

APRIL 2021



AAPDA  
**SAMVAAD**

**FIGHTING  
FOREST FIRE**



### Review of DMP



On 1 April, NDMA reviewed the Disaster Management Plan of the Department of Justice.

### Review meeting on forest fire in Manipur



On 1 April, Shri Sanjeeva Kumar, Member Secretary, NDMA chaired a meeting with concerned officers in order to assess the forest fire in Manipur, as well as discuss preparedness for the upcoming Forest Fire season in 2021.

### National webinar on HVRA



On 7 April, NDMA organised a national webinar on 'Conducting HVRA studies for State/UT officials' as part of understanding the multi-hazard based disaster-risk, and for the preparation of Hazard Vulnerability Risk Assessment (HVRA).

### Review meeting with BMTPC



On 7 April, Shri Sanjeeva Kumar, Member Secretary, NDMA chaired a meeting with the Executive Director, Building Materials and Technology Promotion Council (BMTPC) and other officers to discuss the Vulnerability Atlas prepared by BMTPC in 2019.

### COVID-19 IEC activities

On 9 April, NDMA undertook a review meeting with States/UTs, SDMAs and gave a presentation on COVID-19 related IEC activities.

### BRICS Joint Task Force on DRM



On 16 April, under the chairmanship of India, the 3rd Meeting of BRICS Joint Task Force on Disaster Risk Management was organised by NDMA. The meeting was chaired by Shri Sanjeeva Kumar, Member Secretary, NDMA. In his opening remark, he highlighted the themes for this meeting, namely, Multi Hazard Early Warning Systems, Volunteerism in Disaster Management and Disaster Resilient Infrastructure, and urged BRICS Member Countries to join hands together to develop a common platform for information and data sharing and chalk out exchange programmes.

## Meeting with CSOs, CBOs, NGOs



On 22 April, NDMA interacted with CSOs, CBOs and NGOs regarding ongoing ground activities and possible measures to undertake to curb the spread of COVID-19.

## Meeting with COVID-19 high load States



On 23 April, NDMA officials met with State Disaster Management Authorities of COVID-19 high load States via video conference to discuss the management of the spread of coronavirus.

## Meeting with CSOs, CBOs, NGOs



On 29 April, NDMA interacted with CSOs, CBOs and NGOs regarding ongoing ground activities to curb the spread of COVID-19 including vaccination drive, psychosocial support etc.

# FIGHTING FOREST FIRE

India experiences forest fire incidents each year. According to the Forest Survey of India (FSI) about 36% of the country's forest cover has been estimated to be prone to forest fire, out of which nearly 4% of the country's forest cover is extremely prone to fire. The forest fire season in India usually occurs between the months of February and June. However, due to climate change and man-made factors, the occurrence, risk and severity of forest fires have increased as of late.

Dzukou Valley, about 30 km from Nagaland's capital Kohima, is a popular trekking destination known for its lilies and biodiversity, was engulfed in fire on 29 December 2020. It took two weeks and the efforts of the National Disaster Response Force, Indian Air Force, local authorities and volunteers to douse the fire completely.

Not long after that, a major fire broke out on 28 March 2021 in Shirui Peak, home of the famous Shirui lilies in Manipur. NDMA held a meeting with concerned officials on 1 April 2021 to assess the situation as well as discuss measures to prepare for future forest fires.

The serene hills of Uttarakhand have also experienced raging forest fires in different parts of the State since the beginning of April 2021, damaging more than 500 hectares of forest land. Forest fire incidents become a matter of concern this year as the country is simultaneously facing COVID-19 pandemic. The smoke rising from forest fires can cause difficulty in breathing and prove to be more deadly for people residing in the hills.

## Causes of forest fire

Forest fire is the burning of vegetation in a forest and is caused by either natural or man-made factors. Natural causes entail lightning, high atmospheric temperatures, and dryness (low humidity).

