# MESSAGE CONCEPTS OF VECTOR CONTROL ACTIVITIES AND PERSONAL PROTECTIVE BEHAVIORS

For use in interviews and focus group discussions with Pregnant women and Community Leaders In Puerto Rico

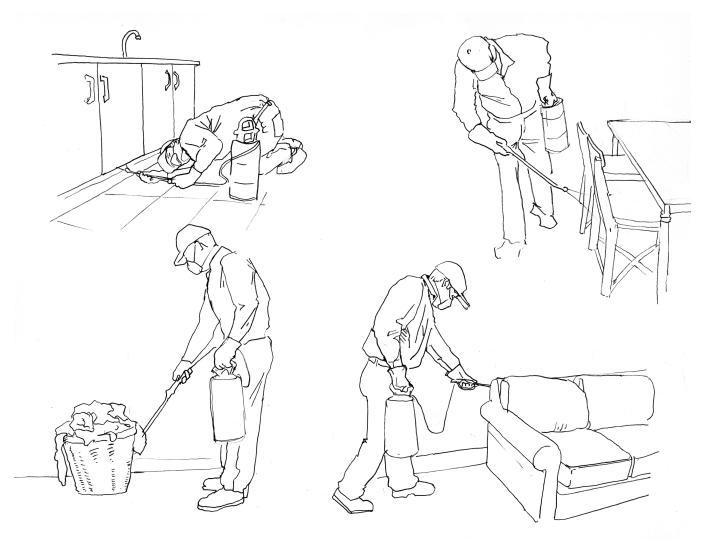
## **Outdoor Residual Spraying (ORS)**

Specially trained professionals spray insecticide outside of the home in and on the places that mosquitoes like to rest – usually dark and wet places. Examples of places are around doorways, by the eaves of the roof, and behind potted plants and bushes. The spraying can be done anytime during the day and usually will kill mosquitoes for several weeks. Outdoor residual spraying kills adult mosquitoes.



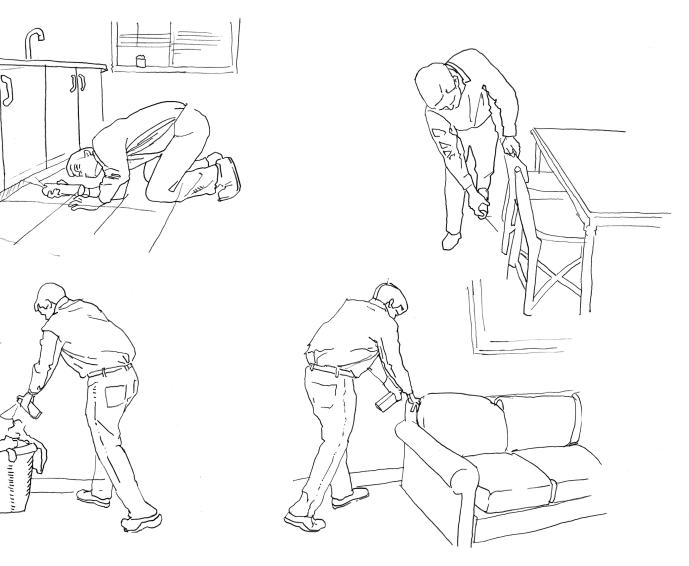
## Indoor Residual Spraying (IRS)

Specially trained professionals spray insecticide inside of the home in and on the places that mosquitoes like to rest – usually dark and moist places. Examples of places are under tables, behind furniture, under bed and cabinets with sinks, and by dirty laundry. The spraying can be done anytime during the day and usually will kill mosquitoes for about three months. IRS is most effective when most houses in a neighborhood have their homes sprayed. Indoor residual spraying kills adult mosquitoes. Scientific studies show that IRS is the most effective way to stop the spread of diseases carried by the mosquito that gives people dengue, chikungunya, and Zika.



### Spraying Indoors with Over-the-Counter Bug Spray

Residents of a home or apartment can buy insecticides at a grocery or hardware store. They are usually aerosol spray cans that can be used to spray places inside the home where mosquitoes like to rest – usually dark and wet places. The spray is intended to kill adult mosquitoes. Using bug spray kills adult mosquitoes.

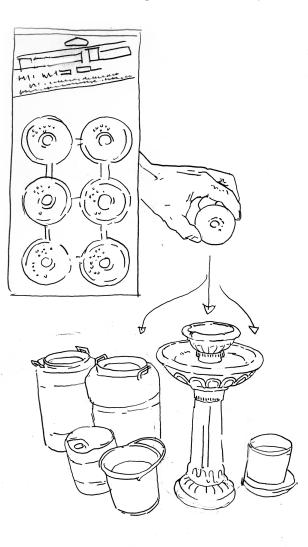


## **Adding Larvicides to Standing Water**

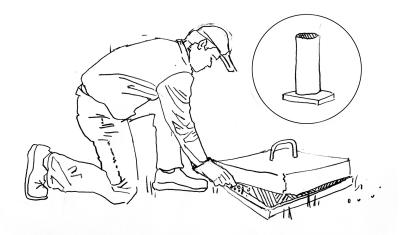
Insecticides can be added to containers that have standing water to kill larvae. Examples of places that often have standing water are

- Fountains
- Trays under potted plants
- Buckets
- Household water storage container

If you can still see the larvicide, it's likely that it is still working. Mosquito "dunks" can be bought at grocery or hardware stores and dropped in the standing water. Pest control professionals can put temephos granules in standing water. Larvicides kill mosquito larvae so that they cannot become adult mosquitoes, which means fewer biting and disease-spreading mosquitoes.







