



Situation Overview



- La Soufrière volcano Saint Vincent and the Grenadines (VCT) active since [December 29, 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.
- Other explosive event occurred at 6:30 am and 8:00 pm on [April 13, 2021](#), also at 6:16 am on April 16, 2021.
- The swarm of long-period and hybrid earthquakes continue but the rate of occurrence dropped significantly last night, April 16, 2021 around 8:00 pm and has remained near-constant since.
- No episodes of tremors have been recorded in last 12 hours.
- Satellite images show that the new crater measures 900m x 750m and estimated to be 100m deep. New crater has several vents but only one is clearly identified.
- The volcano alert level remains **RED**

HIGHLIGHTS

Estimated # of affected persons/evacuees	16,000-20,000
# of villages evacuated	30
# of public shelters	88
# persons in public shelters	4,243
# displaced families	1,459
# displaced persons in private shelters	4,209
# Missing persons	0
# Injured persons	0
# Deaths	0
# medevacs	0
# evacuated health facilities (2 hospitals, all others clinics)	18
# COVID-19 isolation centres	1
Capacity (beds) on main island ¹ , at least	200
Capacity (beds) in the Grenadines ² , at least	21
# Active COVID-19 cases	131
Total vaccines administered 14 April 2021	250
Teams of four nurses visit the shelters daily to administer COVID-19 vaccinations and tests; as well as carry out syndromic surveillance (Coughs, Fevers and Diarrhoea); none of these three symptoms were reported.	

