



**1-876-925-PEST (7378), 1-876-924-PEST (7378)
ST. JAMES 1-876-952-PEST(7378)**

Mosquito Fogging Division

We urge our customers to request a special non-oil internal misting of Space (Volume air), the underside of furniture, and the immediate periphery of structures for the effective control of the *Aedes aegypti* and *Aedes albopictus*.

Mosquito fogging set to hit Kingston East

Oct 23, 2014 10:11 PM Thru to Oct 29, 2014 12:02 PM CT



Chikungunya, transmitted by mosquitoes ***Aedes aegypti* and *Aedes albopictus*** with dengue-like symptoms, is characterized by fever, joint pains, headaches, nausea, fatigue and rash.(Prensa Latina). Though the symptoms last from 2 – 5 days it has been known to last for years and is often mistaken for arthritis.



The best means of prevention is overall mosquito control by repellants, internal smoke coils vapour means coupled with external fogging and the avoidance of bites by any infected mosquitoes so, long socks and pants should be generally worn. No specific treatment is known, but medications can be used to reduce symptoms. Bed rest and lots of Spring water and clear fluids like coconut water may also be very useful.

Caribpest will continue to battle the blood-sucking insects with more fogging in the city on Wednesday night and early Thursday morning.



The Caribpest city- town-neighbourhood Residential & Commercial fogging crews will be out on the hunt for pesky blood-suckers in the evenings.



- Education and Outreach
– education of the public about what steps they can take to prevent mosquitoes from breeding around their home (e.g., source reduction), and how to avoid being bitten by mosquitoes (e.g., install or repair window screens in your home, wear clothing that covers your skin when outside, use effective mosquito repellent, etc.)
- Larviciding
- the application of chemicals or bacterial products (or larvicides) to mosquito breeding areas to kill or inhibit the growth of mosquito larvae (the early stage of the mosquito) from developing into the adult form
- Adulticiding
- the application of pesticide chemicals to kill the adult form of the mosquito. These are applied by truck-mounted sprayers or aurally when the risk of an outbreak is apparent, as indicated by increasing numbers of mosquitoes carrying virus and/or human cases of disease.

The other activities listed above – elimination of breeding sites, education and outreach, and larviciding – should always precede adulticide spraying.



MOSQUITO FOGGING NOTICE

**Fogging for Mosquito control will occur
Mondays and Thursdays at dusk (weather permitting)**

Alternate days will be Tuesdays and Fridays

**Residents who do not wish to have their property sprayed should inform the CARIBPEST
Office, in writing, on a monthly basis.**

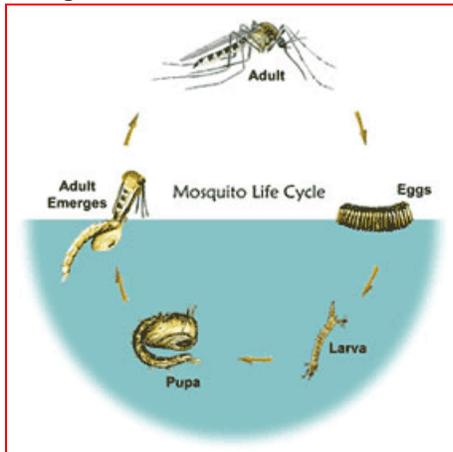
What type of Mosquitos cause Chikungunya?

The *Aedes aegypti* and *Aedes albopictus*

There are many species of mosquitoes but they mainly fall into two categories, namely the *Aedes* mosquitoes and *Culex Tarsalis* mosquitoes. All are a nuisance of course, but it is

the *Aedes aegypti* and *Aedes albopictus*

mosquito that we need to be concerned about, because they are the species of mosquito that can



transmit the Chikungunya.

In addition to this, Caribpest can set up a number of mosquito traps in your private homes and business places and have them tested for the diseases on a regular basis. This type of monitoring should continue with scheduled insect fogging.

What can the public or individuals do to help?

