

La Soufrière Volcano St. Vincent & the Grenadines

Situation Report #5

13 April 2021

Office for Barbados and the Eastern Caribbean Countries

General Overview

- Soufriere volcano Saint Vincent and the Grenadines (VCT) active since 29th December, 2020.
 Started with effusive eruption activity, formation of a volcanic dome, changes to crater lake and seismic activity.
- Activity increased since April 8, 2021 3:00 am. Prime Minister, VCT gave the order to evacuate the red zone on April 8, 2021 at 4:00 pm and declared the red alert. Explosive eruptions commenced at 8:42 am on April 9, 2021.
- On April 11, 2021 at 1:00 am another eruption occurred, followed by a power outage in the NE part of the Island. Power was restored at 6:00 am in Green zone.
- On April 12, 2021, NEMO reported that at approximately 4:15 am, the dome had collapsed and pyroclastic flow occurred along the valleys on the eastern and western coasts.
- The scale of the eruption is likened to that of 1902 in which there was massive destruction, unlike the eruption in 1979. Pyroclastic flow is a dense, destructive mass of very hot ash, lava fragments, and gases ejected explosively from a volcano and

typically flowing downslope at great speed). A pyroclastic flow is a hot (typically >800 °C, or >1,500 °F), chaotic mixture of rock fragments, gas, and ash that travels rapidly (tens of meters per second) away from a volcanic vent or collapsing flow front. Pyroclastic flows can be extremely destructive and deadly because of their high temperature and mobility. These flows even boil the top of the sea and burn vessels.

- Explosions and accompanying ashfall, of similar or larger magnitude, are likely to continue to occur over the next few days.
- Water supply is down. Central Water and Sewerage Authority (CWSA) teams continue to work towards restoration of water supply island-wide. In the meantime, temporary



standpipes have been erected in some communities and the distribution of truck-borne water to shelters and communities has commenced.

Support by Neighbouring Countries

All countries are seeking donations based on the VCT NEMO needs list.

St. Lucia has already accepted 95 Vincentians, 23 Grenadians and 18 St. Lucians that were stranded in St. Vincent. They are farm workers who were in VCT awaiting a flight to Canada when the eruption forced the cancellation of flights. The government is prepared to accommodate 300 Vincentian evacuees initially.

Grenada is willing to accept a maximum of 1600 evacuees and has already provided a shipment of water to National Emergency Management Organizaton (NEMO) VCT.

Dominica is ready to accommodate 300 evacuees Donations are being solicited from CARICOM Member States based on the needs list provided to CDEMA by NEMO.

HIGHLIGHTS				
Estimated # of affected persons/evacuees	16,000-20,000			
# of village evacuated	30			
# of shelters	84			
Shelter capacity	5,527			
# persons in public shelters	3,718			
# beds available (Milton Cato Memorial Hospital, Levi Latham Health Centre & COVID-19 isolation Centre near airport)	200			
# Missing persons	TBC			
# Injured persons	ТВС			
# Deaths	ТВС			
# medevacs	ТВС			



Figure 1. Map showing location of Health Care Facilities

COVID-19

- Active cases: 137
- Chief Medical Officer (CMO), VCT in a coordination meeting of the Caribbean Development Partners Group (CDPG) on April 11, 2021 informed that a 'working quarantine protocol' is now in effect for persons entering VCT as part of the humanitarian response. Persons who have a negative PCR test result, ideally within 24 – 48 hours prior to travel, will be allowed to commence work immediately. If PCR test is done 72 hours prior to travel, the person will be allowed entry but will be required to take a PCR test upon entry and await result before being approved to work. Proof of vaccination would be an asset. However, all persons will be required to wear masks and follow the protocols.



Actions Completed

- Donor alert <u>published</u>
- Health damage assessment by PAHO-team VCT continued and mapped (see updated map on page 2)
- PAHO WASH Expert Ton Vlugman met with Minister of Health, PS, CMO, HDC and CEHO to discuss WASH priorities





PAHO WASH Expert, Ton Vlugman with Minister of Health, Wellness and the Environment, Hon. St. Clair Prince

PAHO WASH Expert, Ton Vlugman, PAHO Country Program Specialist in St. Vincent & the Grenadines, Nicole Slack-Liburd, Neri James, Chief Environmental Health Officer and Danville Toney, Senior Environmental Health Officer

PAHO/WHO Office for Barbados and the Eastern Caribbean Countries

General Challenges

- Still few more persons to be evacuated from the red zone.
- Explosive eruption/gas/ashes/tremors hampering ongoing evacuations (to the south of VCT but also to neighboring member states) and humanitarian efforts
- Extensive damage/disruption to infrastructure; facilities and services (incl. airport closure)
- Extensive damage to assets and livelihoods (fisheries; agriculture)
- Insufficient/inadequate hygiene/WASH facilities at shelters to cope with # of evacuees
- Limited/temporary accommodation available to host evacuees
- Insufficient food supplies to address needs for an extended response
- Insufficient capacity of host countries to provide to evacuees for medium-, long-term support
- Airports in VCT and Barbados closed.



