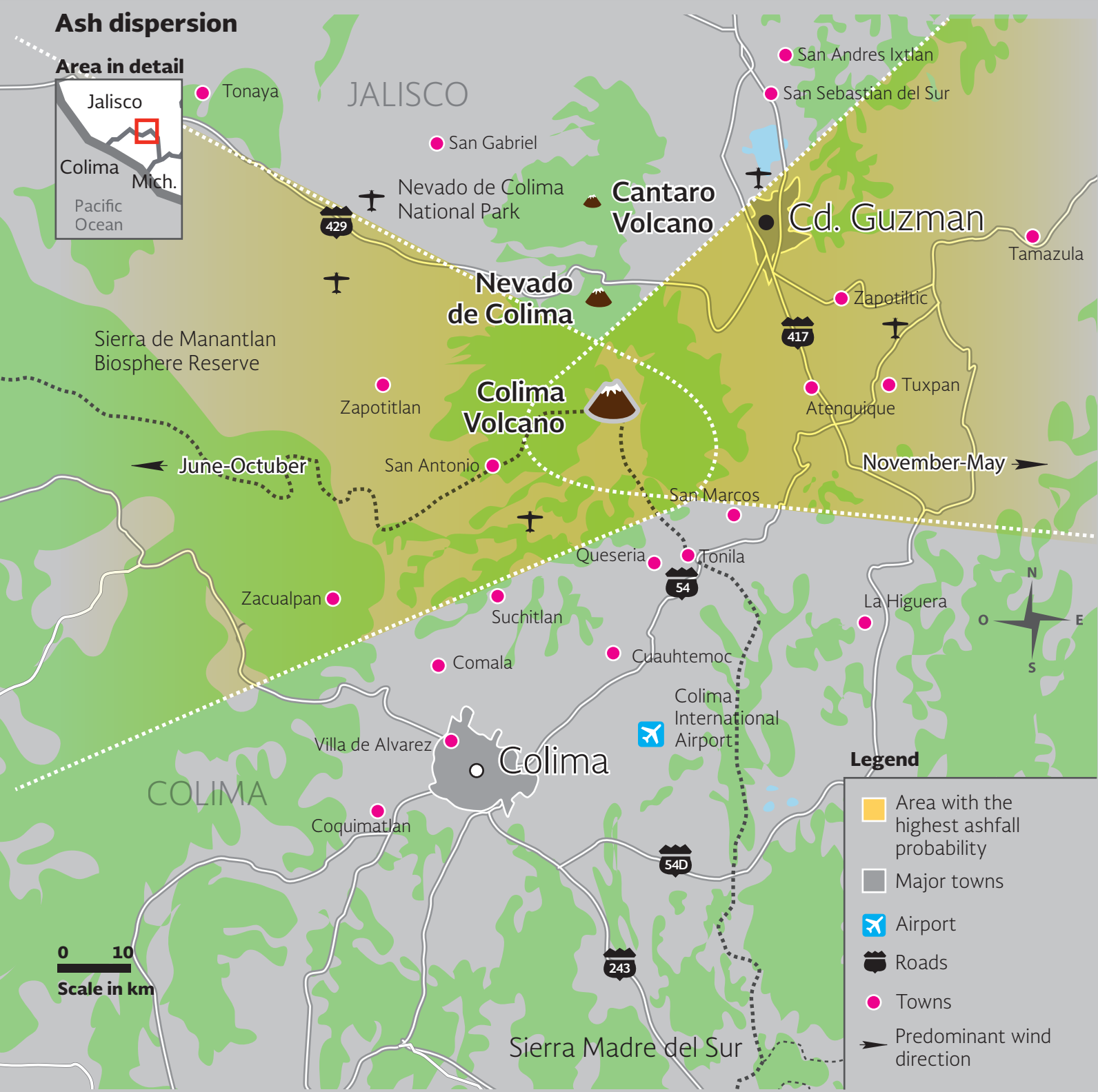


# COLIMA VOLCANO

## Ash dispersion and ballistic projectiles

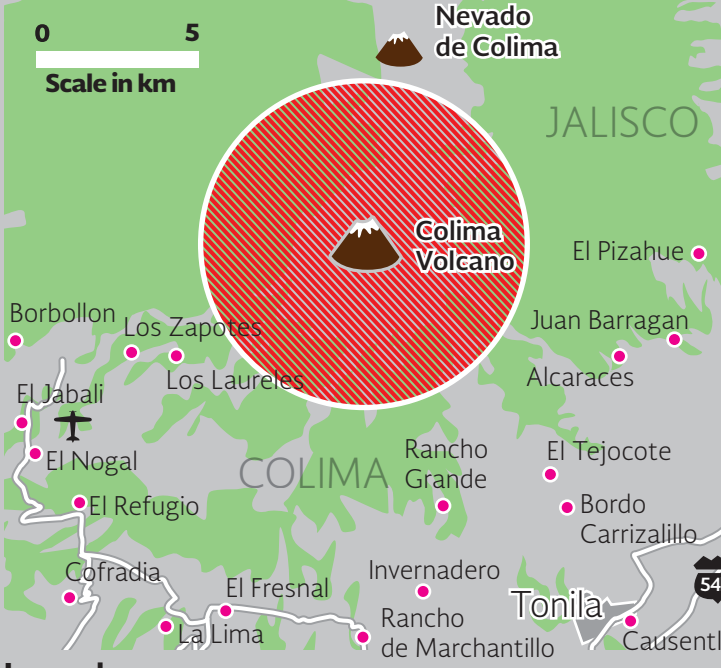


### What are they?

During explosive eruptions, rock fragments less than 2 mm in diameter are dispersed by the prevailing winds and will fall as a rain of dust. Historically it has reached distances of 30 to 50 km, and thicknesses of 10 m within a 7 km radius

**Ballistic products** are rock fragments bigger than 64 mm in diameter, expelled by the volcano during explosions, with trajectories similar to a cannon ball

### Area where ballistic products up to 50 cm in diameter might fall



### Learn more

**National Center for Disasters Prevention**  
[www.gob.mx/cenapred](http://www.gob.mx/cenapred)

Source: Adapted from the Hazards map of Colima volcano made by the University of Colima



# About the Colima Volcano

## Ash dispersion and ballistic products

### Colima Volcano



#### Location

26 km southwest of Ciudad Guzman, Jalisco, and 32 km northeast of the city of Colima

**Elevation**  
**3,860**

meters above sea level

Colima volcano is considered the most active in Mexico

### Ashfall characteristics

#### What is tephra?

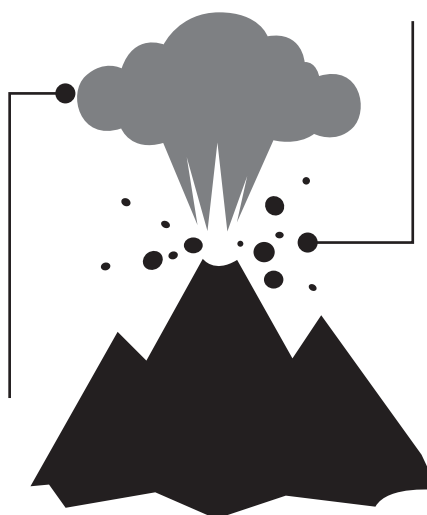
It is composed of:



