Kathmandu, Nepal: Earthquake

**Magnitude:** 7.8

**Need for international assistance**
- Not required
- Low
- Moderate
- Significant
- Urgent

**Expected impact**
- Insignificant
- Minor
- Moderate
- Significant
- Major

**Crisis Overview**
Entries update on 28 April in **bold**.

- **As of 28 April, 21:30 local time, at least 5,057 people have died and more than 8,317 have been injured.** The situation is still unclear in remote areas, which remain cut off or hard to access. **39 districts** have been affected in the Western and Central Regions. Initial reports suggest the following:

<table>
<thead>
<tr>
<th>Districts</th>
<th>Estimated affected population</th>
<th>Total population</th>
<th>Severity of affected population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathmandu</td>
<td>872,100</td>
<td>1,744,240</td>
<td>Very High</td>
</tr>
<tr>
<td>Tanahun</td>
<td>161,650</td>
<td>323,288</td>
<td>Very High</td>
</tr>
<tr>
<td>Gorkha</td>
<td>135,500</td>
<td>271,061</td>
<td>Very High</td>
</tr>
<tr>
<td>Lamjung</td>
<td>83,900</td>
<td>167,724</td>
<td>Very High</td>
</tr>
<tr>
<td>Lalitpur</td>
<td>234,000</td>
<td>468,132</td>
<td>High</td>
</tr>
<tr>
<td>Kaski</td>
<td>246,000</td>
<td>492,098</td>
<td>High</td>
</tr>
<tr>
<td>Bhaktapur</td>
<td>152,300</td>
<td>304,651</td>
<td>Medium</td>
</tr>
<tr>
<td>Nawalparasi</td>
<td>321,700</td>
<td>643,508</td>
<td>Medium</td>
</tr>
<tr>
<td>Chitawan</td>
<td>290,000</td>
<td>579,984</td>
<td>Medium</td>
</tr>
<tr>
<td>Dhading</td>
<td>168,000</td>
<td>336,067</td>
<td>Medium</td>
</tr>
<tr>
<td>Syangja</td>
<td>144,500</td>
<td>289,148</td>
<td>Medium</td>
</tr>
<tr>
<td>Nuwakot</td>
<td>138,700</td>
<td>277,471</td>
<td>Low</td>
</tr>
<tr>
<td>Rasuwa</td>
<td>21,650</td>
<td>43,300</td>
<td>Low</td>
</tr>
<tr>
<td>Kavre</td>
<td>191,000</td>
<td>381,937</td>
<td>Low</td>
</tr>
<tr>
<td>Sindupalchowk</td>
<td>143,900</td>
<td>287,798</td>
<td>Low</td>
</tr>
<tr>
<td>Dolakha</td>
<td>93,300</td>
<td>186,557</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Key Findings**

**Anticipated scope and scale**
- Limited access to affected areas is expected to hamper search and rescue efforts. Clearing the debris is expected to take weeks.
- Isolated heavy thunderstorms are predicted until 8 May, particularly over eastern Nepal. Visibility and access is expected to be impaired, further hampering search and rescue efforts.

**Priorities for humanitarian intervention**
- Search and rescue; heavy equipment for rubble removal.
- Health: medical teams (particularly surgeons, orthopaedics and paramedics), supplies and medications, tents for hospitals, body-bags.
- Shelter and NFI: tents, family kits, plastic sheets, blankets.
- WASH: safe drinking water, hygiene kits.
- Mobile storage units.
- Communications equipment.
- Food supplementation and nutritional support.
- Generators.

**Humanitarian constraints**
The size of the geographical areas affected, scattered population and road blockages will pose serious challenges to reach affected populations.

