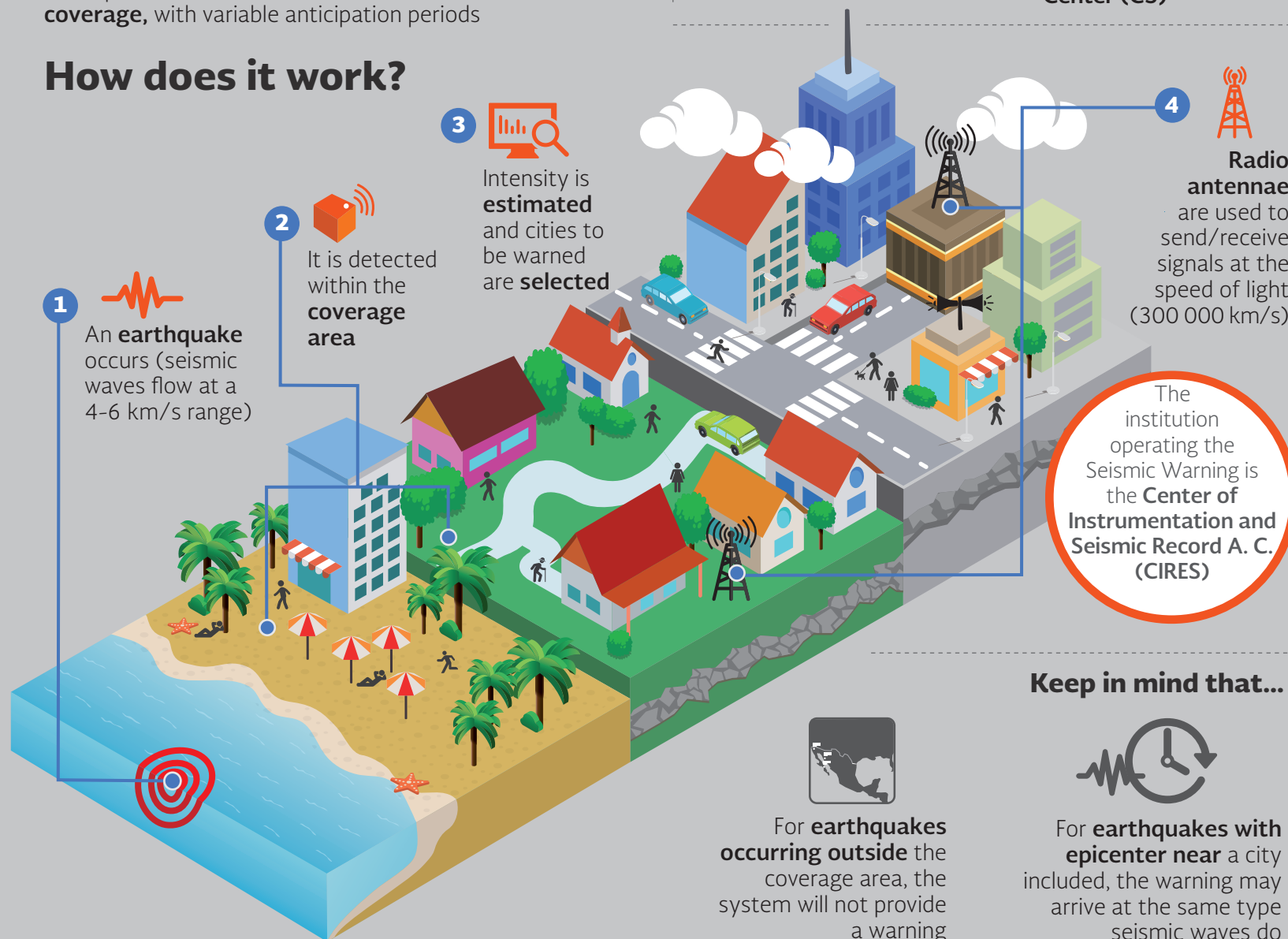


SEISMIC WARNING. The sign of prevention

What is Sistema de Alerta Sísmica Mexicano (SASMEX)= Mexican Seismic Alert System?

A network of sensors which upon detecting a strong earthquake uses radio waves to warn cities with coverage, with variable anticipation periods

How does it work?



How is the warning announced in Mexico City?



Loudspeakers are distributed all over the city, and linked to the Command, Control, Computer, Communications, and Contact Center (C5)



Receivers are installed in strategic buildings



Radio and TV stations broadcast the signal, when they have the service

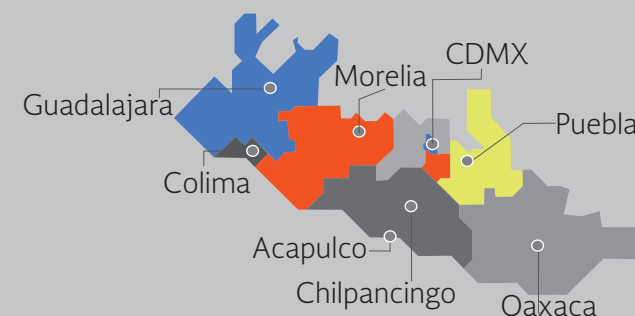
Which is the coverage?

96
sensors

8
cities

installed from Bahia de Banderas (Jalisco through Istmo de Tehuantepec (Oaxaca), including the Alto Balsas region in Guerrero, the south of Puebla, and the center and north of Oaxaca

receive the warning signal:



Keep in mind that...



For earthquakes occurring outside the coverage area, the system will not provide a warning



For earthquakes with epicenter near a city included, the warning may arrive at the same type seismic waves do

Be informed

Centro Nacional de Prevención de Desastres
www.gob.mx/cenapred

Centro de Instrumentación y Registro Sísmico
www.cires.org.mx/sasmex_es.php

Source: Centro de Instrumentación y Registro Sísmico = Center of Instrumentation and Seismic Record
Translation: Guadalupe Meléndez de Escalante. Revision: Angélica Sánchez de la Torre



GOBIERNO DE MÉXICO

SEGURIDAD
SECRETARÍA DE SEGURIDAD Y PROTECCIÓN CIUDADANA



CNPC
COORDINACIÓN NACIONAL DE PROTECCIÓN CIVIL



CENAPRED
CENTRO NACIONAL DE PREVENCIÓN DE DESASTRES





Warning period is variable

Depends on the earthquake location

Benefits the seismic warning has:



Saves lives, reduces damage and cost, if and when one knows what to do when it sounds, response plans are ready, and drills are performed



Cities further away from the epicenter have a **longer period** to implement response actions

Near and coastal areas must also consider other events as a consequence of the earthquake



Tsunamis



Landslides

Recent earthquakes and warnings:

Huitzuco, Guerrero June 16, 2013

Warning for Mexico City had a **20-second** anticipation, due to a shorter distance from the epicenter

Petatlan, Guerrero April 18, 2014

SASMEX transmitted the warning to several cities, with a **70-second** anticipation for Mexico City, and a **24-second** anticipation for Acapulco



When the earthquake is very far away, it may not be perceived, but will be registered by instruments

For an earthquake, Servicio Sismológico Nacional (SSN) = National Seismological Service reports:



Date and time



Magnitude



Depth



Geographic location

Why is it that sometimes the warning signal sounds and the earthquake is not felt?

For a moderate earthquake with a potential for damage, the warning signal may activate

Cities that are near the epicenter may feel a stronger earthquake

A longer distance can make it feel moderate

Cities far away can barely perceive it

