

CASE STUDY

PDC response to Venezuela Twin Earthquakes (M7.2 + M7.5)

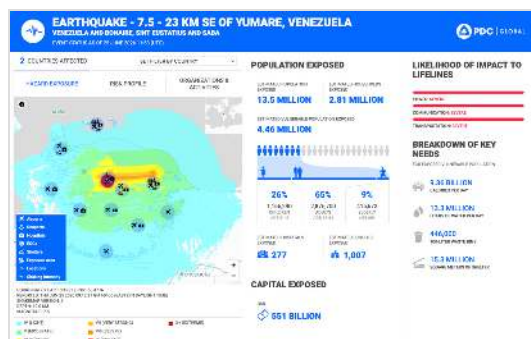
July 7, 2026

Event synopsis (as of July 7, 2026)

On June 24, 2026, two earthquakes (M7.2 / M7.5), struck west of the capital city of Caracas, Venezuela roughly 39 seconds apart, devastating La Guaira and the states of Yaracuy and Carabobo. The sequence generated hundreds of aftershocks and triggered the largest international urban search and rescue (USAR) mobilization in the region's history. PDC's initial estimates placed 13.5 million people within the shaking zone, including a population of **4.46 million vulnerable**.

Magnitudes	M7.2 + M7.5
Aftershocks	400+
Death toll	3,342
Injured	16,740
Displaced	12,841 registered
Missing	40,000+
Damages	US\$37B
USAR	67 teams / 2,500+ pers

Source: Pacific Disaster Center (PDC), Government of Venezuela, UNOCHA sitreps, others. Counts expected to rise.



DisasterAWARE Event Brief provides near-real-time estimates of impacts directly following the M7.2 and M7.5 quakes.

How interoperability and rapid analysis helped save lives

Photo credit: Associated Press



(Above-left): PDC briefs on USAR locations and team activities; (Above right): DisasterAWARE provides real-time building damage data for USAR planning and prioritization. Photo credit: PDC.

Regional partners lean on the DisasterAWARE ecosystem during response to twin earthquakes in Venezuela

On June 24, 2026, PDC joined one of the largest-scale relief efforts in history following the catastrophic impacts of two mega quakes (M7.2 and M7.5) that struck west of Venezuela's city of Caracas. PDC embedded analysts and its DisasterAWARE technology ecosystem into mission operations engaged in the response. From rapid impact assessments and USAR activity tracking, to 96-hour needs forecasting and real-time integration of building damage data, PDC was an authoritative data provider. Shortly after impact, its information streams and analytical insights generated initial estimates of impacts to critical systems to aid planning and prioritization of resources for responders facing widespread building collapse and disrupted power, water, and communications lifelines.

DisasterAWARE: The authoritative data source for a global response

6 min	11 min	<30 min
DisasterAWARE issues early warning (EQs/tsunami), estimated impacts, needs	PDC Smart Alerts go to 3.5M+ DisasterAWARE users worldwide	Joint Operations Center (JOC) activation, with continuous updates

Key response challenges

- Scale of destruction.** Tens of thousands of buildings, along with critical infrastructure, were damaged or destroyed due to widespread soft-story construction prone to pancake collapse. PDC estimates 13.5M people were inside the shaking zone, many of whom live in informal hillside settlements prone to destruction from quakes and rain-triggered landslides.
- A massive, multinational coordinated response.** Sixty-seven USAR teams—more than 2,500 personnel and 188 dogs from dozens of nations—converged alongside U.N. agencies, NGOs, and military elements, each arriving with different systems, data, and reporting chains.
- Search and rescue access and logistics.** Infrastructure damage across seven states, including partial collapse of a key airport, and landslides along the coastal corridor complicated logistics in the critical first 72 hours. USAR teams had to convoy in from hundreds of miles away over damaged

The 72-hour race to reach survivors

While lives hung in the balance, partners from every sector of the response relied on the same live foundation of PDC data through the DisasterAWARE ecosystem. PDC analysts collaborated with civil and military partners responding to the crisis from within the Combined Humanitarian Coordination Cell to provide early estimates of impacts to affected populations, the built environment, airports, seaports, hospitals, and schools, as well as tsunami and sea-level fluctuation warnings. Its critical infrastructure exposure assessments **helped rank the hardest-hit areas while ground reports were still hours away**. These insights informed operational briefings, planning cells, and resource decisions.

One mission. Many partners. Safer world.

PDC capabilities informed the J79 Civil-Military Operations Division and international humanitarian relief effort, enabling information sharing and quick integration of new data from multiple sources.

