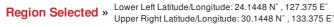
| Pacific Disaster Center | HONOLULU    | WASH.D.C.   | ZULU        | NAIROBI     | BANGKOK     | TAIPEI      |
|-------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Area Brief: General     | 11:23:42    | 16:23:42    | 21:23:42    | 00:23:42    | 04:23:42    | 05:23:42    |
| Executive Summary       | 23 Nov 2017 | 23 Nov 2017 | 23 Nov 2017 | 24 Nov 2017 | 24 Nov 2017 | 24 Nov 2017 |





Additional information and analysis is available for Disaster Management Professionals. If you are a Disaster Management Professional and would like to apply for access, please register here. Validation of registration information may take 24-48 hours.

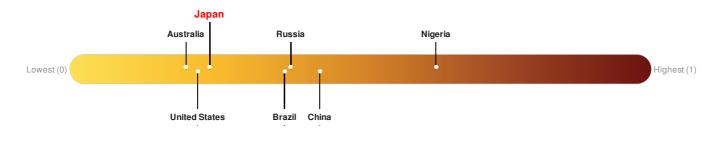
## **Current Hazards:**

| Recent Earthquakes |          |                      |           |            |                          |                      |  |  |
|--------------------|----------|----------------------|-----------|------------|--------------------------|----------------------|--|--|
| Event              | Severity | Date (UTC)           | Magnitude | Depth (km) | Location                 | Lat/Long             |  |  |
|                    | !        | 23-Nov-2017 18:21:33 | 5.5       | 10         | 161km SSE of Naze, Japan | 27.14° N / 130.38° E |  |  |
| Source: <u>PDC</u> |          |                      |           |            |                          |                      |  |  |

## Lack of Resilience Index:

The Lack of Resilience Index assesses the susceptibility to impact and the short-term inability to absorb, respond to, and recover from disruptions to a country's normal function.

Japan ranks 140 out of 165 countries assessed for Lack of Resilience. Japan is less resilient than 16% of countries assessed. This indicates that Japan has low susceptibility to negative impacts, and is less able to respond to and recover from a disruption to normal function.



#### Source: PDC

**Regional Overview** 

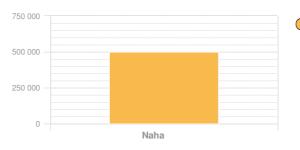
Additional information and analysis is available for Disaster Management Professionals. If you are a Disaster Management Professional and would like to apply for access, please register here. Validation of registration information may take 24-48 hours.

## **Population Data:**

Total: 1, 369, 110

Max Density: 18, 010(ppl/km<sup>2</sup>)

# **Populated Areas:**



Naha - 250,000 to 499,999

#### Source: iSciences

2011

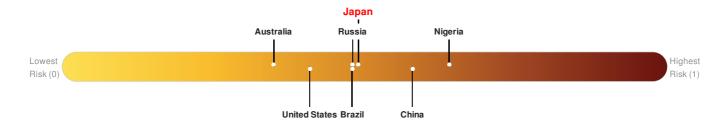
#### **Risk & Vulnerability**

Additional information and analysis is available for Disaster Management Professionals. If you are a Disaster Management Professional and would like to apply for access, please register here. Validation of registration information may take 24-48 hours.

## **Multi Hazard Risk Index:**

The Multi Hazard Risk index assesses the likelihood of losses or disruptions to a country's normal function due to the interaction between exposure to multiple hazards (tropical cyclone winds, earthquake, flood and tsunami), socioeconomic vulnerability, and coping capacity

Multi-Hazard Exposure Japan ranks 81 out of 165 countries assessed for Multi Hazard Risk. Japan has a Multi Hazard Risk higher than 51% of countries assessed. This indicates that Japan has more likelihood of loss and/or disruption to normal function if exposed to a hazard.