**Limitations**
The estimated number of affected population was calculated by using data from the 2011 Census along with Government guidance that 50% of the total population in affected districts is affected. These numbers were further estimated based on the intensity of the earthquake.
Crisis Impact

The earthquake had a magnitude of 7.8 and a depth of 2km (Al Jazeera 25/04/2015). Humanitarian actors on the ground are describing the situation as 'very chaotic'. Although figures are changing rapidly, as of 28 April, 5,057 people have died in Nepal and at least 8,317 others have been injured (International Media 28/04/2015). Around eight million people have been affected. Over two million people live in 11 of the severely affected districts (Reuters 28/04/2015). Most of the deaths are recorded in Bhaktapur, Kathmandu and Lalitpur (OCHA 27/04/2015). These numbers are expected to increase further as search and rescue teams reach remote areas. While aid is beginning to arrive in Kathmandu (including food, medical personnel and supplies, tents and rescue teams), authorities are struggling to deliver aid further afield (Reuters 28/04/2015). Poor infrastructure makes locating and rescuing people who have been buried alive an enormous challenge (BBC 25/04/2015).

On 27 April, the Government has issued a public statement dispelling rumors of another imminent large earthquake and asked, if possible, for people to return home (OCHA 27/04/2015). Government officials are overwhelmed by the scale of the disaster (Reuters 28/04/2015). The Government has reported that 39 districts in the Western and Central regions have been affected, including Kathmandu Valley districts (OCHA CASS 25/04/2015). Gorkha, Lamjung, Sindhupalchok, Kathmandu, Bhaktapur and Lalitpur districts are the most affected districts (OCHA 26/04/2015).

Access to Essential Services

Food: 1.4 million people are in need of food aid (OCHA 27/04/2015). People have reported restricted access to food. Many families maintain large store of grains (restocked each harvest season), but poorer families and landless families have much more limited food stocks. As of 27 April, small grocery shops have opened while large businesses remain closed (OCHA 27/04/2015). Fruit vendors are setting up stalls on major roads (Reuters 28/04/2015). Impact on agriculture based livelihoods and food security is expected to be extremely high, as planting season starts in two months (OCHA 27/04/2015). Current food stocks in the country do not match the needs of the affected population (HCT 28/04/2015).

Health: Hospitals are overwhelmed and overcrowded. There is no capacity for Intensive Care Units (OCHA 27/04/2015). Medics continue experiencing influx of patients as supplies are running low (BBC 26/04/2015). Hospitals are running out of safe spaces to store bodies and emergency supplies, with some hospitals still attending to victims in open spaces. Disease is a concern: diarrhoea is already in issue in Kathmandu Valley due to exposure to the elements (OCHA 26/04/2015). Only four medical teams have been able to reach affected areas outside of Kathmandu (HCT 28/04/2015).

WASH: People have reported limited access to drinking water, and are looking for alternative sources of safe water, i.e. bottled water or boiling. Most houses in Kathmandu store water in water tanks, although these have already run out of water. Water supply in Kathmandu had been interrupted since early April. Sanitation is a major concern.

Shelter: Houses are cracked or fallen. Older buildings have collapsed. In villages, whole neighbourhood buildings have collapsed. People have been sleeping in the open since 25 April, without protection, as aftershocks are still being felt (BBC 26/04/2015). Vast tent cities have sprung up in Kathmandu for those displaced or too afraid to go back home (BBC 27/04/2015). Five camps have been established in areas belonging to the armed police force, and the government has identified 16 open spaces around Kathmandu to be used as camps (OCHA 26/04/2015). As monsoon rains are predicted until 8 May, alternative solutions need to be found for tents as they will not withstand the rain (HCT 28/04/2015). In Ghoraka witnesses have reported that 90% of the houses have been destroyed (BBC 28/04/2015).

Electricity and fuel: Power throughout Kathmandu is limited. Households and offices are mainly relying on generator power. Fuel reserves are running low (OCHA 27/04/2015). The city was under loadshedding before the earthquake, meaning there was no electricity for 12 hours every day. Electricity will be vital in hospitals and to provide protection to populations whose houses have been destroyed. It is unclear how much petrol the city has and whether more can be trucked in (BBC 25/04/2015).

Communications: Internet and mobile phone communications are erratic (BBC 26/04/2015). As of 27 April, telecommunications networks are intermittently operational. Landlines are functional. Radio programming has begun on multiple radio stations reaching affected populations focusing on key messages on aftershocks and community support (OCHA 27/04/2015).