However, in modern-day society, the anthropogenic origin of the fires is common. Electric spark or any source of ignition which comes into contact with inflammable material in the forest, burning debris, unattended campfires, shifting cultivation, the use of fires by villagers to ward off wild animals, smoking near vegetation and

disposing the cigarette into dry vegetation without putting out the burning butt are some of the causes of man-made forest fire.

A forest fire can be divided into three phases—grass, undergrowth and crown fires. Usually, grass and the dry undergrowth ignite first and are easy to control. If the fire reaches the treetops, especially in the case of conifers, leading to a crown or canopy fire it becomes considerably more difficult to control.

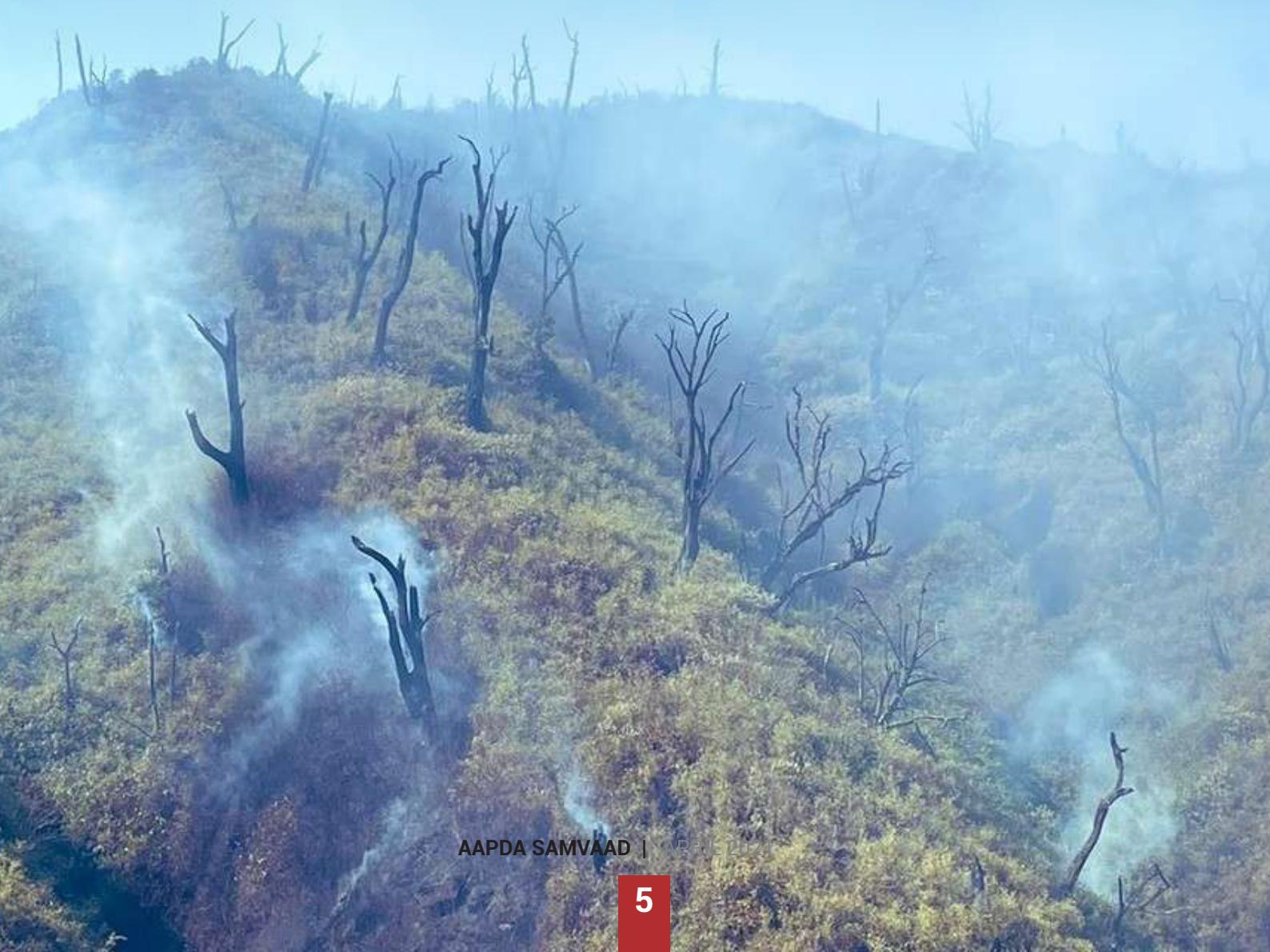
### Protecting our forests

When a forest fire occurs, the entire ecosystem with the plants and animals living within it, are irretrievably lost. The distribution and frequency of forest fires are increasing across the globe. In many regions of the world, forest fires are natural processes and

can have beneficial effects on forests.

However, the recent trend of forest fires present a different picture. Some fires are too severe, occurring in habitats where they were very limited, unseasonal, or even more intense and frequent. In these cases, forest fires pose a serious threat to forest ecosystems and well-being of humans.

In order to protect our forest ecosystems, it is imperative to be vigilant. Generating awareness among the local communities and training them to be the first responders to forest fire incidents can help in taking timely action. Undertaking responsible actions can help in the successful mitigation of man-made forest fire incidents across the country.



# FOREST FIRE

## Do's and Don'ts

### Before

- Make a fire-safe zone around your house. Clean flammable vegetation and debris around the house and any buildings.
- Store water in containers. Install/ service fire extinguishers in the house/ building before the forest fire season.
- Use non-combustible roofing and construction materials, such as metal, slate, or concrete.
- Do not clear land by burning for agriculture. In case you do, please inform the local forest department.