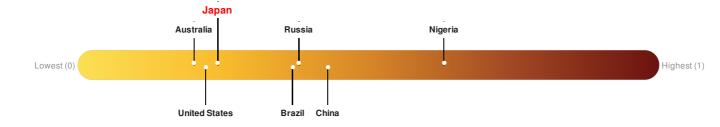


Source: PDC

### Lack of Resilience Index:

The Lack of Resilience Index assesses the susceptibility to impact and the short-term inability to absorb, respond to, and recover from disruptions to a country's normal function.

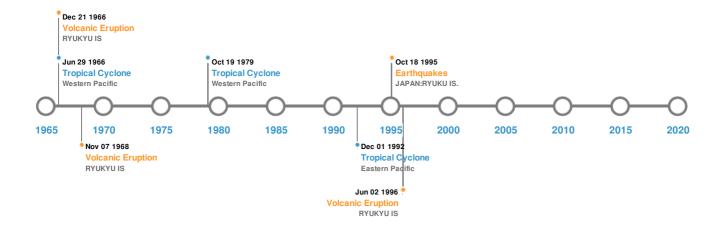
Japan ranks 140 out of 165 countries assessed for Lack of Resilience. Japan is less resilient than 16% of countries assessed. This indicates that Japan has low susceptibility to negative impacts, and is less able to respond to and recover from a disruption to normal function.



Source: PDC

Additional information and analysis is available for Disaster Management Professionals. If you are a Disaster Management Professional and would like to apply for access, please register here. Validation of registration information may take 24-48 hours.

## **Historical Hazards:**



## Earthquakes:

| 5 Largest Earthquakes (Resulting in significant damage or deaths) |                      |           |            |                       |                      |  |  |  |
|---|----------------------|-----------|------------|-----------------------|----------------------|--|--|--|
| Event   | Date (UTC)           | Magnitude | Depth (Km) | Location              | Lat/Long             |  |  |  |
|   | 15-Jun-1911 00:14:00 | 8.70      | 160        | JAPAN: RYUKYU ISLANDS | 29° N / 129° E       |  |  |  |
|   | 01-Feb-1916 00:07:00 | 8.00      | 33         | JAPAN: DUDA           | 29.5° N / 131.5° E   |  |  |  |
|   | 24-Aug-1904 00:20:00 | 7.90      | 25         | JAPAN: KYUSHU         | 30° N / 130° E       |  |  |  |
|   | 24-Jun-1901 00:07:00 | 7.90      | 60         | JAPAN: RYUKYU ISLANDS | 27° N / 130° E       |  |  |  |
| <b></b>   | 18-Oct-1995 00:10:00 | 7.10      | 28         | JAPAN: RYUKU IS.      | 27.93° N / 130.18° E |  |  |  |

Source: Earthquakes

# **Volcanic Eruptions:**

| 5 Largest Volcanic Eruptions (Last updated in 2000) |               |                      |                            |           |                      |  |  |
|---|---------------|----------------------|----------------------------|-----------|----------------------|--|--|
| Event   | Name          | Date (UTC)           | Volcanic Explosivity Index | Location  | Lat/Long             |  |  |
| ٩   | SUWANOSE-JIMA | 02-Oct-1889 00:00:00 | 4.00                       | RYUKYU IS | 29.53° N / 129.72° E |  |  |
|   | SUWANOSE-JIMA | 01-Jan-1877 00:00:00 | 4.00                       | RYUKYU IS | 29.53° N / 129.72° E |  |  |

| Event | Name          | Date (UTC)           | Volcanic Explosivity Index | Location  | Lat/Long             |
|-------|---------------|----------------------|----------------------------|-----------|----------------------|
| Ó     | SUWANOSE-JIMA | 07-Nov-1968 00:00:00 | 3.00                       | RYUKYU IS | 29.53° N / 129.72° E |
| ٩     | SUWANOSE-JIMA | 21-Aug-1967 00:00:00 | 3.00                       | RYUKYU IS | 29.53° N / 129.72° E |
| ٩     | SUWANOSE-JIMA | 02-Jun-1996 00:00:00 | 2.00                       | RYUKYU IS | 29.53° N / 129.72° E |

