

# Genetically Modified Mosquitos

By [Brandon Turbeville](#)

Global Research, December 13, 2010

[Activist Post](#) 13 December 2010

Theme: [Biotechnology and GMO](#), [Science and Medicine](#)

While “scientists” have been genetically modifying insects for years, only in the last few have they begun to openly discuss releasing them into the environment. As always, the fact that public discussion has just now begun to take place on the issue means that the project has already been initiated. This much has been borne out by the facts in that the release of the insects has already been announced.

Under the guise of eradicating Dengue fever, GM mosquitoes were released into the environment in the [Cayman Islands](#) in 2009. [Dengue fever](#) is a mosquito-borne, virus-based disease that has largely been non-existent in North America for several decades. Dengue fever can morph into a much more dangerous form of the illness known as Dengue Hemorrhagic fever. Symptoms of Dengue fever are high fever, headache, pain behind the eyes, easy bruising, joint, muscle, bone pain, rash, and bleeding from the gums. There is no known cure or treatment for Dengue fever besides adequate rest and drinking plenty of water.

Generally speaking, it is one specific type of mosquito, *Aedes aegypti*, which transmits the virus.

The publicly given method for using these GM mosquitoes in the eradication of Dengue fever was that the genetically modified mosquitoes were “engineered with an extra gene, or inserted bacterium, or have had a gene altered so that either their offspring are sterile and unable to spread dengue, [or simply die.](#)” More specifically, the male GM mosquitoes are supposed to mate with natural females which produce larvae that die unless tetracycline, an antibiotic, is present. Without the antibiotic, an enzyme accumulates to a level that is toxic enough to kill the larvae.

It is important to note that these GM mosquitoes, known as OX513A, necessarily have to be of the *Aedes aegypti* type in order to achieve the goals publicly stated by the developers. Therefore, the millions of male mosquitoes that were released into the open-air environment in 2009, and again in [2010](#), were all of the dengue fever carrying type.

The OX513A mosquitoes were developed by a British biotechnology company named Oxitec and their subsequent release was overseen by the Mosquito Research and Control Unit (MRCU) in the Cayman Islands, a British overseas territory.

Although [Oxitec Limited](#) was the developer who engaged in most of the groundwork for the GM insects, the project was not theirs alone. The [Bill and Melinda Gates Foundation](#), the [World Health Organization](#), [The PEW Charitable Trusts](#), and [government agencies](#) in the United States, England, Malaysia, and others were all involved in the development and promotion of the GM mosquitoes.

What has been quite suspicious, however, is the fact that Dengue fever, which has been nonexistent in North America for decades, has [recently surfaced](#) in Florida. Initially, the fever was found in 2009, but by 2010 the cases had vastly increased. In July 2010, a [CDC study](#) was released to very little media attention indicating that about 10 percent of the population of Key West had been infected with Dengue fever. This had doubled from 2009 where 5 percent had been infected. One might wonder what caused a virus that had been almost entirely eradicated to suddenly reappear with such vigor. That is, one might wonder if the answer weren't so blatantly obvious. Of course, official reports do not address whether or not the Dengue fever is connected to the millions of mosquitoes capable of carrying the fever which were released just miles away in the Cayman Islands.

While Dengue fever had been eradicated in terms of naturally occurring outbreaks in the United States, cases that were research-related and laboratory-generated have occurred in the country for many years. This is because Dengue fever has been of particular interest to the United States government, US Army, and CIA since at least the middle part of the 20th century. There is a great deal of evidence suggesting that the biochemical research facilities at Fort Detrick were conducting tests on Dengue fever as a bio-weapon as far back as 1942. It is generally known that in the 1950s the CIA partnered with Ft. Detrick to study Dengue fever and other exotic diseases for use as biological weapons.

It is also interesting to note that, according to CIA documents as well as a 1975 congressional committee, the three locations of Key West, Panama City, and Avon Park (and two other locations in central Florida) were testing sites for Dengue fever research.