- Do not throw combustible items like biddi, cigarettes or matchsticks in the forest.
- Avoid cooking outside/ in the forest. In case, you have to, please ensure the fire has been extinguished properly.
- In case you stay close to the forest area and cook with firewood ensure the fire is extinguished properly.
- Do not leave the lamps unattended in shrines/ temples closer to the forest.
- Inform the forest department the moment you spot a forest fire.
- Know the local emergency/ helpline number and make sure all in the family are aware about it
- If residing in the forest area, make sure not to store inflammable material like petrol/ kerosene in large quantities inside the house.
- Keep an emergency kit ready.

### During

- When you spot a fire, call the local emergency number and provide information about the fire.

- Don't ignore warnings issued by government agencies and evacuate as soon as possible.
- Make the roof, walls, and the ground around your home damp with water if possible.
- Don't leave the pet animals locked inside the house.
- If a forest fire is blazing nearby, please use a wet cloth to cover your nose and mouth.
- When surrounded by forest fire don't try to outrun the fire, rather locate a water body near you and be there till fire subsides. Lie face down and cover your body with things like wet clothing, soil, or mud.
- Try to avoid breathing in the smoke. Protect your lungs by breathing air closest to the ground.
- If in a car, park as far away from the vegetation and trees, if possible.
- Travel upwind and downhill. Use the wind direction to point you in the safest direction of travel away from fire. If it's blowing toward the fire from your position, then run into the wind. But if the wind is behind the fire, blowing toward you – run on a course that puts you perpendicular to the wind, and move fast.
- Don't stay in a spot with overhanging branches or foliage.
- Don't travel through passes and/or canyons. Their natural wind flow patterns could draw in a fire and trap you.

### After

- Do not go back to your property until officials declare it safe to do so.
- Rebuild with fire resistant material.
- Be careful with the post-fire debris.



