In2Care® Mosquito Station

Easy to use	Unique	Effective
User-friendly design, no power source needed, easy to assemble and maintain	A multi-impact mosquito control tool that uses mosquitoes to spread larvicides	Scientific field data shows effective kill of *Aedes* larvae & mosquitoes

An innovative tool to combat *Aedes and Culex* that may transmit Dengue, Chikungunya, Yellow Fever, West Nile and Zika virus

Dengue, Chikungunya, Yellow Fever, West Nile and Zika virus are rapidly spreading mosquito-borne viral diseases. They are difficult to diagnose and treat, and mosquito control is the only option to stop transmission.

Aedes mosquitoes are difficult to control as they lay their eggs in very small breeding sites and have become resistant to chemical insecticides. The In2Care® Mosquito Station attracts and kills *female mosquitoes* with effective green ingredients that target both mosquito larvae and adults. It is the first product to exploit the concept of 'auto-dissemination', resulting in an effective kill of mosquito larvae in breeding sites surrounding the Station.

In2Care® Mosquito Stations are to be placed outdoors at a recommended density of 1/400 m^2 (10 Stations per acre) and be maintained every 4 to 6 weeks using refill sachets. The product lends itself perfectly for use in existing vector control programs. Particularly for use in hotspot areas, and by professional pest management companies for mosquito control services at resorts, hotels, and residential sites.

Unique larvicide auto-dissemination

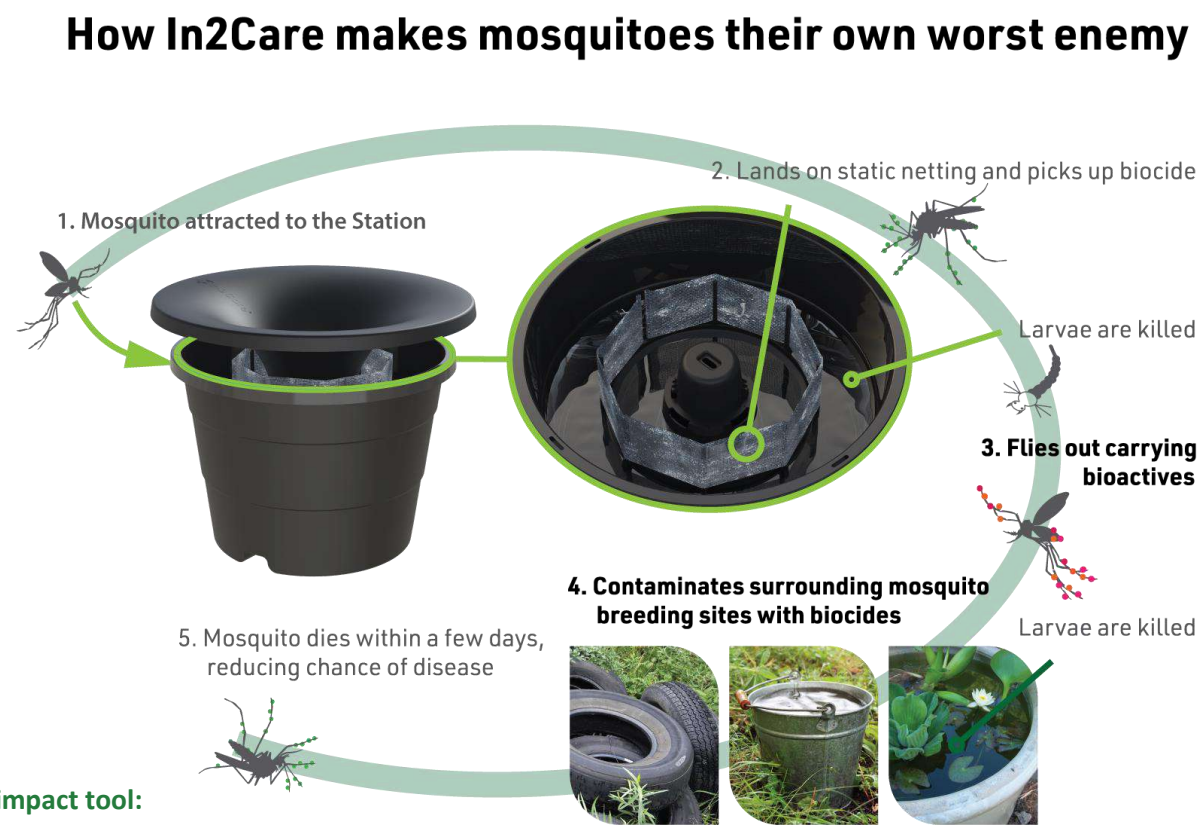
Aedes aegypti can transmit Dengue, Chikungunya and Zika virus to humans. They are attracted to small man-made breeding sites and have a unique egg-laying behavior; spreading eggs over several breeding sites to minimize risks for their offspring.