Health Related Challenges

- Heightened risk of COVID-19 transmissions. Low vaccine uptake. Approximagely 6-8 persons per shelter day.
- Water supply is been shut off
- Water contamination could result in outbreak of water-borne illnesses
- Increase in reported respiratory symptoms
 Increase risk of asthma, especially in Children
- Treatment of burn victims. Possibility for medevac to Guadeloupe.
- Need for safe water and food in shelters. The Central Water and Sewerage Authority (CWSA),

reported that they are unable to abstract water from their sources, as the water is like a mud slurry caused by the persistent ash fall.

- Need for Oxygen Cylinders and PPEs
- Need for public information in shelters and cleaning of the ash, see guidelines: https:// www.ivhhn.org/
- Access to health for evacuees in neighboring countries
- Challenges Identified by the IVHHN team at DURHAM University.
 - Air quality monitoring
 - Air quality should be measured to determine population exposure.
 - Special equipment is needed to conduct measurements
 - Proper clean-up and disposal of ash to avoid continuous exposure
 - UNEP is leading UN agent on this priority

PAHO Priority Response Actions

- Damage assessment of health facilities including assessing structural and functional integrity of facilities; assessing water quality
- 2. Strengthening of health emergency operation centres including support to establish alternative medical care sites
- 3. Support to MoH for coordination of international health response
- 4. Assisting with coordination of personnel for provision of psychosocial support
- 5. Maintenance of essential health services, including in coordination with Primary Health Clinics
- 6. WASH in health care facilities
- Support with shelter management including assisting with set up in line with shelter management guidelines in context of COVID-19
- 8. Infection prevention control through provision of PPEs and masks
- 9. Provision of Health communication materials
- 10. Support potential deployment of EMT's including Barbados Defence Force

Action Points

- 1. Update Health Needs List H-EOC VCT, including anticipated emergency medication/supplies requirements
- 2. Update anticipated needs for Health Service delivery
- 3. Continue damage assessment of health sector
- 4. Identify water tank and pump requirements for Health Clinics in the green zone.
- 5. Support BDF EMT
- 6. Support Chief Environmental Health Officer (WASH) SVG
- 7. Deliver container with 60,000 masks, 7,000 N95 and 60,000 gowns to BDF.
- 8. Facilitate shipment of 100,000 masks to MoH VCT from PAHO Office Barbados. Transportation to be identified in coordination with WFP and CDEMA
- 9. Purchase 50 watertanks, 50 waterpumps and 50 Oxygen cylinders
- 10. Purchase NCD kits
- 11. Purchase 17 (Seventeen) additional residual chlorine testing kits (HACH CN70) as requested by Mr. N. James CEHO
- 12. Follow up on medevac protocol for burn patients to Guadeloupe.
- 13. Deploy 2x PAHO staff as part of Detailed Damage Sectoral Analysis (DDSA). Deployment date postponed to April 14, 2021

Civil Military Coordination (CMCOORD)

- · Venezuelan navy ship with emergency supplies arrived April 12, 2021
- Dumont D'Urville returning to region from Bahama's
- French frigate Ventose available for transport (no containers and vehicles) from Martinique
- Dutch navy ship HNLMS Pelikaan potentially available from end of April 2021

Information Management

- 1. <u>CDEMA</u>
- 2. CDEMA CDPG needs list
- 3. PAHO situation reports and donor alert
- 4. The International Volcanic Health Hazard Network (IVHHN): <u>a protocol for ash collection</u>, <u>IVHHN ash pro-</u> tection pamphlet, <u>leaflet</u>
- 5. Relief web PAHO donor alert
- 6. Video timeline eruption and forecast (credits GeologyHub)

CONTACT INFORMATION

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PAHO Contact in St. Vincent & the Grenadines, Mrs. Nicole Slack-Liburd | slacklnic@paho.org | (784) 526-6000 **Communication Contact,** Ms. Brenda Lashley | lashleyb@paho.org | (246) 836-2671