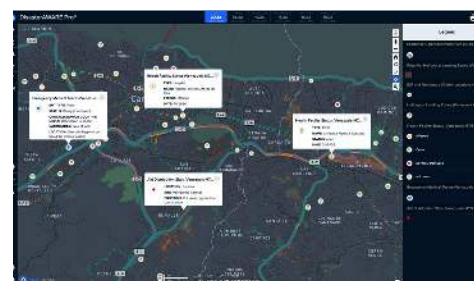
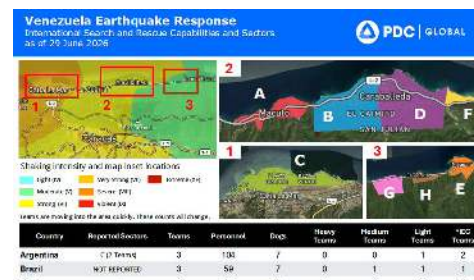
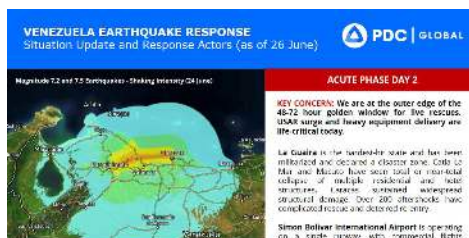
DisasterAWARE Users

U.S. Gov Accounts: **153**
Humanitarian Actors: **199**

- U.S. Government (SOUTHCOM, U.S. State Department)
- United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA)
- World Food Programme (WFP)
- Pan American Health Organization (PAHO/WHO)
- International Federation of Red Cross and Red Crescent Societies (IFRC)
- Others



PDC's disaster response liaison briefs Acute Phase situation report and 96-hour needs outlook.



Above: Sample analytical products developed by PDC to aid international response and recovery efforts.

With sixty-seven USAR teams from dozens of nations, coordination challenges could not be solved through individual field reports alone. PDC's live tracking of team locations, capabilities, and sector assignments gave a holistic view of which sectors had teams working, which did not, and where arriving units could do the most good alongside regional and international partners already on the ground. PDC also helped provide a comprehensive civil-military operating picture, integrating information from UNOCHA, WFP, IFRC, PAHO, and others for continuous situational awareness.

The same picture shaped how assistance physically moved. PDC assessments of airports, seaports, and road corridors identified which access points could bear the load, letting logistics staff set routes and priorities for USAR teams and relief cargo entering the affected region. More than 37 mission-critical datasets—shaking intensity, satellite-derived damage, infrastructure status, aid distribution sites, and more—were added to DisasterAWARE during the response, **keeping the picture current as conditions changed**.

As rescue gave way to recovery, PDC's 96-hour needs outlooks, powered by the Center's AI for Humanity technology, gave each planning cycle a head start—flagging emerging demands across health system restoration, debris management, transitional sheltering, water and sanitation, and humanitarian coordination before they became shortfalls.



Photo credit left: U.S. SOUTHCOM. Photo credit right: WFP

How preparedness made the difference

One of the biggest challenges in responding to a disaster of this scale is information-sharing across organizational lines. As a neutral, science-based organization trusted globally across agencies and sectors, PDC has worked hard to close this gap by providing a common operational picture during times of disaster that strengthens collaboration, coordination, and improves outcomes. The DisasterAWARE ecosystem was not introduced in the middle of a crisis—it was already part of the international operating environment that bridges communities. It has been exercised through continuous engagements and is embedded in the workflows of the organizations who need it.

This type of long-term investment meant that when the massive earthquake doublet rocked Venezuela, there was no ramp-up period. Impact assessments reached decision-makers within hours, and 338 new users across the response community were onboarded onto platforms their organizations already trusted.

The mission is not finished. PDC platforms remain the operational backbone for tracking evolving impacts, coordinating relief, and supporting evidence-based decisions as Venezuela's recovery continues.

Throughout crisis operations, PDC provided authoritative data, rapid analytics, and forward-looking decision support that enabled senior leaders, planners, logisticians, interagency partners, and multinational responders to operate from a more integrated common operational picture.

Major outcomes

- ✓ **Rapid impact assessment:** Real-time population and critical infrastructure impact assessments gave an early-onset understanding of the areas requiring immediate response.
- ✓ **System interoperability:** The DisasterAWARE ecosystem bridged partner systems, ensuring a common foundation of operational data for senior-level decision-making.
- ✓ **A shared operational picture for USAR:** Team locations, capabilities, sector assignments, and deployment status for 67 international teams supported coverage analysis and gap identification.
- ✓ **Logistics planning:** Assessments of airports, seaports, and critical infrastructure informed route evaluation, access prioritization, and the flow of USAR teams and humanitarian assistance into theater.
- ✓ **Anticipated operational needs:** AI-powered 96-hour forward assessments guided decisions across health, debris, sheltering, WASH, logistics, and humanitarian coordination through the recovery transition.
- ✓ **Information sharing:** Humanitarian partners and the J79 Civil-Military Operations Division leveraged PDC platforms to integrate information that could be shared across mission operations.

About the DisasterAWARE technology ecosystem

The DisasterAWARE technology ecosystem—including DisasterAWARE Pro and several custom versions developed for partners—provides early warning, advance risk intelligence, and real-time insights and analytics to disaster management and humanitarian assistance decision-makers worldwide. Learn more at pdc.org/newsroom.