Education: Actors on the ground estimate that 80% of schools in affected areas outside of Kathmandu have sustained damage. Approximately 5,000 schools have been totally destroyed (HCT 28/04/2015).

Access

Roads: Landslides have been reported, further hampering access to more remote locations (BBC 26/04/2015). As of 26 April, the status of the main and feeder roads outside of Kathmandu Valley is still unclear (UNICEF 26/04/2015). Reports have confirmed that the Araniko highway has sustained damage (The Hindu 25/04/2015). Unconfirmed reports have suggested that roads from Kathmandu and Pokhara to Gorkha are, overall, accessible, with some damage. With roads being open, around 70,000 have left Kathmandu into more remote areas to search for their relatives. This has caused traffic jams in and around Kathmandu, further hampering the delivery of aid (BBC.
Helicopters are currently air-dropping tents, dry food and medicine, yet still struggling to reach isolated communities (BBC 28/04/2015).

Airports: Kathmandu airport had no major damage and is open to relief flights and operating 24 hours. Pokhara airport is also open. As of 26 April, reports indicate that the Kathmandu airport is also open to commercial flights. Nepal has signed the customs agreement to facilitate emergency relief operations. On 27 April the Reception and Departure Centre (RDC) reported difficulties in getting aircraft in to Kathmandu as there is only space for six aircraft on the apron (GDACS 27/04/2015). Some flights are forced to circle for hours before landing. The internet connection in the airport is unstable (GDACS 27/04/2015). All currency exchange and ATMs at the airport are closed. UNDAC has set up a reception and departure centre at Kathmandu Airport. A Humanitarian Staging Area (HSA) in Kathmandu International Airport has been set-up to mitigate congestion at Kathmandu Airport (OCHA 27/04/2015).

Avalanches: Nearly 1,000 climbers and sherpas were on Mount Everest when the first avalanche struck. Shakes and wind from avalanches have destroyed some camps, and doctors in the area are treating the injured (Reuters 26/04/2015). As of 26 April, the death toll on Mount Everest had reached 17, with 61 injured and an unknown number missing. Avalanches struck between the Khumbu Icefall, a rugged area of collapsed ice and snow, and the base camp where most climbing expeditions are located. Reports have suggested that some base camps are still covered in snow. Helicopters trying to airlift the injured to Kathmandu were delayed, but have now managed to land at the base camp (international media 25/04/2015; BBC 26/04/2015). Witnesses have reported that avalanches buried Langtang village, north of Kathmandu and bordering Tibet, and survivors, many badly wounded, are starting to come up the mountain to Kyanjin Gompa (Humanity Road 27/04/2015).

Vulnerable Groups Affected

As of 28 April, 2.8 million children have been affected and 940,000 are in need of urgent aid (OCHA 27/04/2015). There is an urgent need for children’s clothes (HCT 28/04/2015). Children, women, the elderly, and people with disabilities are particularly vulnerable. Gender is an important consideration because earthquakes usually kill more women than men (ALNAP 2008). Persons with disabilities have a much greater chances of being killed during an earthquake, and in previous responses they have been excluded from mainstream response and needs assessment operations (DINF 2015). Caste-based discrimination is present in Nepal, and the Dalit population is in general more vulnerable to disaster due to marginal social standing and because they live apart from mainstream settlements (IDSN 2012). Tibetan refugees living in Nepal are also vulnerable, as in most cases they are stateless and live in already marginalised communities (BBC 27/04/2015).

Impacts in other countries

Tremors have been felt throughout the region and caused damage outside Nepal (Times of India 25/04/2015). As many as 62 people have been killed in India: in Bihar, Uttar Pradesh, and West Bengal. 288 have been injured (Government of India 27/04/2015). In Tibet, the death toll climbed to 17, according China’s state news agency (Reuters 26/04/2015). The main border entry point between Tibet and Nepal is currently closed due to blocked road access.

