



**ANTIGUA & BARBUDA**

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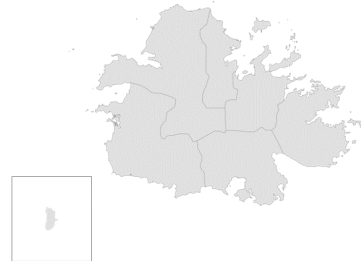
**BARBUDA**

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**NDPBA SUBNATIONAL PROFILE**

# ANTIGUA & BARBUDA BARBUDA

Area: 160.58 km<sup>2</sup>



## RISK AND VULNERABILITY COMPONENT SCORE



### MULTI-HAZARD RISK (MHR)

- Moderate

Score: 0.463 • Rank: 3/8



### RESILIENCE (R)

- Very Low

Score: 0.527 • Rank: 6/8



### MULTI-HAZARD EXPOSURE (MHE)

- Low

Score: 0.443 • Rank: 4/8



### VULNERABILITY (V)

- Very High

Score: 0.558 • Rank: 1/8



### COPING CAPACITY (CC)

- High

Score: 0.612 • Rank: 2/8



Population (2011 Census)

**1,625**



Prevalence of Chronic Illness

**32.5%**



Unemployment Rate

**7.4%**



Population with Unmet Housing Need

**12.5%**



Households with Internet Access

**31.9%**



# MULTI-HAZARD EXPOSURE (MHE)

RANK: 4 / 8 ASSESSED  
SCORE: 0.443



MHE  
0.443

Raw MHE  
0.040

Relative MHE  
0.845

## ESTIMATED EXPOSURE TO EACH HAZARD:



Coastal Flooding

**10%**

1,195

Buildings Exposed: **11%**

Critical Infrastructure Exposed: **33%**



Hurricane Winds

**100%**

1,950

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



Earthquake

**100%**

1,950

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



Landslide

**0%**

0

Buildings Exposed: **0%**

Critical Infrastructure Exposed: **0%**



Extreme Heat

**100%**

1,950

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



Sea Level Rise

**15%**

288

Buildings Exposed: **7%**

Critical Infrastructure Exposed: **32%**



Flood

**99%**

1,940

Buildings Exposed: **100%**

Critical Infrastructure Exposed: **100%**



Tsunami

**15%**

288

Buildings Exposed: **16%**

Critical Infrastructure Exposed: **58%**

NOTE: Population exposure values for Antigua and Barbuda are estimated using PDC's AIM model. Values may differ from Census population.



## MULTI-HAZARD EXPOSURE (MHE)

RANK: 4 / 8 ASSESSED  
SCORE: 0.443

### ESTIMATED EXPOSURE TO EACH HAZARD (CONTINUED):



Wildfire

**<1%**

**2**

Buildings Exposed: **<1%**

Critical Infrastructure Exposed: **0%**



## VULNERABILITY (V)

**RANK: 1 / 8 ASSESSED**  
**SCORE: 0.558**

Vulnerability in Barbuda is primarily driven by Housing and Transportation Vulnerability and Economic Constraints. The bar charts indicate the socioeconomic themes contributing to the overall Vulnerability score.



### Information Access Vulnerability

0  1 **SCORE: 0.567** **RANK: 3/8 ASSESSED**

<b>7.8%</b> Highest Education Primary School	<b>85.7%</b> Households without Desktop Computer Access	<b>31.9%</b> Households with Internet Access	<b>76.9%</b> Households with Television Access	<b>63.3%</b> Households with Radio Access
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### Economic Constraints

0  1 **SCORE: 0.750** **RANK: 1/8 ASSESSED**

<b>0.55</b> Economic Dependency Ratio	<b>63.7%</b> Labor Force Participation Rate	<b>11.0%</b> Population Receiving Remittances	<b>7.4%</b> Unemployment Rate
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### Environmental Stress

0  1 **SCORE: 0.054** **RANK: 8/8 ASSESSED**

<b>15.5%</b> Coastline Exposure to Local or Global Threats	<b>1.7%</b> Tree Cover Loss
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### Gender Inequality

0  1 **SCORE: 0.629** **RANK: 1/8 ASSESSED**

<b>0.06</b> Female to Male Labor Ratio	<b>0.30</b> Female to Male Secondary Education Attainment
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## VULNERABILITY (V)

RANK: 1 / 8 ASSESSED  
SCORE: 0.558



### Housing and Transportation Vulnerability

0  1 SCORE: 0.853 RANK: 1/8 ASSESSED

**74.3%**

Housing Built  
Prior to 2000

**4.6%**

Household  
Overcrowding

**61.3%**

Households  
without Private  
Vehicle

**12.5%**

Population  
with Unmet  
Housing Need



### Household Composition and Vulnerable Health

0  1 SCORE: 0.551 RANK: 2/8 ASSESSED

**4.83**

Prevalence of  
Disability (per  
100 persons)

