

# DISASTER MANAGEMENT





What is disaster?





# Disaster



“A disaster can be defined as any occurrence that causes damage, ecological disruption, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area.”

*(WHO)*

# Disaster



“Disaster means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, or by accident or negligence which leads to substantial loss of life of human suffering or damage to and destruction of property, or damage to, or degradation of environment and is such a nature or magnitude as to be beyond the coping capacity of the community of the affected area.”

*Disaster Management Act 2005*



# India and disasters

India is amongst the most disaster prone countries in the world due to high vulnerability to natural disasters like floods, earthquakes, cyclones and droughts.





58.6 per cent of the landmass is prone to earthquakes of moderate to very high intensity



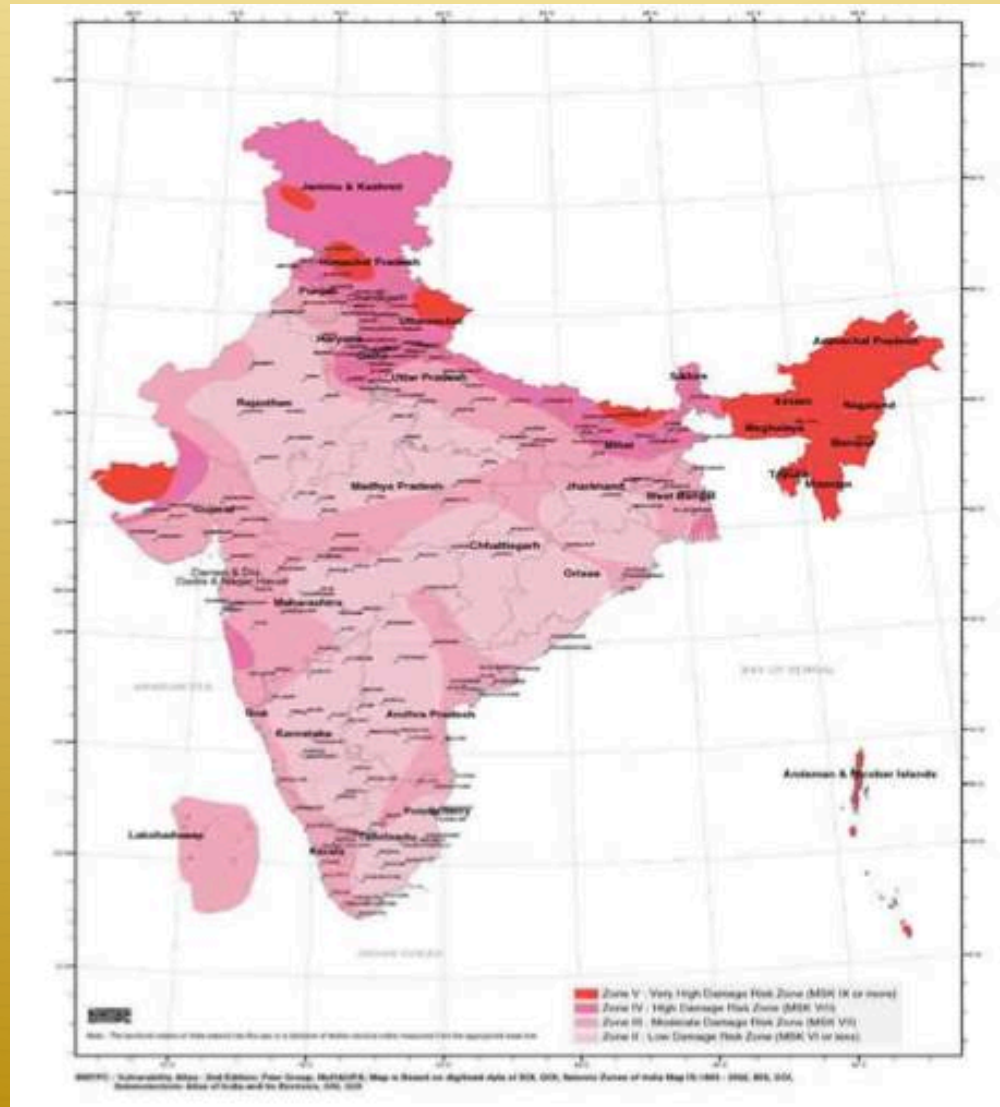