Culex mosquitoes can transmit West Nile virus to humans. They lay their eggs in stagnant water.

The In2Care® Mosquito Station exploits this behavior by contaminating the female mosquito body and using her to spread larvicide to multiple breeding sites around the Station. Via this "**auto-dissemination**" the Station can kill virtually all mosquito larvae in its surroundings before these become biting adults. In this way small cryptic breeding can be effectivelv controlled.

How does it work?

The In2Care® Mosquito Station is made of durable plastic and uses water with an odour lure to attract egg-laying *Aedes* and *Culex* mosquitoes. Once inside, mosquitoes contact the specially treated netting near the water surface and get contaminated with larvicide powder and fungus spores. In2Care exploits the fact that *Aedes* and *Culex* like to divide their eggs over multiple sites; by letting them fly out of the Station whilst carrying larvicide on their legs. They transport the larvicide and contaminate multiple breeding sites around the Station. In this way, we can kill larvae in small and hard to find breeding sources. The mosquito also gets infected with an insect-specific fungus that kills her before she can spread disease.



A multi-impact tool:

- ✓ Kills all larvae inside the Station
- ✓ Kills larvae in surrounding breeding sites
- ✓ Kills exposed mosquitoes
- ✓ Stops virus development in the mosquito

An environmentally friendly solution

Insecticide resistance has become a major problem in countries infested by *Aedes* and *Culex* mosquitos. Area-wide insecticide fogging is still being used but is showing limited efficacy and major impacts on non-target organisms. This necessitates a switch to more sustainable, environmentally friendly vector control. The In2Care® Mosquito Station is the first Station that uses a biological control agent to kill mosquitoes. It deploys an US-EPA-approved fungus that kills the mosquito several days after infection and can prevent disease transmission. The Station larvicide is US-EPA-approved and WHO-recommended for mosquito control and use in drinking water. Both bioactives have short half-lives and pose very low risks for non-target organisms.

In2Care® Mosquito Stations deploy a small dose of bioactive mixture in an enclosed point-source product that is specifically attractive to mosquitoes. Only tiny amounts of larvicide will get spread to other breeding sites, which are mostly small man-made containers. These tiny amounts are enough to kill mosquito larvae (as <10 ppb PPF works well), but not enough to cause risk for non-target organisms like fish or mammals. In this way, the In2Care Stations offer an effective mosquito control option without drastic use of chemicals.

Station Deployment

This innovative tool can complement *Aedes* and *Culex* vector control efforts and can be used to control mosquito hotspots and pockets of persistent breeding.

How to use

We recommend placement where mosquitoes are likely to breed: in shaded, vegetated places near habitation. In high-risk areas we recommend 1 Station per 400m^2 (10 Stations per acre). Station maintenance (topping up with water) is recommended at regular intervals and reactivation with a fresh refill sachet is recommended every 4 to 6 weeks.

Mosquitoes are not trapped but are contaminated. Because of its slow-killing action, you will see living larvae in the Station water. These larvae will die before becoming adults. When deployed properly in a large enough area, In2Care® Stations will effectively reduce the numbers of *Aedes* and *Culex* mosquitoes and the risk of virus infections. For optimal impacts, we recommend an integrated approach with breeding source reduction and insecticide barrier treatments for non-isolated sites. Effects will become most noticeable after the first 2 weeks of deployment because the next mosquito generation is affected.

See User Manual and Instruction Movies: https://www.in2care.org/how-to-use/

The In2Care® Mosquito Station includes:

- Durable 5L water reservoir
- Lid with click-on mechanism
- Floater (to carry the netting strip)
- Green time indicator cap (servicing reminder)
- Optional securing tools
- Refill sachets (netting, bioactives & attractant tablets) for reactivation every 4 to 6 weeks

For more information, please contact info@in2care.org