**32.5%**

Prevalence of  
Chronic Illness  
(per 100  
persons)

**7.2%**

Population  
Age 65 and  
Over

**28.4%**

Population  
Under Age 15



### Population Pressures

0  1 SCORE: 0.500 RANK: 3/8 ASSESSED

**2.5%**

Average Annual  
Population  
Change

**10.1**

Population  
Density  
(persons per  
sq km)



## ISLAND CAPACITY (IC)

**RANK: 1 / 8 ASSESSED**  
**SCORE: 0.760**

Barbuda exhibits weaker Island Capacity in the areas of Emergency Services Capacity and Health Care Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Island Capacity score.



### Environmental Capacity

0  1 **SCORE: 0.520** **RANK: 2/8 ASSESSED**

<b>0.0%</b> Croplands	<b>-39.30</b> Net Carbon Flux	<b>24.3%</b> Protected Terrestrial Area	<b>85.3%</b> Protected Coastlines
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### Governance Capacity

0  1 **SCORE: 0.813** **RANK: 1/8 ASSESSED**

<b>97.3%</b> Household Waste Disposal	<b>3.9%</b> Prevalence of Crime
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### Infrastructure Capacity

0  1 **SCORE: 0.786** **RANK: 1/8 ASSESSED**



### Communications Capacity

0  1 **SCORE: 1.000** **RANK: 1/8 ASSESSED**

<b>50.4%</b> Households with Fixed Phones	<b>90.6%</b> Households with Mobile Phones
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### Emergency Services Capacity

0  1 **SCORE: 0.330** **RANK: 6/8 ASSESSED**

<b>2.4</b> Average Distance to Fire Station (km)	<b>2.7</b> Average Distance to Hospital or Clinic (km)	<b>2.5</b> Average Distance to Police Station (km)	<b>2.6</b> Average Distance to Shelter (km)
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### Energy Capacity

0  1 **SCORE: 1.000** **RANK: 1/8 ASSESSED**

<b>95.8%</b> Household Access to Public Electricity	<b>97.3%</b> Households Using Gas for Cooking	<b>16.5%</b> Households with Generator
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### Health Care Capacity

0  1 **SCORE: 0.815** **RANK: 1/8 ASSESSED**

<b>56.3%</b> Health Insurance Coverage	<b>0.51</b> Hospitals and Clinics per 1,000 Persons
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# LOGISTICS CAPACITY (LC)

**RANK: 6 / 8 ASSESSED**  
**SCORE: 0.463**

Barbuda exhibits weaker Logistics Capacity in the areas of Maritime Logistics and Transportation Capacity. The bar charts indicate the socioeconomic themes contributing to the overall Logistics Capacity score.



## Maritime Logistics

0 1 **SCORE: 0.370** **RANK: 6/8 ASSESSED**

<b>1.4</b> Average Distance to Seaport (km)	<b>146.6</b> Distance to External Medium or Large Seaport (km)	<b>0.03</b> Port Density (ports per km of coastline)
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## Air Support

0 1 **SCORE: 0.500** **RANK: 3/8 ASSESSED**

<b>96.0</b> Distance to External C130 Airport (km)	<b>1.5</b> Average Distance to Airport or Heliport (km)
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## Transportation Capacity

0 1 **SCORE: 0.389** **RANK: 4/8 ASSESSED**

<b>0.51</b> Gas Stations per 1,000 Persons	<b>0.5</b> Road Density (km of roads per sq km)
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## Warehouse Access

0 1 **SCORE: 0.596** **RANK: 5/8 ASSESSED**

<b>2.6</b> Average Distance to Warehouse (km)	<b>45.1</b> Distance to CDEMA Sub- Regional Focal Point (km)
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## COPING CAPACITY (CC)

Coping Capacity measures the systems, means, and abilities of people and societies to absorb and respond to disruptions in normal function. Coping Capacity of Antigua & Barbuda was calculated by using a combination of Island Capacity and Logistics Capacity.

**RANK: 2 / 8 ASSESSED**  
**SCORE: 0.612**



## RESILIENCE (R)

Resilience in Antigua & Barbuda was calculated by using a combination of Vulnerability and Coping Capacity (including both Island Capacity and Logistics Capacity).

**RANK: 6 / 8 ASSESSED**  
**SCORE: 0.527**

## KEY FACTORS INFLUENCING RESILIENCE

Barbuda's score and ranking are due to Very High Vulnerability combined with High Coping Capacity scores.