Source reduction

- Elimination of potential breeding sites

Reduce standing water by:

- Regularly cleaning your potted plant bowls, water pooling cisterns etc.
- Punch holes in garbage cans and drill holes in dumpsters
- Cleaning and emptying bird baths on a weekly basis.
- Ensuring that rain barrel openings are covered with screening.
- Checking that lawn is kept low, trees are trimmed, and your yard is clear of foliage debris, decorative accessories, bowls or tires that can hold water.

What is fogging and how is it done?

A truck mounted or hand held ULV (Ultra-Low Volume) sprayer or smoker would be used to disperse a floating mixture of pesticide throughout the community or property. ULV sprayers and smokers dispense very fine aerosol droplets that stay aloft and kill mosquitoes on contact. At present, the only registered product for fogging mosquitoes (also known as adulticiding) is Malathion. Please note that the concentration of pesticide being dispensed is very low, and therefore the risk of exposure by people and the environment is minimized.

What happens when the Caribpest Conducts fogging in a neighbourhood or district?

In neighbourhoods where Caribpest conducts a fogging for mosquitoes – there is usually a lot of notice. Caribpest will place advertisements in the local paper, or a message on the WP Sign and on the welcome page of our website as soon as notice is delivered. Fogging usually starts around 10:00 pm on the dates specified, weather permitting. If weather conditions do not allow fogging to take place when planned it will be pushed forward to the next scheduled night. The product Malathion, which is registered for mosquito control, will be used. Fogging commonly take place driving along the roads of neighbourhoods and drifts into the air above dwellings.

Precautions That The Public Can Take During Fogging;

Ministry of Health has concluded the use of malathion for adult mosquito control in residential areas using ultra-low-volume application will not pose a health concern. However, people who wish to further reduce their exposure to malathion can take additional precautions which are;

Before spraying occurs:

- Keep all windows and doors locked between 5:30pm and up to the time of the fogging, new mosquitoes generally invade homes at sunset times.
- Use a smoking device (Bee smoker or smoke coils) to drive mosquitoes that are already indoors outside into the path of the outdoor smoking that will take place. (fans can be used to help forced-air circulate smoke in rooms, forcing the insects (already inside) out through windows. Then close the windows behind them)
- Central air conditioning units may remain on. Window air conditioning units may also remain on, but set the vents to “closed” or choose the “re-circulate” option. If you have an older window air conditioning unit that does not have these options, the air conditioner should be turned off to reduce the possibility of exposure to malathion.
- Remove children’s toys, cover outdoor personal items, exercise, turn over sitting equipment and remove clothes from lines etc, outside.
- Pick home grown fruits and vegetables you expect to eat soon before spraying takes place. Rinse homegrown fruits and vegetables (in fact, all produce) thoroughly with water before cooking or eating.
- Cover outdoor tables and play equipment before spraying or wash them off with detergent and water after they have been sprayed.
- Bring pet food and water dishes inside, enclose/cover birdcages and cover ornamental fishponds and outside, porch and verandah fish aquariums to avoid direct exposure.

During spraying:

- Stay indoors and keep your windows closed for at least 30 minutes after the spraying takes place. This is especially important for children and pregnant women, and for those with asthma or other respiratory conditions.

- Keep pets indoors.

After spraying:

- Minimize your contact with surfaces and wash skin that has come in contact with surfaces.
- Take extra precautions with infants and small children when outdoors by placing children on a blanket instead of the grass.
- If children's toys or other items remained outside at the time malathion was applied, wash all items with soap and water before using them again.
- If you have a vegetable garden, wash vegetables with water before eating them.
- Weekly average trap counts of the Aedes Mosquito by regional health authority should be available on Ministry of Health website

Mosquitoes need water to breed, and the flooding after a hurricane or prolonged, heavy rains can lead to a big increase in mosquitoes. To protect people from mosquito-borne diseases, pesticides or insecticides may be sprayed from trucks or airplanes to kill adult mosquitoes.