Security Constraints

- Initial reports of looting have started to appear.
- A convoy of humanitarian actors was attacked on the way to Sindulpalchowk, as people are desperate for aid (HCT 28/04/2015).
- Helicopters have been mobbed by villagers desperate for food or demanding to be lifted out (BBC 28/04/2015).
- Hostility of affected populations against humanitarian agencies have been reported (HCT 28/04/2015).

Humanitarian and Operational Constraints

- Poor physical connection and access to remote disaster sites is a major challenge, at this point it is still only by aerial transport. Responding teams might have to prepare to downsize accordingly.
- Lack of coordination between international and national actors is causing logistical problems.

Aggravating Factors

Weather/Altitude

Kathmandu Valley, situated at an altitude of 1,310m (4,297ft) has a mild climate most of the year. Summer temperature range from 19°C–27°C (from 67°F to 81°F C). In spring (March to April) there are occasional short bursts of rain. May and June can be hot and humid until the monsoon. Meteorologists have predicted rainfalls until 8 May (OCHA 27/04/2015). With monsoons announced for the coming days, fears of localized flooding and water borne diseases have been raised.

Type of Housing/Infrastructure

750,000 people live near the epicentre in poor quality housing (OCHA 27/04/2015). Many people live and work in buildings that will not withstand a significant seismic event. Infrastructure in some of the affected areas is very old and weak (BBC 25/04/2015).
Kathmandu has a high population density; open spaces are scarce and streets are narrow (World Bank).

The road density in Nepal is one of the lowest in South Asia. Over one-third of the people living in hills are more than four hours away from an all-weather road. 60% of road networks, including most rural roads, cannot provide all-weather connectivity. 15 out of 75 district headquarters are yet to be connected by road. (World Bank). In 2013 WFP reported that an earthquake in the area would likely render all roads in and out of the Kathmandu Valley impassable, and damage the airport (OCHA 21/05/2013).

### Key Characteristics of Affected Population and Area

- **Population density:** 209 people per sq. km.
- **Languages:** Nepali, Newari and Hindi understood in some areas.
- **WASH:** Population with access to improved water: 88% (2012) (WHO 2012).
- **Lighting and cooking:** 62.8% of houses in Nepal have electricity. The majority use wood for cooking.
- **Nutrition:** Around 49.3% of children under five are chronically malnourished (FAO, 2010).
- **Literacy rate average:** 65.9% (populstat).

### Response Capacity

#### Local and National Response Capacity

The Government of Nepal is leading the response effort. The National Emergency Operations Centre (NEOC) is operational and tasked with preparing a priority workplan for search and rescue efforts (National Disaster Response Framework 2013). The Humanitarian Country Team has established coordination hubs at the NEOC, the Humanitarian Staging Area, and at the UN office. The Nepal Army has established a

#### Multi-National Coordination Centre (MNCC) at the Army Headquarters coordinating foreign military elements (OCHA 27/04/2015).

The Government is planning to set up camps for the displaced. Ministry of Home Affairs and IOM have mapped all public spaces in and around Kathmandu that can be used for temporary shelters (OCHA 21/05/2013). The Government has held an emergency meeting of its Central Natural Disaster Relief Committee (CNDRC) followed by meetings with Cabinet and the humanitarian community. The Government is also trying to mobilise heavy equipment to remove rubble and carry out search and rescue. The Government requested international humanitarian assistance on 25 April, including deployment of urban search and rescue (USAR) and declared a state of emergency in the affected districts (USAID 26/04/2015). The Governments of China and India have offered the use of their military assets to support the response (UNICEF 25/04/2015). On 27 April, national authorities said that the current USAR capacity on the ground is sufficient to cover identified needs, and prompted all other USAR teams to stand by and not deploy unless they can support with other relief activities.

### Information Gaps and Needs

- There is no information regarding rural areas surrounding Kathmandu. There is an urgent need to prioritize the most affected districts.
- Damage assessments should be a priority.
- There is critical need to assess the condition of roads and connectivity with more remote areas.
- Information regarding displaced populations and their needs is needed.

### Lessons Learned

ACAPS published a Lessons Learned for the Nepal Earthquake on 27 April 2015.