# Earthquakes

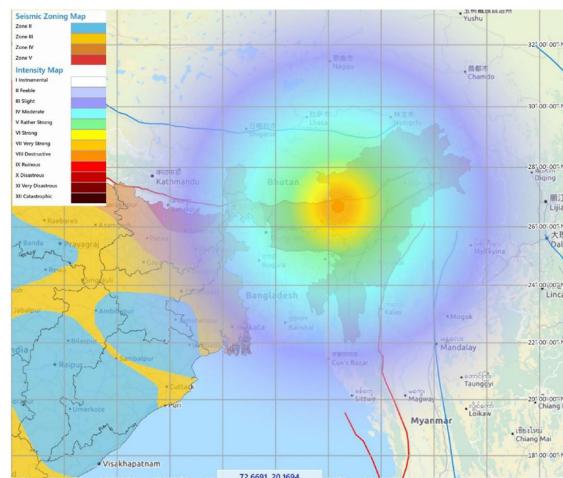
## Staying stable on unstable grounds

At 7:51 am on 28 April 2021, Assam was struck by a massive earthquake of 6.4 magnitude on the Richter scale, according to the National Center for Seismology. The earthquake was felt in the entire northeast region of India and some parts of Bihar and West Bengal. A total of six aftershocks of magnitude ranging 3.2 to 4.7 on the Richter scale were felt within three hours from the time of occurrence of the main shock of 6.4.

The Bureau of Indian Standards has classified regions in India into four seismic zones. These are, zones II (low intensity), III (moderate intensity), IV (severe intensity) and V (very severe intensity). Among these, zone V is the most seismically active region and zone II is the least active. Northeast India falls under 'Seismic Hazard Zone V' and is also one of the six most seismically active regions of the world. The northeastern region is also associated with collisional tectonics where Indian plate subducts beneath the Eurasian Plate.

Earthquake hazards in the northeastern region and elsewhere cannot be predicted, however the disaster can be mitigated. To

reduce the potential for human, material, or environmental losses caused by earthquakes, modern disaster management goes beyond post-disaster assistance and includes pre-disaster planning and preparedness activities, organisational planning, training, information management etc.



(Earthquake intensity map of mainshock  
M: 6.4; Source: NCS)

### Preparing ahead

The impact of an earthquake can certainly be minimised with proper preparation. For this purpose, consulting structural engineers and designing the infrastructure of our cities to be earthquake resistant can help in long term prevention from earthquakes. Damage to buildings is a serious cause of human injury and death during an earthquake. For old homes, it is advised to know whether it complies with the National Building Codes (NBC) to identify potential weaknesses. One should closely inspect their house and also their workplace to determine if there are structural dangers such as cracks on walls and ceilings and work towards repairing them. Fastening shelves securely to walls and placing heavy/large objects on lower shelves also helps in preventing damage during an earthquake.

When an earthquake does strike, remember the Drop-Cover-Hold technique. Drop on your hands and knees, Cover your head and neck with your hand and seek shelter under a table or sidle up to the interior wall, away from tall objects that might topple. Hold onto the leg of a table or if you're outside continue to shield your head and neck with your arms.

### Protect Yourself During Earthquakes!



Even after an earthquake subsides, one has to be careful of the aftermath including



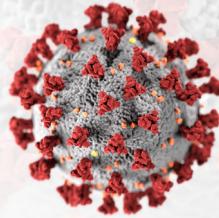
aftershocks. One shouldn't enter damaged buildings, and if stuck in rubble, make sure to protect the nose, mouth and eyes from dust. Make noise by whistling or tapping on a surface to get attention. When outside, one should be careful from hazards like fallen electrical lines, ruptured gas pipes etc.

### Towards a quake- resilient future

Frequent earthquakes have increased the importance of mainstreaming earthquake resistant infrastructure in India. Several codes on earthquake engineering have been produced in construction of quake-resistant structures and regarding tests & measurements therewith by the Bureau of Indian Standards. Various mechanisms have been adopted while designing buildings which make them more earthquake resistant, such as bracing, base isolation, dampers etc, to enhance building vibration control. Vibration control is the reduction of desired building structural response to earthquake or wind forces on the structure.