ANNEX

Available Supplies PAHO

The following items will be provided/ purchase by PAHO (based on health needs list of the Ministry of Health (MoH)):

ITEM	QUANTITY	ITEM	QUANTITY
Generator	1	Aquatabs 67 mg for 10 liters, box	30
Streamline High-Wall Split NC	4	of 1,600 blister x 10 tablets	
System, DC Inverter 9000 BTU, 2.6KW (Installed) (OM)		Aquatabs 8.68 gr for 1,000 liters, bottle, x60 tablets	100
Streamline High-WallSplit NC System, DC Inverter 24000 BTU,	2	Aquatabs 33 mg for 5 liters, box of 10,000 tablets	15
7.0KW (Installed) (OM)		Mosquito nets	100
3M Dual Cartridge Respirator (Me dium) (C12)	14	Masks Gas Masks	100,000
3M Pre-Filter for 51P71 & 52P71	177	Masks	15 60,000
Respirator (pack of 10)		Gowns	60,000
3M Multiple Gas Cartridge (Multi-Acid Gas/Organic Vapour)	10	N95 Mask	7,000
For 6200 1/2 Mask - Pair (B30)		3M Half Face Mask W/O Cartridg-	10
3M Filter Retainer for 51P71,	20	es (EA) (B24)	
52P71, 53P71(B20)		Surgical Mask	100,000
Bladder tank 10m3, distrib ramp,	1	Face Shield	5,000
repair kit, cover	4.000	Goggles	200
Jerry cans	1,000	Sets working gloves	50
Bladder tank 5m3 w/accessories, 6 point distrib. Ramp	2	Helmets	80
Bladder tank 10m3 w/accessories, 6 point distrib. Ramp	1	Boots	50
Respirators	200		
Oxygen cylinders	100		
1000 Gallon water tanks	50		
Water pumps	50		
First responders trauma back packs	39		
Wildfire Kits*	10		
KN95 Respirator Masks*	2,000		
Wildfire Medical Relief Corps Back Packs*	14		
Mosquito nets	100		
Oral Hydration Salts (boxes)	3		
Aquatabs	40,000		
Aquatabs 8.68g	24,480		
Water testing kits	6		

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H-EOC and Shelters NEEDS LIST from Chief Medical Officer St. Vincent & the Grenadines (9-4-2021)						
	St. Vincent & the Grenad	unes (9-4	Cost in EC Dollars			
Item Name	Item Description	Quantity	Price per Item			
A/C Units		8	-	-		
Water Storage	1000 Gallon	10	-	-		
Refrigerator	1500 cubic meters	1	\$3,200.00	\$3,200.00		
Freezer		1	\$2,600.00	\$2,600.00		
Washer		1	\$2,600.00	\$2,600.00		
Stove	4 burner	1	\$1,200.00	\$1,200.00		
Generator		1	-	-		
Folding Table	6'	4	\$350.00	-		
Folding Table	4''	4	\$450.00	-		
Cots		350	\$395.00	\$138,250.00		
Shelves		20	\$800.00	\$16,000.00		
Kettle		20	\$120.00	\$2,400.00		
Blender		10	\$120.00	\$1,200.00		
Bath towels		150	\$20.00	\$3,000.00		
Disposable plates		1,000	-	-		
Disposable Forks		2,000	-	-		
Disposable		2,000	-	-		
spoons	B:	5 000				
Gowns	Disposable impermeable	5,000	-	-		
Alcohol Pads		20,000	(-)	-		
Face masks		20,000	-	-		
Vaccine Flasks	1 NI 1 1 1	20	-	-		
Garbage Bins	Large with cover and peddle	20	-	-		
Garbage Bags		40		-		
Antigen kits	Level and March	20,000	-	-,		
Sanitizer	hand sanitizer	50 cases	-	-		
Washing Detergent Face shields		3	\$70.00	\$210.00		
		20,000	-	-		
Caps (Buffet) Shoe covers		40,000 40,000	-	-		
		40,000	1	-		
Hospital mattresses		50	1.0	7		
Sheets	white	-	-	-		
Pillowcases	white	-	-	-		
Bed pans		500		-		
Urinals		500	-	-		
Water pumps		10	-	-		
Water hose		20	-	-		
Shovels		20	1 <u>-</u> 1	-		
Water boots		50 pairs	-	-		
Raincoats		200	-	-		
O2 cylinders		100				
Industrial Vaccum		4	-	-		
		7				