As is generally the case, the experiments in Avon Park were concentrated in low-income neighborhoods, in areas that were predominantly black with newly constructed housing projects. According to H.P. Albarelli Jr. and Zoe Martell of [Truthout](#), CIA documents related to the MK/NAOMI program revealed that the agency was using the Aegis aegypti type of mosquito in these experiments as well. In one of these experiments, 600,000 mosquitoes were released over Avon Park and in another 150,000 insects were released in specially designed paper bags that were designed to open up when they hit the ground.

Truthout interviewed residents (or test subjects) of Avon Park still living in the area who related that there were at least 6 or 7 deaths resulting from the experiments. As quoted by Truthout, one resident said, "Nobody knew about what had gone on here for years, maybe over 20 years, but in looking back it explained why a bunch of healthy people got sick quick and died at the time of those experiments." Truthout goes on to point out that around the same time of the Avon Park experiments "there were at least two cases of Dengue fever reported among civilian researchers at Fort Detrick in Maryland."

In 1978, a Pentagon document titled, "Biological Warfare: Secret Testing & Volunteers" revealed that similar experiments were conducted in Key West by the Army Chemical Corps and Special Operations and Projects Divisions at Fort Detrick.

Like the current situation, U.S. government agencies teamed with NGOs, academia, and other organizations to conduct mosquito-related projects. Operation Bellweather, a 1959 experiment consisting of over 50 field tests, was conducted over several states including Georgia, Maryland, Utah, and Arizona, and Florida. Operation Bellweather was coordinated with the Rockefeller Institute in New York; the facility that actually bred the mosquitoes. What's more, the experiment was aided by the Armour Research Foundation, the Battelle

Memorial Institute, Ben Venue Labs, Inc., the University of Florida, Florida State University, and the Lovell Chemical Company.

The military and CIA connections to Dengue fever outbreaks do not end with these experiments, however. It is widely believed that the 1981 outbreak in Cuba was a result of CIA and U.S. military covert biological attacks. This outbreak occurred essentially out of nowhere and resulted in over one hundred thousand cases of infection. Albarelli and Martell write:

American researcher William H. Schaap, an editor of Covert Action magazine, claims the Cuba Dengue outbreak was the result of CIA activities. Former Fort Detrick researchers, all of whom refused to have their names used for this article, say they performed 'advance work' on the Cuba outbreak and that it was 'man made.'

In 1982 the CIA was accused by the Soviet media of sending operatives into Pakistan and Afghanistan for the purposes of creating a Dengue epidemic. Likewise, in 1985 and 1986, authorities in Nicaragua made similar claims against the CIA, also suggesting that they were attempting to start a Dengue outbreak.

While the CIA has characteristically denied involvement in all of these instances, army researchers have admitted to having worked intensely with "arthropod vectors for offensive biological warfare objectives" and that such work was conducted at Fort Detrick in the 1980s. Not only that, but researchers have also admitted that large mosquito colonies, which were infected with both yellow fever and Dengue fever, were being maintained at the Frederick, Maryland facility.

There is also evidence of experimentation with federal prisoners without their knowledge. As [Truthout](#) reports:

Several redacted Camp Detrick and Edgewood Arsenal reports indicate that experiments were conducted on state and federal prisoners who were unwittingly exposed to Dengue fever, as well as other viruses, some possibly lethal.

With all of the evidence that CIA and military tests have been conducted regarding Dengue fever, there is ample reason to be concerned when one sees a connection like the recent release of mosquitoes and the subsequent outbreak of Dengue fever in Florida, a traditional testing site for these organizations.

The response to the Dengue outbreak should also be questioned as [aerial spraying](#) campaigns were intensified. While these sprayings were claimed to be for the eradication of the Dengue-carrying mosquitoes, the number of people who contracted the illness actually rose.

Another [questionable incident](#) related to mosquito-borne Dengue fever and the sudden outbreak occurred on November 15, 2010. A University of South Florida molecular biologist apparently committed suicide by drinking cyanide at a Temple Terrace hotel. Dr. Chauhan, had studied mosquitoes and disease transmission at the University of Notre Dame. While

ordinarily this would not be cause for concern, when one considers the level of interest maintained in mosquito-borne illnesses by both the military and intelligence agencies, the death of Dr. Chauhan might well be something that should be investigated further.

Until her death, she was a post-doctoral researcher in the Global Health department in the College of Public Health. Those who knew her described her as both very bright and very enthusiastic. Maybe this is a coincidence, but regardless, it is one that should be looked at closely.

