




## Types and Telltale Signs of Sediment Disasters

When there is heavy rain or a typhoon or an earthquake, the ground loosens, potentially leading to landslides like cliff/bank falls, sediment flows and full on landslides. Therefore, to protect yourself from sediment related disasters, first it is important to check around your home to see if there is anything that could be dangerous. Indeed, there are telltale signs for sediment disasters. So, if you come across any of the following telltale signs, quickly evacuate.

Broadly speaking, there are three types of sediment related disasters. So be sure to check your neighborhood to find the locations that could be at risk in terms of a sediment disaster and what kind of disaster that might be.

Cliff/bank fall	Sediment flow	Landslide
		
This is a phenomenon where steep slopes will suddenly break away and slide downwards due to water soaking into the ground.	This is a phenomenon where prolonged rainfall or concentrated torrential rain causes mountain and river rocks and sediment to combine in a sudden fast flow down stream (debris flow).	This is where heavy or prolonged rain causes rainwater to seep into the surface of the ground, and the force of the water lifts up the ground surface, which will slowly move across a widespread area.



Care must be taken at these times

### Telltale signs of sediment disasters

Five senses	System of movement	Earth fall	Sediment flow	Landslide
Vision (eyesight)	Mountainside, slope, cliff/bank	<ul style="list-style-type: none"> <li>A crack is visible in the cliff or bank.</li> <li>Small stones are sprinkling down from the cliff or bank.</li> <li>The slope is swelling out.</li> </ul>	<ul style="list-style-type: none"> <li>Inclines around mountain streams start to crumble and slip.</li> <li>Rock start falling down.</li> </ul>	<ul style="list-style-type: none"> <li>Cracks appear in ground surface.</li> <li>Parts of the ground sink down and others swell up.</li> </ul>
	Water	<ul style="list-style-type: none"> <li>Surface flow occurs.</li> <li>Water is spurting out from the cliff or bank.</li> <li>Spring water becomes cloudy.</li> </ul>	<ul style="list-style-type: none"> <li>River water becomes extremely cloudy.</li> <li>River level drops even though rain continues to fall.</li> <li>Sediment starts flowing down.</li> </ul>	<ul style="list-style-type: none"> <li>Mountain streams and wells become cloudy.</li> <li>Water spurts out from inclines.</li> <li>Pond and/or marsh water levels suddenly drop.</li> </ul>
	Trees	<ul style="list-style-type: none"> <li>Trees tilt over.</li> </ul>	<ul style="list-style-type: none"> <li>Driftwood starts getting mixed in with the cloudy water.</li> </ul>	<ul style="list-style-type: none"> <li>Trees tilt over.</li> </ul>
	Other	_____	<ul style="list-style-type: none"> <li>Driftwood in cloudy water starts sparking.</li> </ul>	<ul style="list-style-type: none"> <li>Cracks appear in property walls and retaining walls.</li> <li>Retaining walls and power poles tilt over.</li> </ul>
Sound		<ul style="list-style-type: none"> <li>The sound of tree roots ripping can be heard.</li> <li>The sound of trees shaking can be heard.</li> <li>The ground is rumbling.</li> </ul>	<ul style="list-style-type: none"> <li>The ground is rumbling.</li> <li>Hills and mountains start rumbling.</li> <li>The sound of rolling rocks clashing can be heard.</li> </ul>	<ul style="list-style-type: none"> <li>The sound of tree roots ripping can be heard.</li> </ul>
Smell		_____	<ul style="list-style-type: none"> <li>There is a smell of rotten soil.</li> </ul>	_____

\* The above are general telltale signs. They may not always occur in all locations.

### Sediment Disaster Emergency Warning Area

The Sediment Disasters Prevention Act designates two types of zones: the sediment disaster warning area (Dosha-Saigai-Keikai-Kuiki) and the sediment disaster emergency warning area (Dosha-Saigai-Tokubetsu-Keikai-Kuiki).

#### A sediment disaster warning area (yellow zone)

In cases where bank collapses are occurring on steep inclines, that area is declared to be an injury risk and/or threat to life of the local residents, so this warning is used to specifically organize the evacuation of residents.

#### A sediment disaster emergency warning area (red zone)

In cases where bank collapses are occurring on steep inclines, that area is declared to be a destructive threat to property as well as a marked injury risk and/or threat to life of the local residents, so this warning is used to specifically deter any new locationing of homes, etc.