# Know your seismic risk exposure

#### The seismic risk in Occitanie

More than 3,000 earthquakes are recorded each year in the Pyrenees, including 500 in Occitanie. Most are imperceptible, but some are damaging or destructive.

#### **Examples of historical earthquakes**

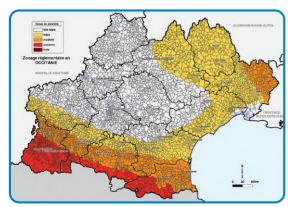
- 1967 / Arette / magnitude 5.1 / intensity at the epicenter VIII ("heavily damaging") / felt in the whole Aquitaine Basin
- 1660 / Bigorre / magnitude 6.2 / intensity at the epicenter IX ("destructive") / felt as far as Poitou and Languedoc

#### Seismic zones map

France is divided on a municipal scale into five zones of increasing seismicity.

The Pyrenees mountain range experiences medium seismicity (zone 4), but other parts of Occitania have lower seismicity (zone 3 or 2).

How can you know which seismic zone your municipality is in? Visit the Errial/Georisques website.



Seismic zones map of the Occitanie region (2017)

#### Glossary

#### Earthquake

vibration of the ground caused by a sudden release of energy on a fault. The seismic waves propagate through the rocks and can be amplified by relief and sedimentary cover.

#### **Epicenter**

location on the earth's surface where the vibrations produced at depth by an earthquake arrive first.

#### Magnitude or intensity?

#### Magnitude:

quantity of energy released, calculated from earthquake recordings. It's not a "scale"... and not necessarily the Richter (or local) magnitude.

#### Intensity:

degree of severity of the ground shaking (perception of the population, material damage) estimated on a scale of I to XII (in Roman numerals).

#### **Emergency numbers:**

Only call in an emergency so as not to congest the telephone lines.

European emergency number: 112
Deaf and hard of hearing emergency number: 114

#### A question about seismic risk?

- Centre pyrénéen des risques majeurs (C·PRIM) / www.c-prim.org / +33 6 26 43 33 35
- Observatoire Midi-Pyrénées (OMP) / Réseau de surveillance sismique des Pyrénées (RSSP) / rssp.irap.omp.eu / +33 5 61 33 29 29
- Association française du génie parasismique (AFPS) / www.afps-seisme.org / +33 1 85 34 33 19





# ion graphique Marion Clédat

# BE PREPARED AND REACT

# to mitigate the seismic risk

While it is not possible to predict earthquakes, there are ways to reduce risks through preventive actions



#### Know your risk exposure

See page 2

#### **Earthquake-proof building**

Consult and apply construction standards limiting the risk of a building collapsing on its occupants in the event of an earthquake.

#### **Know the right reflexes**

What to do before, during and after an earthquake: see reverse







### **BEFORE** be ready

## **DURING**

## protect yourself

## **AFTER** react



#### Anticipate!

Check and strengthen the non-structural parts of your house (like the chimneys). Secure your furniture to the walls and remove heavy objects placed at height.



### take shelter!

At the first auake, drop, cover and hold on. To protect your head, choose a solid piece of furniture, a supporting wall or a corner. Stav away from anything that can fall and alass surfaces.



As soon as the shaking stops, take only vour emergency kit and evacuate the building.

#### Identify safe areas

Identify in advance the areas where you can protect yourself (e.g. a solid door frame, under a table). Make sure exits are clear. Find out if there are assembly points nearby.



#### When to evacuate?

Evacuate (calmly) as soon as physically possible, especially if you are on the ground floor and close to an exit. If this proves impossible (if the shaking is too strong or the exit too far), continue to shelter on site. Attention! Never use the elevators.



# Stay alert Only return to a building

with the green light from the authorities. Beware of aftershocks and side effects (fire, landslide, tsunami, etc.).



#### The emergency kit

Prepare an emergency kit: first aid kit, water, high-calorie food, flashlight, whistle, radio, batteries, warm clothes, copy of your documents, money, etc.

#### **Outdoors:** move away!

Outside, stay away from buildings, electrical poles and wires, trees and rugged terrain. When driving, stop in a clear area and stay in the vehicle.

#### Stay informed



Listen to a public radio to find out the instructions from the authorities. In order to avoid congesting the networks, only use your phone for emergencies. Go to an assembly point if there is one nearby.