Unfortunately, the issue of GM insects being released into the wild does not end with increasing Dengue fever and malaria. In 2009, The Bill and Melinda Gates Foundation awarded [\\$100,000 each](#) to researchers in 22 countries in order to develop mosquitoes that would act as “flying syringes.” Essentially, the mosquitoes would be genetically engineered to deliver vaccines with each bite.

The money was distributed to a wide variety of academic institutions, non-profit organizations, government agencies, and private companies. The funding was part of what was termed in an AFP article “the first round of funding for the Gates Foundation’s ‘[Grand Challenges Explorations](#),’ a five-year 100-million-dollar initiative to ‘promote innovative ideas in global health.’” The basic premise behind the [flying mosquito vaccines](#) is that an insect will be genetically modified to produce antibodies to a certain disease in their saliva, which is then transmitted to the individual when the mosquito bites them.

There is a host of problems with this method that range from the moral to the scientific. First, the presence of antibodies does not necessarily mean immunity, and the transfer of them does not in any way provide immunization to the subject being injected with them. The science related to antibodies and immunity is still largely unsettled. Vaccines, themselves, are completely ineffective and have never been proven effective by a study that was not connected to a drug company or a pharmaceutical company.[1] They are, essentially, [faith-based medicine](#).

Even more frightening is the potential of releasing genetically modified mosquitoes that contain actual diseases in their systems to purposely cause a human pandemic. Those who have weakened immune systems would be at the highest risk, but this would no doubt include everyone else as well since they would also be infected with the viruses when bitten. Person-to-person spreading would take over where the mosquitoes left off. Add to this the potential for simultaneous pandemics (if different versions of the insects were used simultaneously) and one has the recipe for genocide on a mass scale. Unfortunately, this is the scenario that many have envisioned for some time.

Nevertheless, although Gates has invested so much money, and so many hardworking individuals and prestigious universities have invested so much time and effort, the general consensus of the media is that the flying syringes will never take flight. This is because, as [Science NOW](#) reports,

The concept of a ‘flying vaccinator’ transgenic mosquito is not likely to be a practicable method of disease control, because ‘flying vaccinator’ is an unacceptable way to deliver vaccine without issues of dosage and informed consent against current vaccine programs. These difficulties are more complicated by the issues of public acceptance to release of transgenic mosquitoes.

However, it is quite difficult to believe that the Gates Foundation distributed such a vast amount of money to researchers without first questioning whether or not their efforts were feasible for future use. It is likewise very hard to believe that once these issues were considered, that the Gates Foundation would simply throw away money on a project that was doomed to failure. In fact, anyone who actually believes this is unfortunately very naïve. Clearly, we are being conditioned to accept and expect these organisms to be released on the public on some future date. What the context will be, however, is anyone's guess.

Notes:

[1] Flu and Flu Vaccines: What's Coming Through That Needle. Dr. Sherri Tenpenny.

Brandon Turbeville is an author out of Mullins, South Carolina. He has a Bachelor's Degree from Francis Marion University where he earned the Pee Dee Electric Scholar's Award as an undergraduate. He has had numerous articles published dealing with a wide variety of subjects including health, economics, and civil liberties. He is also the author of [Codex Alimentarius - The End of Health Freedom](#)

The original source of this article is [Activist Post](#)  
Copyright © [Brandon Turbeville](#), [Activist Post](#), 2010

---

[Comment on Global Research Articles on our Facebook page](#)

[Become a Member of Global Research](#)

Articles by: [Brandon Turbeville](#)

**Disclaimer:** The contents of this article are of sole responsibility of the author(s). The Centre for Research on Globalization will not be responsible for any inaccurate or incorrect statement in this article. The Centre of Research on Globalization grants permission to cross-post Global Research articles on community internet sites as long the source and copyright are acknowledged together with a hyperlink to the original Global Research article. For publication of Global Research articles in print or other forms including commercial internet sites, contact: [publications@globalresearch.ca](mailto:publications@globalresearch.ca)  
[www.globalresearch.ca](http://www.globalresearch.ca) contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: [publications@globalresearch.ca](mailto:publications@globalresearch.ca)