

POUNDS OF PREVENTION

- A Disaster Risk Reduction Story -

“Pounds of Prevention” is a series of short articles that illustrate how disaster risk reduction works and why it is important. Take a behind-the-scenes look at aid work in action, long before the disaster occurs. How is that possible? Read on!

FOCUS: COLOMBIA

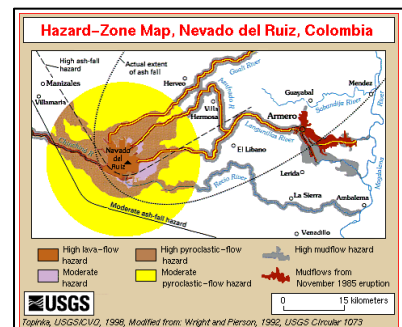
Many people in Colombia live among active volcanoes, including Nevado del Ruiz located in the Andes mountain range in the central part of the country. When it erupted in 1985, approximately 22,000 people perished. The tragedy—the nation’s deadliest natural disaster—prompted the Colombian government to overhaul how the country monitors hazards and prepares for, manages, and responds to disasters. The eruption also prompted USAID and the U.S. Geological Survey to create a partnership known as the Volcano Disaster Assistance Program, or VDAP, to respond to international volcanic events.

USAID emergency management experts and VDAP scientists forged long-lasting relationships with Colombian counterparts. The U.S. personnel helped strengthen disaster preparedness capabilities through improved disaster management education, training, planning, and hazard analysis. VDAP reviewed Colombia’s national volcano early warning system, installed new monitoring equipment, and collected seismic data using satellite remote-sensing methods. These modest investments have helped to minimize potential human suffering, most recently as Nevado del Ruiz once again threatened its neighbors in 2012.

Today, approximately 124,000 people live on the slopes of, and in the valleys below, Nevado del Ruiz. When the volcano showed signs of increased activity in February 2012, the Colombian authorities took immediate actions to close the nearby national park and to issue regular alerts based on its level of activity. In April 2012, VDAP assisted Colombian volcanologists with monitoring in an effort to forecast possible activity. Then, on June 30, 2012, Nevado del Ruiz erupted briefly, causing small volcano-related earthquakes and emitting a column of ash approximately eight kilometers high.

While this eruption was not as severe as the 1985 event, the Colombian Government’s improved monitoring and preparedness capabilities led to timely actions by communities and authorities that prevented injuries and limited property damage. The government activated its emergency plan, put hospitals and police on alert, and closed several airports, highways, and roads in the area. Local emergency committees used phone trees designed for such an emergency, and together with officials, evacuated 1,700 people in less than three hours. Shelters housed evacuees, and health teams taught residents how to protect their eyes and lungs from the damaging effects of ash fall. The same day, USAID activated a two-person team of local disaster relief consultants to coordinate with Colombian officials and share information in case international assistance became necessary.

Activity at the volcano decreased the following day, but scientists believe it could resume at any time. When faced with a hazard as potentially destructive as Nevado del Ruiz, local residents can never become complacent. The technical training in eruption forecasting, remote monitoring assistance, and disaster management expertise provided by the U.S. Government have helped ensure that timely warnings and evacuations will take place when activity at the volcano again increases to hazardous levels. Due in part to the partnership between the U.S. and Colombian governments, Colombia and its citizens are better informed and ready to manage what comes their way.



Map showing the various hazards from an eruption of Nevado del Ruiz Volcano.



Marta Calvache, the head of the volcano hazards program in Colombia, explains the impacts of the 1985 eruption of Nevado del Ruiz Volcano. Photo by Wendy McCausland, VDAP.