1 & 2 Total capacity of beds, not # of available beds based on occupancy

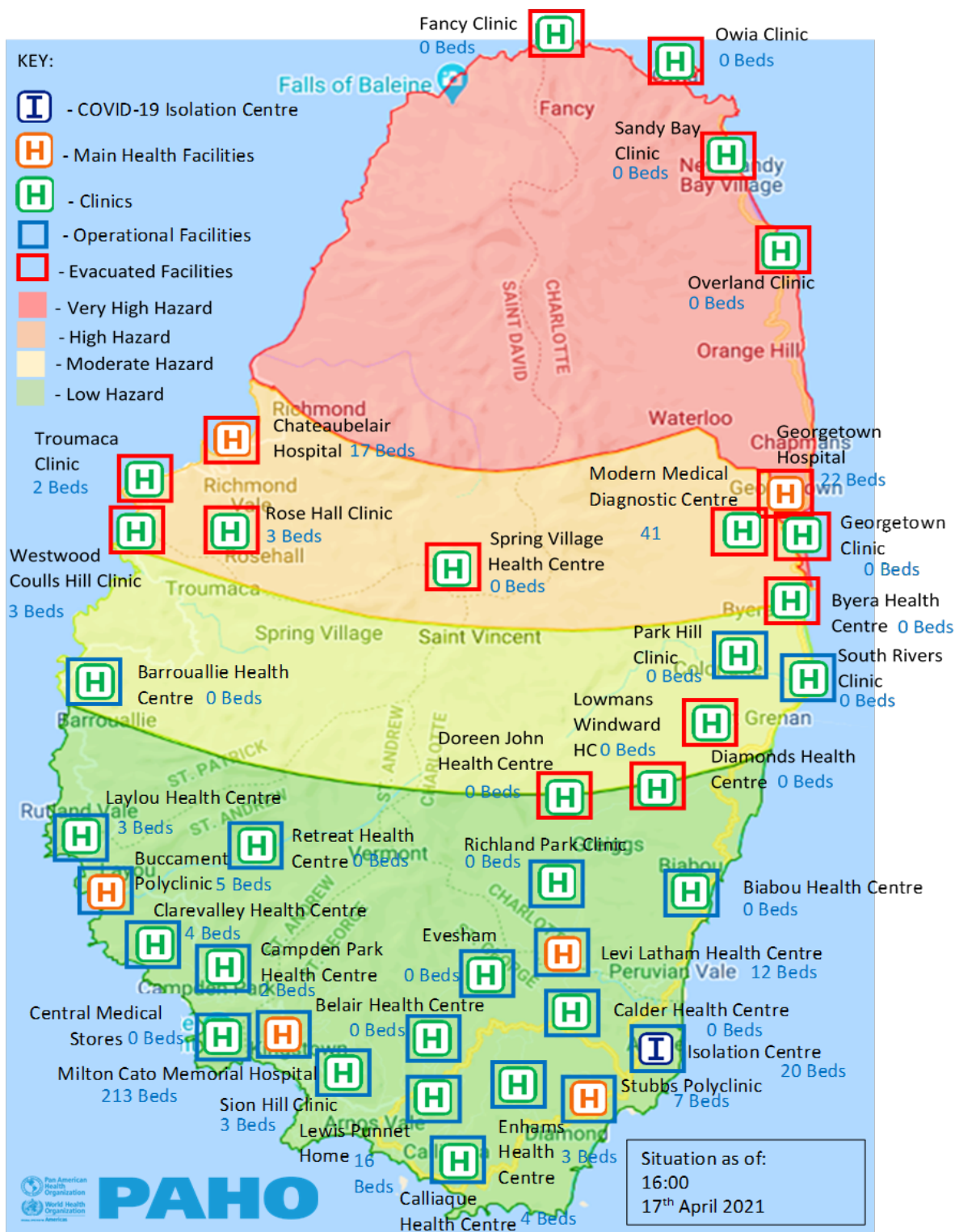
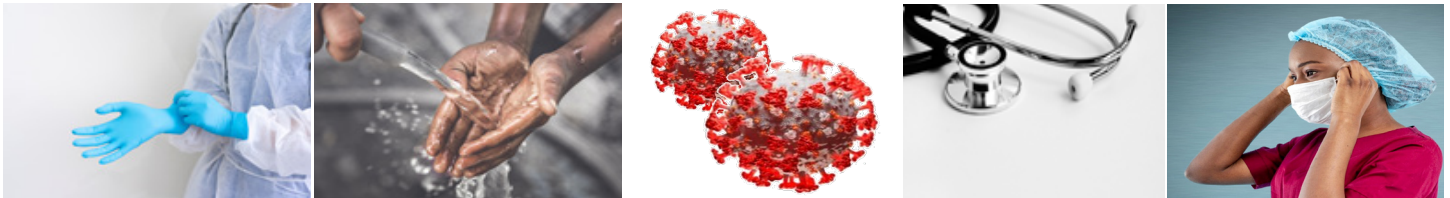


Figure 1. Map showing location of Health Care Facilities

General Challenges

- Persons to be evacuated from the red zone.
- Persons re-entering the red zone to check on livestock and property.
- 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 (including airport closure)
- Extensive damage to assets and livelihoods (fisheries, livestock and agriculture)
- Limited/temporary accommodation available to host evacuees
- Airport VCT and Barbados remain closed until 4:00 pm on Monday April 19, 2021.

Health related challenges



- Limited capability for dialysis (2 beds) and oncology services (Georgetown Health Care facilities evacuated).
- Ash impact on the regional neighboring Islands. Montserrat reports little ash and smell of sulfur from La Soufriere, VCT
- Government of Barbados has requested assistance on the ashfall damage and impact assessment
- Reported increase in respiratory systems at the Accident and Emergency Department
- Insufficient storage capacity for supplies
- Heightened risk of COVID-19 transmissions. On average only 6-8 persons per shelter have been vaccinated on entry
- Insufficient water supply
- Water contamination could result in outbreak of water-borne illnesses
- Increased in illness related to respiratory symptoms, including risk of asthma, especially in children
- Increased risk of burns due to pyroclastic flows and people returning to the red zone to retrieve belongings. Treatment of burn patients. Possibility for medevac to Martinique.
- Infection prevention control (in shelters)
- Need for safe water and food in shelters
- Insufficient/inadequate WASH facilities at shelters to cope with the number of evacuees
- Need for Oxygen Cylinders and PPEs
- Need for public information in shelters and cleaning of the ash, see guidelines: <https://www.ivhnh.org/>
- Access to health care services for evacuees in neighboring countries
- Potential increased risk of outbreak of dengue in the short to medium term due to uncovered water tanks and other water-holding containers which provide sources for mosquito breeding. The ashfall will result in initial suppression of mosquito populations, which may rebound at a later date if potential breeding sites are not eliminated.
- The authorities in VCT have granted permissions to farmers, based on requests, to re-enter the red zone to search for and tend to surviving livestock. Access is strictly controlled and monitored.
- There are reports of animal carcasses, but there appears to be pockets of green, especially in the north of the volcano where some livestock survived.