### Wearing Repellents on Bare Skin not Covered by Clothes

Repellents make people "invisible" to mosquitoes. If mosquitoes can't find you, they can't bite you.

People wear repellents to keep from getting bitten by mosquitoes. Repellents are designed to be used on bare skin, especially skin that is not covered by clothing.

Repellents come in many forms:

- Aerosol sprays deter
- Lotions
- Creams
- Solid (sticks)
- Pump sprays
- Liquids
- Towelettes or wipes

CDC recommends using an EPAregistered insect repellent. Safe and effective repellents contain ingredients such as oil of lemoneucalyptus, picaridin, IR3535, para-methane-diol, and DEET. Repellents do not kill mosquitoes but they will help keep them them from biting people.



#### Removing Standing Water where Mosquitoes Grow From Eggs To Larvae To Pupae To Adults

Removing water can keep mosquitoes from successfully reproducing. Since water is needed for mosquitoes to develop, removing water around the home leads to fewer mosquitoes and less chance of disease.



## **Community-Wide Clean Up Campaigns**

Community-wide efforts to pick up trash and tires can help get rid of places where mosquitoes grow from eggs to larvae to pupae to adults.

Discarded tires are the perfect place for many generations of mosquitoes to grow in—they are dark and wet.



#### Wearing Clothing that Covers Bare Skin

Clothing is a barrier between mosquitoes and the bare skin of people they want to bite. Long sleeved shirts, pants, and socks cover a majority of the skin and makes it harder for mosquitoes to bite.



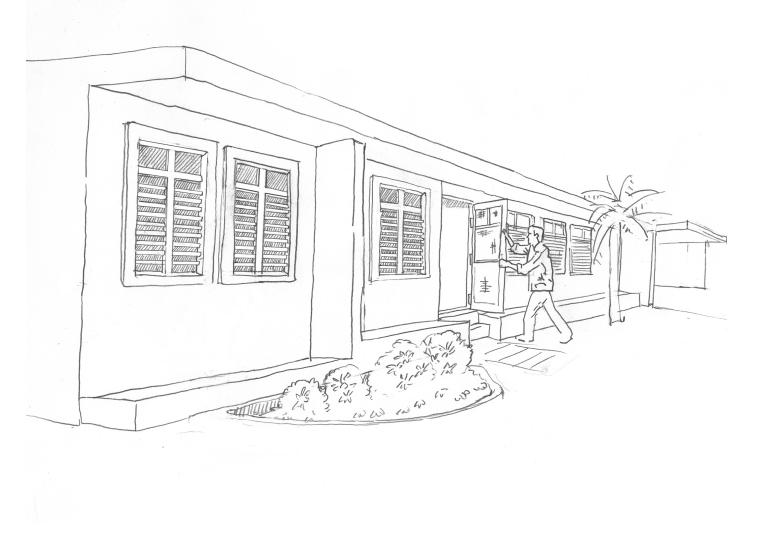
## **Sleeping Under a Bed Net**

A bed net is a barrier between mosquitoes and the people they want to bite. The mosquitoes that spread the Zika virus bite during daylight hours, especially at dawn and dusk. Bed nets can protect you from being bitten while you sleep.



#### **Placing or Replacing Screen Windows and Doors**

Screen windows and doors help to keep mosquitoes outside of your home. Mosquitoes can get inside if there are rips or tears in screens, so it is important to repair screens (close any holes). Scientific studies show that houses with screens are less likely to have mosquitoes in them, especially the kind of mosquitoes that give people Zika virus.



#### Using Condoms Every Time You Have Sex Or Stop Having Sex During Pregnancy

Because Zika virus has been found in the semen of men who have had an infection

AND

because most men do not know if they are infected

AND

because there isn't a test that is widely available to detect Zika virus in semen

Couples should either use condoms the right way every time they have vaginal, anal, and oral (mouth to penis) sex

OR

Not have sex during pregnancy.

Using a condom will keep the virus in the man's semen from infecting a woman.



## Aerial Spraying (Spraying From An Airplane)

A specially equipped airplane sprays insecticides in small (invisible to the eye) droplet aerosols that cover a neighborhood to kill adult mosquitoes. The spraying usually occurs when the mosquitoes are most active. The insecticide used is a chemical that kills mosquitoes but does not hurt people, pets, or plants. Aerial spraying can kill adult mosquitoes and larvae across many communities. Everyone in a community benefits from fewer mosquitoes, mosquito bites, and diseases.

