ST. VINCENT & THE GRENADINES RED CROSS

Stopping the Spread of Dengue By Covering Barrels

CASE STUDY

BACKGROUND

St. Vincent and the Grenadines was experiencing the worst dengue outbreak in recent history with 1,155 laboratory confirmed cases of dengue fever and six fatalities by the end of October. By the end of January, this number grew 11 per cent to 1,790 confirmed cases with 8 deaths. Prior to this outbreak, which began in late August/early September, the last major dengue outbreak in SVG was in 2012 and then only 200 cases were reported.

This mosquito-borne disease affects all health districts, with 58 per cent of transmission happening in Pembroke, Kingstown, and Calliaqua Health Districts, and children are the most impacted. As part of a DREF, the St. Vincent and the Grenadines Red Cross looked to the IFRC for the support of a Community Engagement and Accountability delegate to work as part of their mosquito (vector) control programs including barrel covering, mosquito nets/repellent distribution, and white goods pickups.

The operation timeframe was initially three months, with a goal to provide relief to persons and communities affected by high indices of the mosquito-borne virus, in particular relation to Dengue. With the impact of a rapidly increasing number of COVID-19 in January and an increased focus on the possibility of a volcanic eruption, additional time was given in order to full implement all activities.

THE PROJECT

The St. Vincent and the Grenadines Ministry of Health identified rainwater collection barrels as one of the top places that the aedes aegypti mosquito breeds. As the carrier of dengue, this makes eliminating these breeding sites a top priority in addressing the dengue outbreak.

In line with its humanitarian mandate, St. Vincent and the Grenadines Red Cross launched a Safer Barrels initiative to directly benefit 300 households and/or farms. This had the Red Cross working with plumbers in communities to cover barrels and add a tap. In cases where there were many barrels, the team would use pipes to link the barrels together. This plumbing works created a system where people could more easily keep their barrel covered, but having an easy way to access the water.

STORIES OF IMPACT

MARISA BYNOE

Marisa Bynoe lives in Paget Farm, on Bequia an island in the North Grenadines. Her only water comes from a rainwater barrel. When Red Cross teams were doing their assessment alongside vector control officers, they found her barrels uncovered and with mosquito larva.

“When the first come, the water in the tank was old, but I was still drinking water because I had no other choice,” she said. ““They were all full of mosquito because they had no cover, but I had no choice, I still have to drink it.”

A short time later a team with plumbers came and cleaned up the barrels, attached a system to bring water collected on the roof, attached the barrels together, pulled a fine mesh screen over the top and added a tap.

“They change it wash it down, screw on the pipe, they cover it up and everything. Since then, after rain coming down, so I had clean water since they did,” she said.

ALFOND JAMES

Alfond James is a farmer living on Lowmans Hill. Farmers often use collected rainwater to care for soft plants, like lettuce, and often to have several barrels for collecting rainwater. With more barrels, it can mean more containers for mosquitoes to lay their eggs.

The financial impacts of COVID-19 has meant farmers are less able to pay for the plumbing works and screens to cover their barrels. So, this project, while also helping to negate some of the costs, as a result of COVID, make sure more barrels are covered and helps the surrounding community by reducing the number of mosquitoes.

“It was a very good opportunity for me, saves a lot for me. It was my idea before but [the Red Cross] gave me a better idea,” he said. “I’ll save a lot of money on the water system. The rain water is better for the plants too.”

He added that mosquitoes were a problem and the new system addressed that, “they jump in when it not covered properly, it will save some problems now, especially for other neighbours now too.”

THE OUTCOMES

In the end, the St. Vincent and the Grenadines Red Cross covered 300 barrels in the Southern Grenadines Health District (Union Island and Mayrou), Northern Grenadines Health District (Bequia), and Pembrook Health District (Retreat, Lowmans Hill), Kingstown Health District (Sharps, Ottley Hall, Montrose, and other small communities), Calliqua Health District (Pole Yard, Stubbs).

Along with these individuals having barrels covered, the SVG Red Cross created posters and nationally-televised public service announcements to help others learn about the importance of reducing mosquito breeding sites. By sharing information on covering and tapping the rainwater collection barrels, the project reached more people than those who received direct support.

CHALLENGES OVERCOME

A sudden spike in COVID-19 cases in early January, slowed the project, as the national society decided that during the surge in cases volunteers would no longer be traveling to communities for the dengue project. To address this, the project manager did a majority of the traveling and shared details about the project with the people installing the piping and doing the plumbing work.

WHATS NEXT

While the rate of new cases of dengue in St. Vincent and the Grenadines is slowing it has not stopped. It is important to continue to educate people on eradicating mosquito breeding sites. The information we gained through this project, and the effectiveness covering and tapping barrels, continues to be useful after the project ends. The National Society continues to shared information with government and communities as the epidemic comes to an end, and as another possible season could begin in September.

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