adult mosquitoes (adult mosquito control).

### Adult mosquito control

- Cover up your skin.  
When outdoors, avoid exposing your skin by wearing a shirt with long sleeves, long pants, etc.
- Use insect repellent.  
An insect repellent is a substance that is applied to the skin to discourage mosquitoes from biting. Use it appropriately by observing the precautions for use.
- Clear away thickets and grass fields.  
Trim and cut dark and airless thickets and grass fields to clear the air and let sunlight in.
- Install screens and mosquito nets.  
Put a screen on windows and doors to keep mosquitoes from entering the house.

### Precautions for Using an Insect Repellent

When using a household insect repellent or other such substance, carefully read all precautions before use. An insect growth regulator (IGR) may also be applied to street inlets and catch basins as a larvae control measure.



**Hollows in trees**  
Fill with putty or other filler.

**Clogged rain gutters**  
Clean and unclog.

**Screens**  
Repair any tears.

**Airless thickets and grass fields**  
Trim and cut regularly to clear the air.

**Street inlets & catch basins**  
Clean frequently.  
Apply an insect growth regulator (IGR).

**Clogged gutters**  
Clean and unclog.

**Pet bowl**  
Put away when not in use.

**Flowerpot saucers**

- Put away when not in use.
- Empty old water at least once a week.
- Turn upside down.

**Water kept for sprinkling or fire control**

**Empty bottles**

**Discarded food containers**

**Empty cans**

- Put away.
- Store in dry place out of the rain.

**Used tires**

**Folds of plastic rain covers**  
Make the covers taut.