Mental Health Situation

- The eruption of La Soufriere in Saint Vincent and the Grenadines and the current Covid pandemic, present complex challenges for individuals, families, communities and the entire population. These problems are likely to adversely affect the mental health and psychosocial wellbeing of the residents of St. Vincent and the Grenadines.
- Immediate initial needs identified include the importance of delivering psychosocial communication to combat stress and fear caused by the eruptions, displacement, and limited access to services.

National Response

- Contact tracing was initiated on confirmation of 3 positive cases of COVID-19 in shelters and 3 police officers. All cases were linked to previously identified positive individuals.
- Random COVID-19 rapid antigen testing is being conducted at shelters; Personnel at the NEMO have also been tested. All tested negative.
- Displaced doctors and nurses from the red and yellow zones are being assigned to clinics
- Health authorities are looking at having more doctor clinics in order to increase access to health care for evacuees in both private homes and shelters
- Medical teams have been visiting shelters attending to persons with Communicable Diseases
- Nutrition officers along with doctors, nurses and shelter teams are attending to individuals with Non Communicable Diseases (NCDs) such as diabetes and hypertension, to ensure that nutrition and healthy diets are maintained¹.

¹ CMO provides update on contact tracing of COVID-19 positive persons in Shelters - WE FM 99.9 | The Clean, Fresh Sound (999wefm.com)

PAHO Priority Responses (when requested by MoH)

- Damage assessment of health facilities including assessing structural and functional integrity of facilities
- Conducting water quality assessments
- Strengthening of Health Emergency Operation Center, including support to establish alternative medical care sites
- Support to MoH for coordination of international health response
- Assisting with coordination of personnel for provision of mental health and psychosocial support
- Maintenance of essential health services, including in coordination with Primary Health Clinics
- Support with shelter management including assisting with set up in line with shelter management guidelines in context of COVID-19
- Infection prevention control through provision of PPEs and masks
- Provision of Health communication materials in shelters and healthcare facilities
- Support the coordination of Mental Health and Psychosocial Support (MHPSS) and provide guidance on protecting the wellbeing of front line workers and the vulnerable groups.
- Protect and promote mental wellbeing, improving stress management, particularly in shelters.
- Provide updated Health needs lists in coordination with MoH VCT
- Support CDEMA assessment team with Detailed Damage Sectoral Analysis (DDSA)
- Support potential deployment of EMTs including Barbados Defence Force. Provide container with 60,000 masks, 7,000 N95 and 60,000 gowns for BDF EMT.
- Support MoH with H-EOC, storage, medical supplies, medication (including NCD-kits) and logistics

Health Facilities

Two facilities were visited by the PAHO representative working with the CDEMA (DDSAT). South Rivers and Park Hill Health Centers are operational but damage as a result of the volcanic eruptions has been reported. A list of Medical supplies needed was prepared by staff and given to the relevant authority.