Source: Volcanoes

# **Tsunami Runups:**

| 5 Largest Tsunami Runups |  |   |  |  |   |  |  |
|--------------------------|--|---|--|--|---|--|--|
| Date (UTC)               | Country  | Runup (m)   | Deaths   | Location   | Lat/Long  |  |  |
| 13-May-1791 00:00:00     | JAPAN  | 11  | -  | RYUKYU ISLAND, NAHA  | 26.22° N / 127.75° E  |  |  |
| 21-May-1792 00:00:00     | JAPAN  | 7   | -  | SAN-NOSAWA   | 27.88° N / 128.94° E  |  |  |
| 22-May-1960 00:00:00     | JAPAN  | 3.2   | -  | FUTAMI-SUGINDA   | 26.55° N / 128.03° E  |  |  |
| 22-May-1960 00:00:00     | JAPAN  | 3   | -  | OURA   | 26.55° N / 128.05° E  |  |  |
| 22-May-1960 00:00:00     | JAPAN  | 2.9   | -  | FUTAMI-SUKU  | 26.55° N / 128.03° E  |  |  |
|                          | 13-May-1791 00:00:00<br>21-May-1792 00:00:00<br>22-May-1960 00:00:00<br>22-May-1960 00:00:00 | 13-May-1791 00:00:00 JAPAN   21-May-1792 00:00:00 JAPAN   22-May-1960 00:00:00 JAPAN   22-May-1960 00:00:00 JAPAN | 13-May-1791 00:00:00   JAPAN   11     21-May-1792 00:00:00   JAPAN   7     22-May-1960 00:00:00   JAPAN   3.2     22-May-1960 00:00:00   JAPAN   3 | 13-May-1791 00:00:00     JAPAN     11     -       21-May-1792 00:00:00     JAPAN     7     -       22-May-1960 00:00:00     JAPAN     3.2     -       22-May-1960 00:00:00     JAPAN     3     - | 13-May-1791 00:00:00     JAPAN     11     -     RYUKYU ISLAND, NAHA       21-May-1792 00:00:00     JAPAN     7     -     SAN-NOSAWA       22-May-1960 00:00:00     JAPAN     3.2     -     FUTAMI-SUGINDA       22-May-1960 00:00:00     JAPAN     3     -     OURA |  |  |

Source: Tsunamis

# **Tropical Cyclones:**

| 5 Large | 5 Largest Tropical Cyclones |  |                         |                      |                 |                     |  |  |
|---------|-----------------------------|--|-------------------------|----------------------|-----------------|---------------------|--|--|
| Event   | Name                        | Start/End Date(UTC)                            | Max Wind Speed<br>(mph) | Min Pressure<br>(mb) | Location        | Lat/Long            |  |  |
| ٢       | NANCY                       | 07-Sep-1961 18:00:00 - 17-Sep-1961<br>12:00:00 | 213                     | No Data              | Western Pacific | 31.48° N / 146.6° E |  |  |
| ٢       | KIT                         | 22-Jun-1966 06:00:00 - 29-Jun-1966<br>18:00:00 | 196                     | No Data              | Western Pacific | 26.45° N / 141.6° E |  |  |
| ٢       | TIP                         | 04-Oct-1979 06:00:00 - 19-Oct-1979<br>18:00:00 | 190                     | No Data              | Western Pacific | 23.8° N / 141.4° E  |  |  |
| ٢       | GAY                         | 13-Nov-1992 12:00:00 - 01-Dec-1992<br>00:00:00 | 184                     | No Data              | Eastern Pacific | 16.84° N/0°         |  |  |
| ٢       | KAREN                       | 08-Nov-1962 00:00:00 - 18-Nov-1962<br>18:00:00 | 184                     | No Data              | Western Pacific | 21.69° N / 0°       |  |  |

Source: Tropical Cyclones

**Disclosures** 

\* As defined by the source (<u>Dartmouth Flood Observatory</u>, University of Colorado), Flood Magnitude = LOG(Duration x Severity x Affected Area). Severity classes are based on estimated recurrence intervals and other criteria.

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