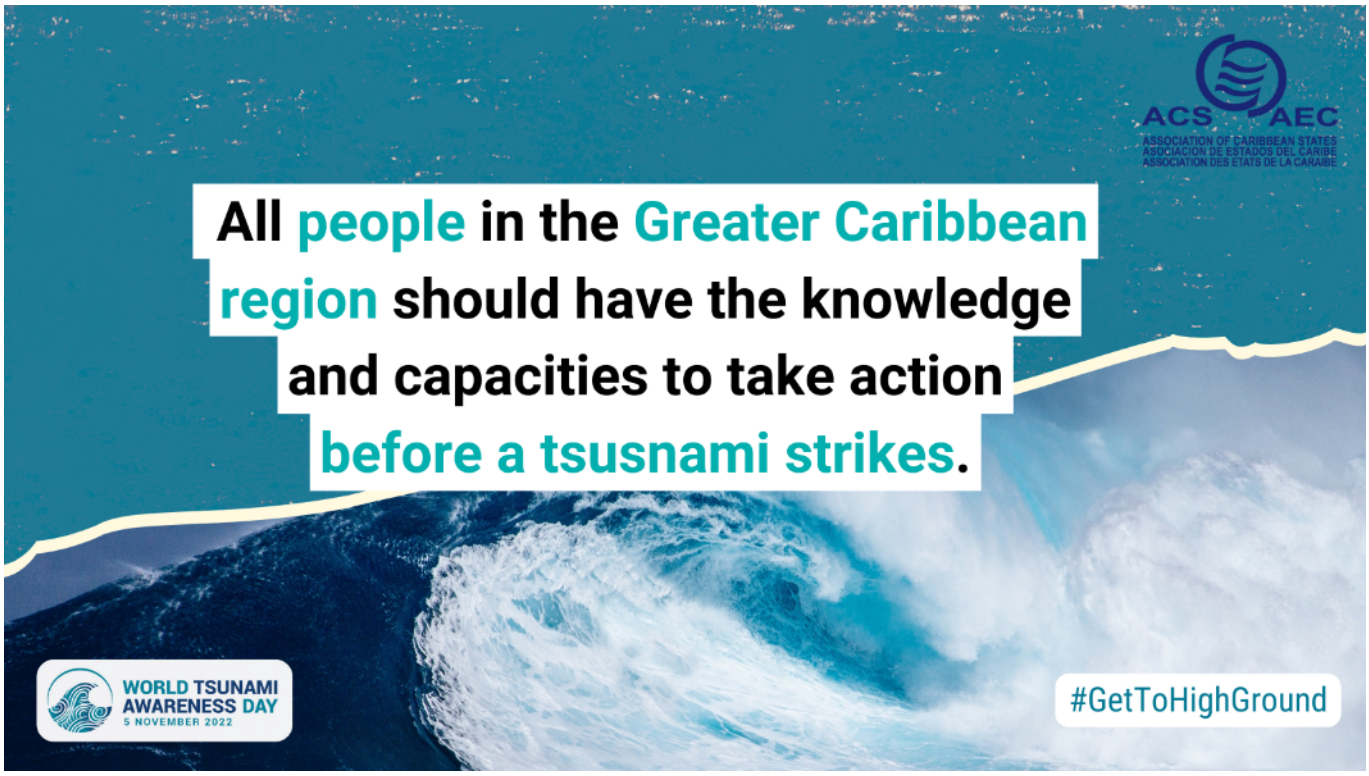
World Tsunami Awareness Day 2022: Get to Higher Ground



The word “tsunami” is composed of the Japanese words “tsu” (which means harbor) and “nami” (which means wave). A tsunami is series of enormous waves generated by earthquakes, volcanoes and other geologic activity beneath or near the ocean. Tsunamis take place less frequently than other types of natural hazards, but when they occur they are one of the most destructive and costly hazards. “In the past 100 years, 58 tsunamis have killed more than 260,000 people, higher than any other natural hazard” [1]. However, tsunamis do not have to be deadly. Preparedness activities such as drills and simulations can provide at-risk communities with the knowledge and capabilities to get to higher ground before a tsunamis occurs. World Tsunami Awareness Day presents us with a great opportunity to raise awareness of the importance of these activities.