**Volcanic ash:** fragments of volcanic material (pyroclasts) with less than 2 mm in diameter



**Lapilli:** fragments between 2 and 64 mm in diameter



#### Ballistic products



Are caused by explosions at the crater. Rocks are expelled at high speed and then fall on the ground



As they fall, they can damage infrastructure and people



If the ballistic products fall at high temperature they can cause forest fires and burn houses

#### Ash dispersion scale

Minor eruption tens of kilometers

Mayor eruption hundreds of kilometers

### Activity in the last 100 years:

**1913**

Ash reached Guadalajara, Saltillo and Coahuila. The eruption changed the top of the volcano

**1958**

Lava flowed from the crater towards the north flank

**1991**

Effusive activity accompanied by dome collapse

**1998**

Eruption that caused a first dome on the southwest portion of the crater

**2000**

Lahars affected the town of La Becerrera and the Montegrando ravine

**2004**

Lava flows that reached between 2 and 5 km in length

**2014**

Numerous explosions, new dome growth, lava flows towards the west and southeast

**1955**

Debris flows reached the town of Atenquique, located 18 km away

**1975**

Lava flows emplaced over the eastern flank

**1997**

Several earthquakes noticed, dome fracture

**1999**

Explosion that produced an ash column 7 km high and pyroclastic flows 4.5 km long

**2000-2003**

Growth of a dome, with pyroclastic flows and ashfall to the southeast, south and east

**2008-2012**

Dome growth