Although a person's chances of experiencing any health effects from mosquito spraying are quite low, it is wise to take the following steps to reduce exposures to insecticides during spraying:

- Know the spray schedule — pay attention to Caribpest Mobile announcements and newspapers ads about spraying.
- Remain indoors when pesticides are sprayed in your immediate area.
- Keep children inside during spraying and for at least one hour after spraying ends.
- Do not let children play near or behind truck-mounted pesticide applicators.
- Close windows and doors before spraying begins.
- Window-unit air conditioners should be turned off or set to "recirculate" mode so outside air does not come into the house during the spraying. Leave them off for at least one hour after spraying ends, or continue to operate on the recirculate setting for an hour.
- If you must remain outside during spraying, avoid getting spray in your eyes or on your skin.
- If you get insecticide in your eyes, immediately rinse them with water.
- Wash exposed skin surfaces with soap and water if you come in contact with the insecticide.
- Wash homegrown fruits and vegetables thoroughly before cooking or eating.
- Cover outdoor tables and play equipment before the spraying begins, or wash them with soap and water after they have been sprayed.
- Bring laundry and toys inside before spraying begins. (Wash these items with soap and water if exposed to insecticide during spraying.)
- Before spraying, bring pets, pet food and water bowls inside and cover ornamental fishponds to avoid direct exposure to the spray.

- Consult your doctor if you think you are experiencing health effects from the spraying. People who suffer from chemical sensitivities or feel spraying may aggravate a preexisting health condition may consult their physician or local health department.

Updated information on the risk of the Chikungunya virus will be provided to our Caribpest customers throughout the danger period. Customers can check the office regularly for up-to-date data and information.

All buffer zones will be respected, meaning crews will not fog before the contracting customer notifies neighbours within 60 metres of either side of the treatment property/s.

Fogging will occur between 9:30 p.m. Wednesday and 6:30 a.m. Thursday in XXXXXXXXXXXX

Check our Office fogging schedule to see if your neighbourhood is one of those being fogged and on what date and time.

2

What pesticides are used for adulticide ground spraying?

Synthetic pyrethroid pesticides are the main pesticides used in ground spraying operations for adult mosquito control. These pesticides (or adulticides) have been used for many years. They are chemically similar to pyrethrums, a natural pesticide produced by chrysanthemum flowers. For ground spraying operations, resmethrin is usually used. In addition to resmethrin, adulticide contains another active ingredient called piperonyl butoxide (PBO), which increases the ability of resmethrin to kill mosquitoes upon contact and at lower application rates. Other pesticide products sold in Jamaica contain pyrethroid ingredients and are generally used to treat head lice on children, and fleas and ticks on pets.

How are the pesticide products typically applied?

Adulticides are typically applied from truck-mounted sprayers as a fine mist. Most of each droplet is composed of the soybean oil or mineral oil carrier used

to dilute the pesticide product. Mosquitoes die after they come in contact with the tiny droplets of the pesticide. Pesticide products that deposit on surfaces as part of a mosquito control program (e.g., grass, outdoor toys and furniture, etc.) degrade quickly, particularly once exposed to sunlight. Adulticiding for West Nile virus is generally performed at night to target the particular species of mosquitoes that are known to carry the virus.

Why do I see live mosquitoes the day after adulticide spraying was done?

There are several reasons why you might see mosquitoes the day after adulticide spraying. The mist of pesticide cannot reach all mosquitoes, so you could be seeing ones that were not air borne active at the time of spraying, and did not come in contact with the droplets of pesticide mist. Some of the mosquitoes you see may have just emerged from their breeding sites that were not identified prior to fogging and cleaned up. Also, different kinds of mosquitoes are active at different times of the day. Since adulticide spraying for mosquitoes is done in the evenings and the Mosquito that spreads the Chikungunya virus is usually active in the days, this species of mosquitoes not active at the evening time may not be fully eliminated by the external spraying. We urge our customers to request a special non-oil internal misting of Space (Volume air), the underside of furniture, and the immediate periphery of structures for the effective control of the **The Aedes aegypti** and **Aedes albopictus**.