Below are the four thematic areas with the weakest relative scores:



### Housing and Transportation Vulnerability

Populations living in older housing, and prior to the enactment of modern building codes, are more susceptible to structural damage and losses as a result of hazard impacts. In addition, higher density living situations such as crowded housing, as well as populations with unmet housing needs, increase susceptibility to negative consequences as a result of hazard exposure. Populations with limited vehicle access are more likely to experience mobility challenges during an evacuation, and have difficulty accessing needed supplies and services before, during and after a hazard event.



### Economic Constraints

Economic constraints have individual, household, community, and region-wide influence. Limitations on available financial resources reduce opportunities to invest in mitigation and preparedness measures and limit the ability to facilitate short- and long-term recovery.



### Maritime Logistics

Diverse maritime transport options, within and outside the country, offer crucial support for humanitarian efforts and the transit and delivery of disaster relief supplies. Protecting and maintaining port infrastructure and equipment can help safeguard these key assets and sustain functional operations during a disaster.

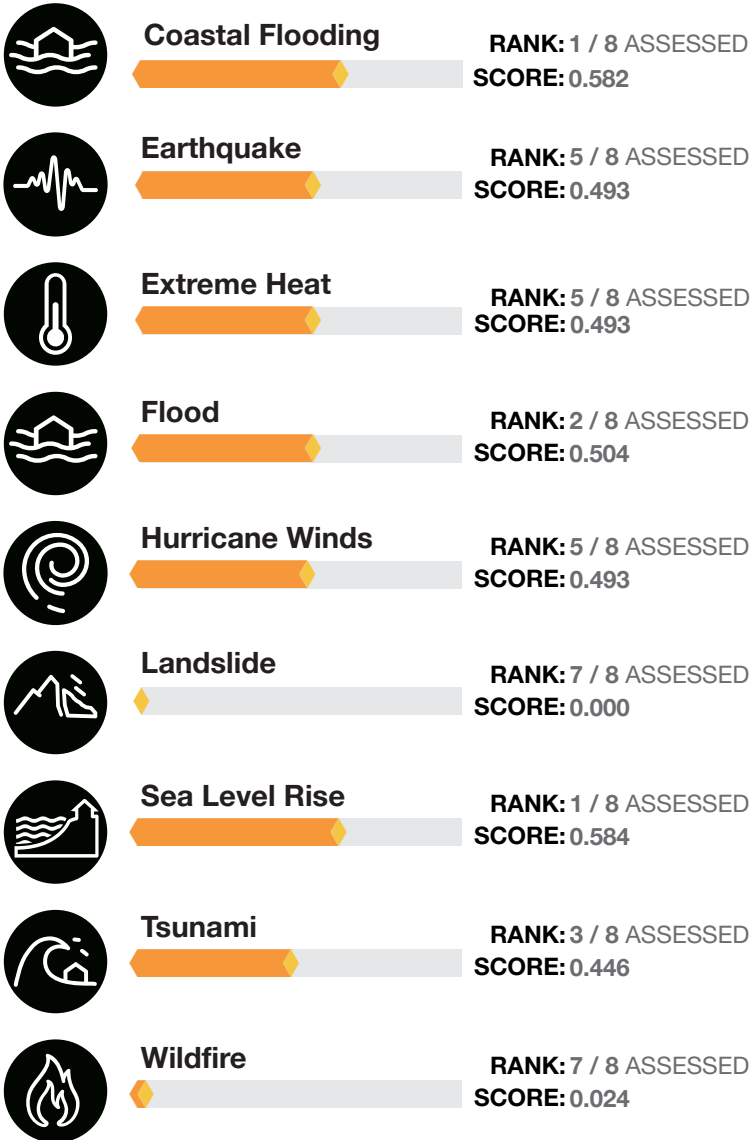


### Transportation Capacity

Dense road networks and refueling locations facilitate the evacuation of populations during a disaster and increase the ability of response stakeholders to access affected populations. Improved transportation capacity supports the ability to distribute resources before, during, and after a disaster.



## HAZARD-SPECIFIC RISK (HSR)





## MULTI-HAZARD RISK (MHR)

**3 / 8**

RANK AMONG PARISHES/DEPENDENCIES  
Score: 0.463



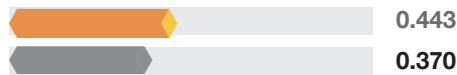
Barbuda's score and ranking are due to Low Multi-Hazard Exposure combined with Very High Vulnerability and High Coping Capacity scores.

### Multi-Hazard Risk component scores compared to overall average country scores:

**DEPENDENCY SCORE**  
**COUNTRY SCORE**



#### Multi-Hazard Exposure



#### Vulnerability



#### Coping Capacity



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