On 22 December 2015, the United Nations adopted UN Resolution 70/203 designating November 5 as World Tsunami Awareness Day. This day was proposed by Japan and is based on an anecdote and an example of good practice known as “Inamura-no-hi” (the burning of the rice sheaves). This took place during the 1854 Ansei Nankai Earthquake-Tsunami Disaster in Japan. On that night, villagers in Hiromura, a little village on the Kii Peninsula in western Japan (presently Hirokawa town, Wakayama Prefectur) were engaged in festivities. Hamaguchi Gorvo, a farmer was preparing to join the festivities when he felt the earthquake. Turning toward the sea, he saw the water recoiling and realised that a tsunami was about to take place. With little time to warn his fellow villagers, he lit his precious rice sheaves and used it as a signal to get the attention of the villagers and lead them to higher ground. On that night, Hamaguchi sacrificed his entire harvest, but saved the lives of his community.

This story highlights the importance of community action in disaster risk reduction. It also emphasises that timely evacuation to higher ground in the short time frame between an earthquake and a tsunami can save lives. In recognition of this, the United Nations office for Disaster Risk Reduction (UNDRR) will launch a new campaign-#gettohigherground on November 5th, 2022. Its

objective is to encourage and support relevant actors to raise awareness on tsunami risk and increase community preparedness by hosting activities such as drills, walks and runs of tsunami evacuation routes.

This is aligned with the Seven Sendai Targets and it complements tsunami preparedness activities which are already taking place in various parts of the world. One such initiative is the United Nations Educational, Scientific and Cultural Organisation Intergovernmental Oceanographic Commission (UNESCO/IOC) Tsunami Ready Programme. This programme is contributing to increased awareness and preparedness for tsunamis in coastal communities across the world. Several communities in countries across the Greater Caribbean, including Antigua and Barbuda, Barbados, Saint Vincent and the Grenadines and Trinidad and Tobago region have been recognised as “Tsunami Ready” after participation in this programme. This means that they have comprehensive hazard zone and evacuation maps, alert systems are in place and they host regular training and simulations. Additionally, the UNESCO/IOC annual Caribe Wave Exercise engages over 800,000 people from nearly fifty (50) countries in in the world’s biggest tsunami drill [2].

This progress in tsunami readiness is significant and must be commended. However, there is still much work to be done to ensure that all people in the Greater Caribbean are equipped to respond to tsunami hazards. This has become even more urgent given the growing climate crisis. Research has shown that sea level rise and the erosion of coastlines caused by climate-related phenomenon can dramatically increase the frequency of tsunami-induced flooding. Small tsunamis will have greater potential to reach further inland, thus placing coastal communities at greater risk.

However, increased access to multi-hazard early warning systems (MHEWS) can reduce these risks. While scientists are unable to predict the earthquakes which generate tsunamis, tsunami warnings can be issued within minutes of an earthquake. This has become possible with technological advancements such as the Deep-ocean Assessment and Reporting of Tsunami (DART) systems, originally developed by the National Oceanic and Atmospheric Administration (NOA). DART systems have the capacity to sense pressure changes at the bottom of the ocean caused by passing tsunamis and to relay these changes to tsunami warning centers. This allows scientists to make predictions on the speed, height and direction of tsunamis [3].

Advancements in tsunami detection, monitoring and analysis technology are critically important and allow for greater precision in the dissemination of tsunami warnings. However, if early warning is to be effective, technological advancements must be complemented by comprehensive education and training programs. Such programmes should focus on developing understandable and actionable warnings, which empower at-risk populations to act in a timely manner. They should also be inclusive, catering to the needs of diverse groups including the elderly, youth, women, children, people with disabilities and indigenous groups.

The ACS recognises the critical role that early warning systems play in reducing the risks associated with tsunamis and other natural hazards. As such its Plan of Action 2022 to 2028 prioritises the assessment and development of regional early warning systems.The ACS is also actively seeking to mobilise regional and international partnerships to increase access to multi-hazard early warning systems to those who need them most. On the occasion of World Tsunami Awareness Day we invite you to join us in raising awareness and increasing preparedness, so that people are equipped to #gettohigherground before tsunamis take place.

1. Lessons for life: Drills prepare students for tsunamis

2. Caribbean throws spotlight on "forgotten" tsunami threat

3. JetStream Max: Deep-ocean Assessment and Reporting of Tsunami