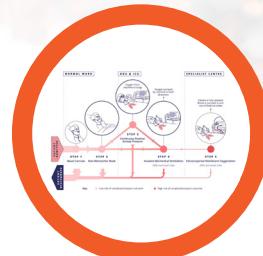
One should also be aware of the necessary compliances and guidelines while making buildings. Awareness regarding prevention methods during an earthquake along with relief and reconstruction is a must for people. Continuous inspection and care of buildings is also critical in minimising damage from earthquakes. An earthquake can strike anytime but it's upon ourselves to be prepared for tomorrow which can help to save our present.

# THE FIVE FAQS - USE OF OXYGEN DURING COVID-19



## What is the role of oxygen during COVID-19 disease?

The requirement of medical oxygen is enhanced during COVID-19, as the disease primarily infects the lungs and in severe cases, causes death due to Acute Respiratory Distress Syndrome (ARDS) and pneumonia.



## What should be the normal oxygen saturation as recorded by a Pulse Oximeter?

Normal level of oxygen is usually 95% or higher. In Chronic Obstructive Pulmonary Disease (COPD) or sleep apnea, it is around 90%. If your home 'SpO2' (percentage of oxygen in blood) reading is lower than 95%, call your healthcare provider.



## How do I check my oxygen level at home without a Pulse Oximeter?

Signs of low oxygen level are rapid heart rate and fast breathing rate. Under conditions of low oxygen, your body responds by increasing your heart rate (normal: 60-100 beats) and speeding up your breathing rate (normal: 12-20 breaths). Another sign is cyanosis, or a bluish colour change on your lips, nose, or fingertips. Seek medical help in case of bluish discolouration.



## When does a patient require medical oxygen in a COVID-19 positive case?

Moderate and Severe cases of COVID-19 where the infection induces shortage of oxygen in the body due to its impact on lungs require medical oxygen and immediate oxygen therapy. Oxygen acts as a life-saver for COVID-19 patients.



## When does a patient require Mechanical Ventilator Support?

During respiratory failure i.e. difficulty in breathing or not getting enough oxygen into the blood. The ventilator controls how often it pushes air in and out of your lungs. You may be fitted with a mask to get air from the ventilator, or a breathing tube if your breathing problem is more serious.



# Stay safe during **CYCLONE**

## Do's & Don'ts

### BEFORE CYCLONE

- Ignore rumours, Stay calm, Don't panic
- Keep your mobile phones charged to ensure connectivity; use SMS
- Listen to radio, watch TV, read newspapers for weather updates
- Keep your documents and valuables in water-proof containers
- Prepare an emergency kit with essential items for safety and survival
- Secure your house; carry out repairs; don't leave sharp objects loose
- Untie cattle/animals to ensure their safety

### DURING & AFTER CYCLONE

#### Indoors

- Switch off electrical mains, gas supply
- Keep doors and windows shut
- If your house is unsafe, leave early before the onset of a cyclone
- Listen to radio/transistor
- Drink boiled/chlorinated water
- Rely only on official warning

#### If Outdoors

- Do not enter damaged buildings
- Watch out for broken electric poles and wires, and other sharp objects
- Seek a safe shelter as soon as possible

#### Fishermen Should

- Keep a radio set with extra batteries handy
- Keep boats/rafts tied up in a safe place
- Not venture out in the Sea



### Evacuation during COVID-19

While going out and inside the Safe Shelter always :

- Wear a mask
- Keep sufficient amount of hand sanitiser and use it often
- Maintain social distance



Address:

**NDMA Bhawan**

A-1, Safdarjung Enclave, New Delhi - 110029

Telephones : +91-11-26701700

Control Room : +91-11-26701728

Fax : +91-11-26701729



controlroom@ndma.gov.in



/NDMA.in



@ndmaindia