Recommendations for operating health facilities:

- Enforcement of COVID-19 protocols.
- Track and replenish medical supplies
- Provide water for drinking, washing and flushing
- Provide PPEs, cleaning materials and cleaners
- Provide MHPSS

Water, Sanitation and Hygiene (WASH) and Environmental Health

PAHO Environmental Health expert working with CDEMA Detailed Damage Sectorial Analysis Team (DDSAT) met with the Ministry of Health, Wellness and Environment and visited some boreholes and wells with the CWSA representative. Water tests were carried out and the environmental health officers provided chlorine treatment and education to residents.

Public health related needs include water testing kits, water storage, hygiene education and lab testing facilities.

In addition, the PAHO WASH expert accompanied CWSA in following up on collecting water samples from the orange, yellow and green zone to be analysed in Martinique. Transportation to be facilitated by the French Navy.

Fluoride has been mentioned by Dr. Carol Stewart of Massey University in New Zealand, as the most important parameter for human health, in relation to ash pollution. Arsenic is a concern for the residents in St. Vincent and it would be beneficial to have sufficient evidence to state that the water is free of arsenic. Therefore, it is recommended to include rapid test kits for Fluoride (F) and Arsenic (As)

Selection of other parameters is dependent on the results of tests to be conducted in Martinique.

NAME OF SHELTER	TOTAL # OF PERSONS	MALE	FEMALE
Shelter Lodge Village Government School	140	53	87
Shelter Kingstown Government School	88	TBC	TBC
The Latter Day Saint Church shelters	45	24	21
Shelter in New Adelthy Secondary School	51	34	17
Shelter at New Ground Primary School	56	31	25
Shelter at Diamond Primary School	34	22	12

WASH Shelter needs and recommendations

- Provide water for drinking, washing and flushing
- Food inspection and safety equipment
- Vector control
- Increase in number of garbage bins
- Increased resources for the pumping of septic tanks
- Supplies for water chlorination and water testing
- PPE (gowns and masks)
- Sanitation and hygiene stations.
- Provide MHPSS

Logistics



Currently working with NEMO, CDEMA and WFP on establishing logistics system (warehousing, tracking). The port is very busy with multiple containers and loads of supplies coming in, including water tanks, bottled water, hygiene items, etc.

Information Management

1. PAHO [situation reports](#) and donor alert
2. The International Volcanic Health Hazard Network (IVHHN): [a protocol for ash collection](#), [IVHHN ash protection pamphlet](#), [leaflet](#)

CONTACT INFORMATION

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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	Bladder tank 5m3 w/accessories, 6-point distrib.Ramp	2
Mosquito nets	100	Bladder tank 10m3 w/accessories, 6-point distrib. Ramp	1
Oral Hydration Salts (boxes)	3	Aquatabs 67 mg for 10 liters, box of 1,600 blister x 10 tablets	30
Aquatabs	40,000	Aquatabs 8.68 gr for 1,000 liters, bottle, x60 tablets	100
Aquatabs 8.68g	24,480	Aquatabs 33 mg for 5 liters, box of 10,000 tablets	15
Water testing kits	6	450 Gallon water tanks	30
Masks	100,000	Water pumps	30
Masks	60,000		
Gowns	60,000		
N95 Mask	7,200		
Streamline High-Wall Split NC System, DC Inverter 9000 BTU, 2.6KW (Installed) (OM)	4		
Streamline High-WallSplit NC System, DC Inverter 24000 BTU, 7.0KW (Installed) (OM)	2		
3M Dual Cartridge Respirator (Medium) (C12)	14		
3M Pre-Filter for 51P71 & 52P71 Respirator (pack of 10)	177		
3M Half Face Mask W/O Cartridges (EA) (B24)	10		
3M Multiple Gas Cartridge (Multi-Acid Gas/Organic Vapour) For 6200 1/2 Mask - Pair (B30)	10		
3M Filter Retainer for 51P71, 52P71, 53P71(B20)	20		
Bladder tank 10m3, distrib ramp, repair kit, cover	1		
Surgical Mask	100,000		
Face Shield	5,000		
First responder's trauma back-packs	30		
Jerry cans	1,000		
O2 cylinders	50		