12% land prone to floods

2/3<sup>rd</sup> coastline prone to cyclones  
and tsunami

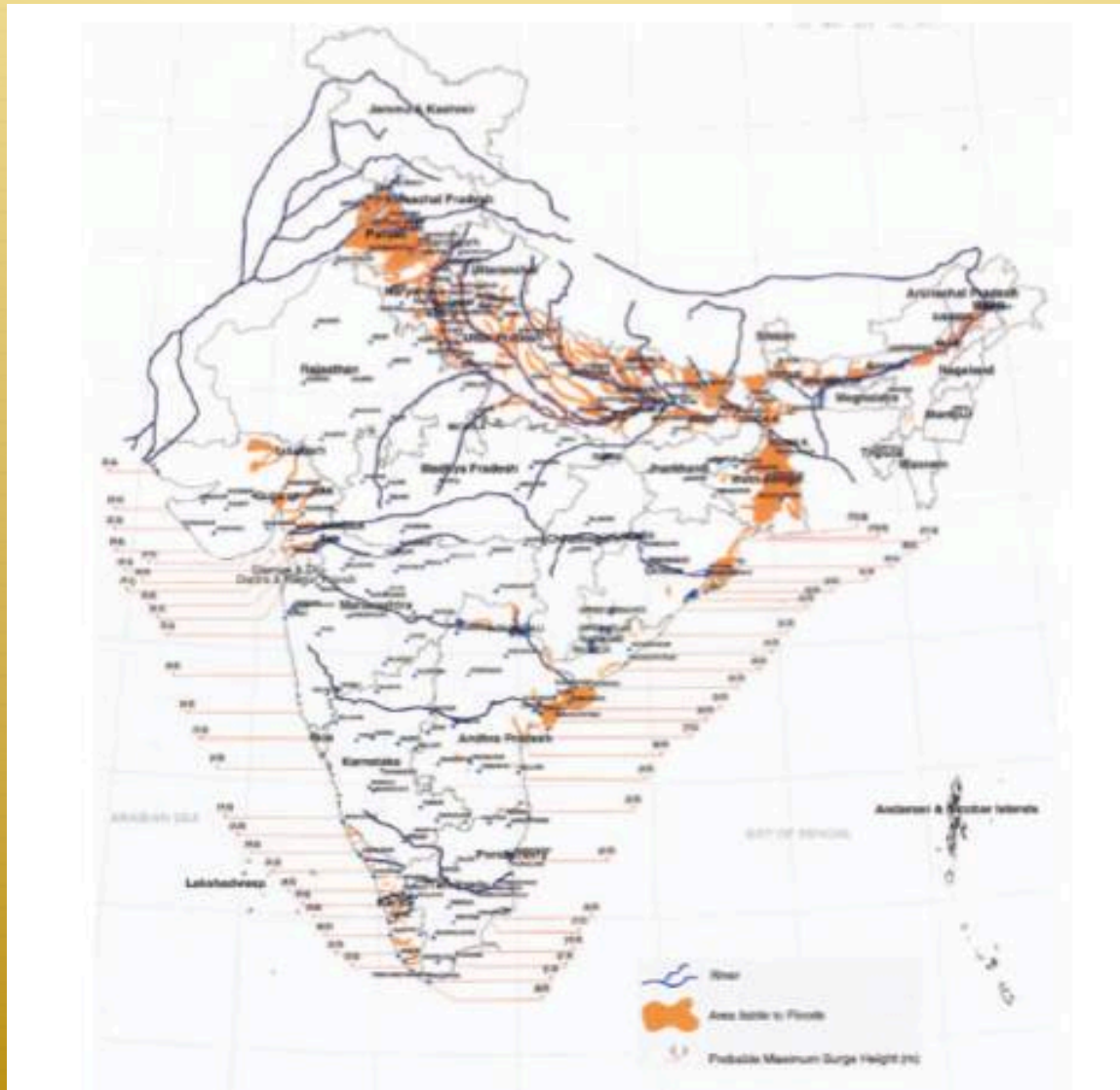
68% prone to drought

# Earthquake zones

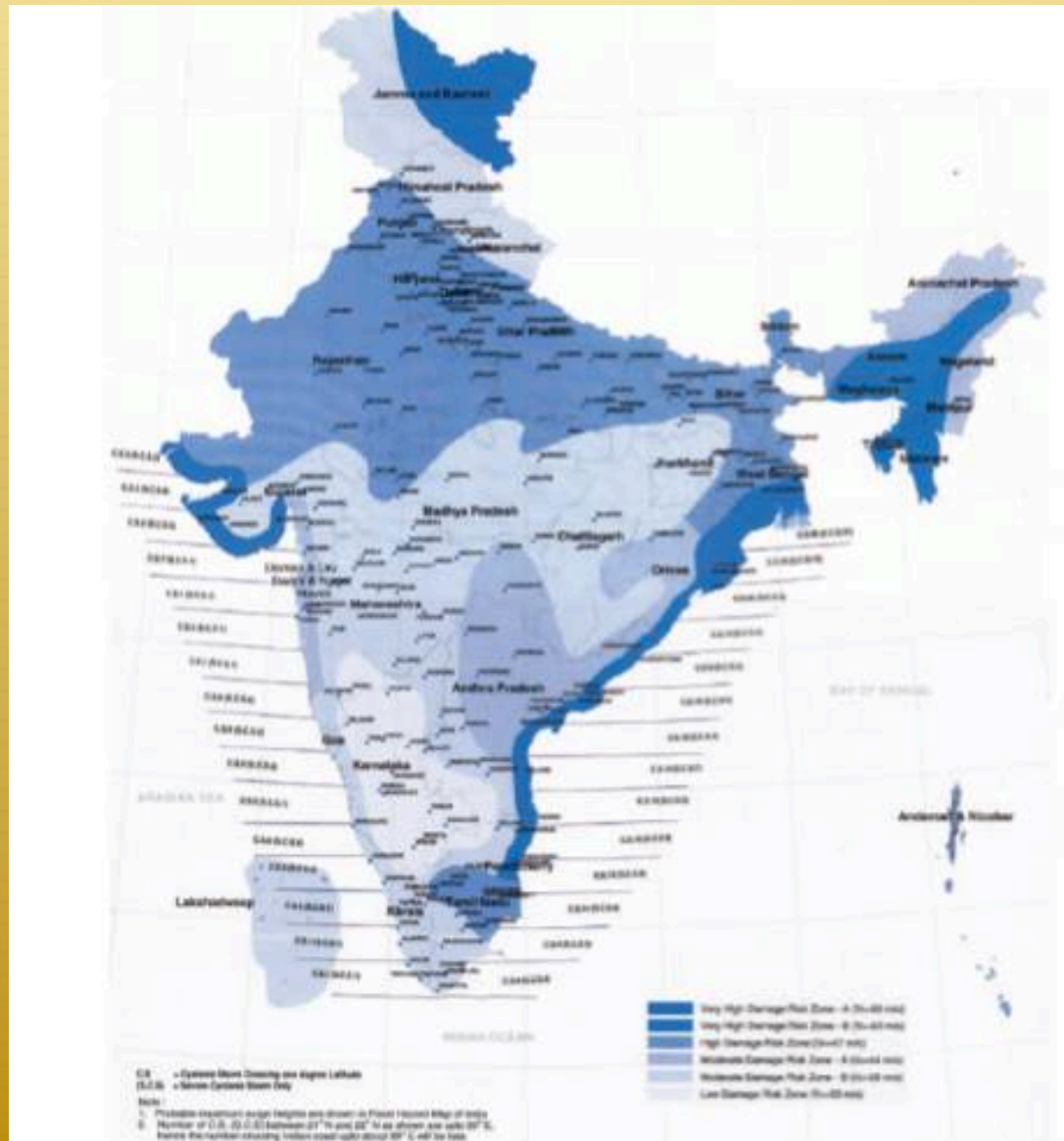




# Flood zones

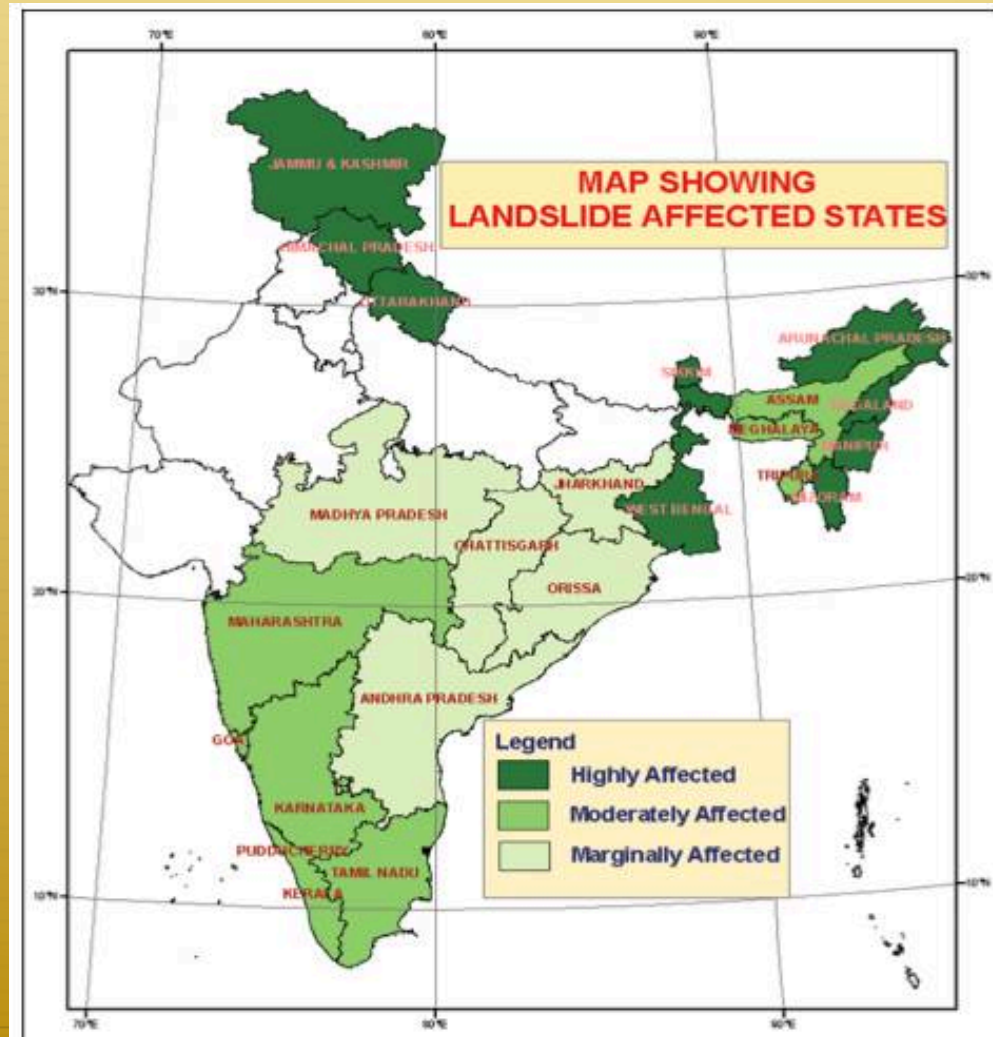


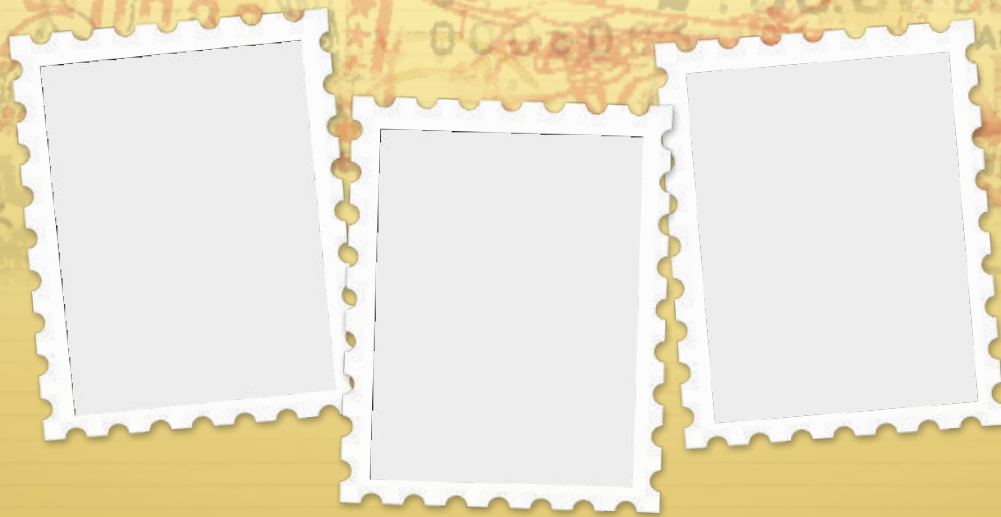
# Wind and cyclone zones





# Landslide-affected states

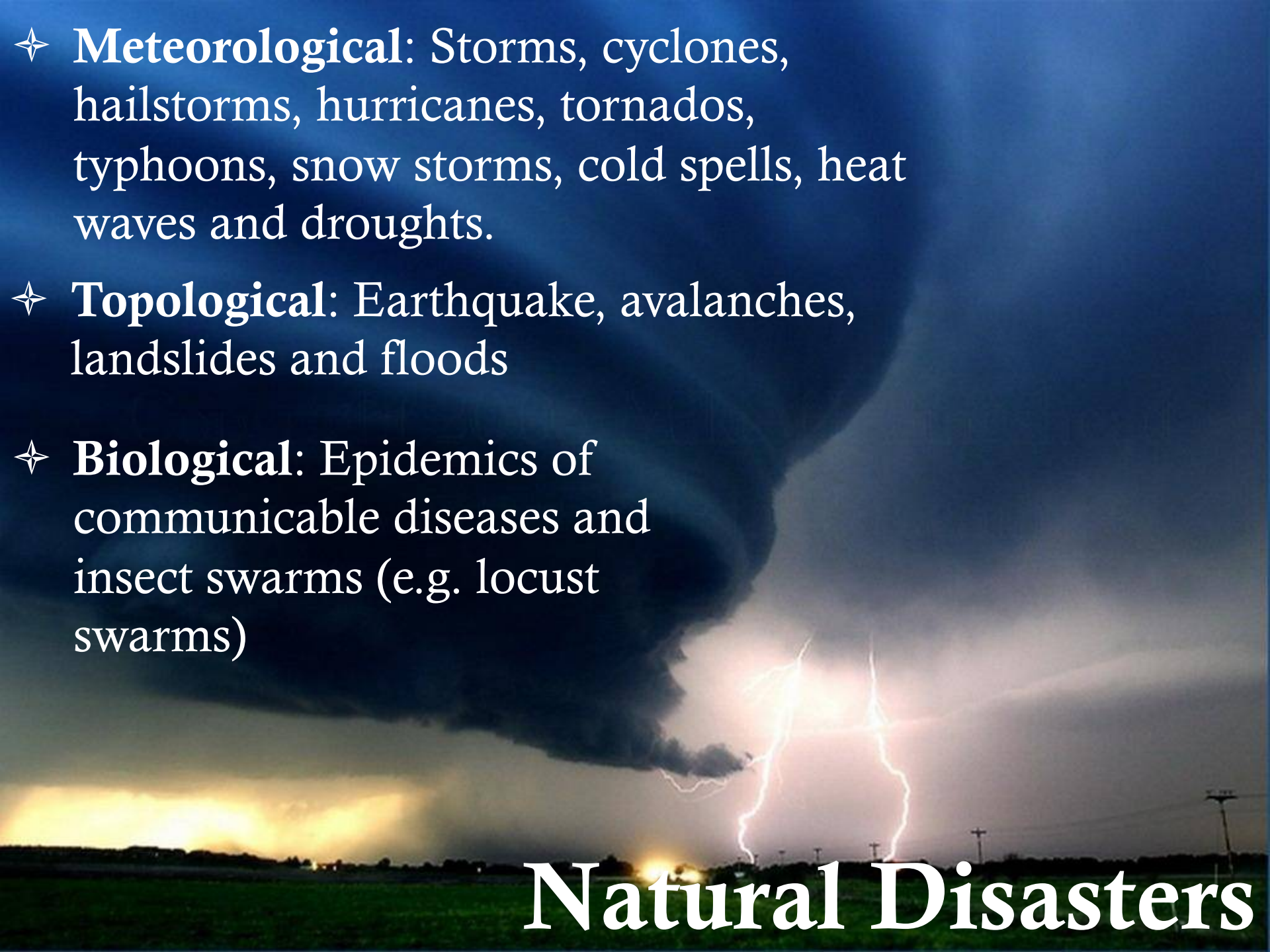




# Name some disasters

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- ✦ **Meteorological:** Storms, cyclones, hailstorms, hurricanes, tornados, typhoons, snow storms, cold spells, heat waves and droughts.
  - ✦ **Topological:** Earthquake, avalanches, landslides and floods
  - ✦ **Biological:** Epidemics of communicable diseases and insect swarms (e.g. locust swarms)

# Natural Disasters

# Man-made Disasters

A large, dark, billowing plume of smoke and dust rises from a city, indicating a major disaster. The smoke is thick and dark brown, with a lighter, yellowish-brown base near the ground. The city below is densely packed with buildings of various heights and colors, mostly in shades of brown, orange, and white. The background shows a hazy horizon with some distant hills or mountains.

## Accidents

Transportation accidents,  
collapse of buildings,  
nuclear leak

## Civil disturbances

Riots and  
demonstrations

## Warfare

Conventional warfare,  
Non - conventional  
warfare

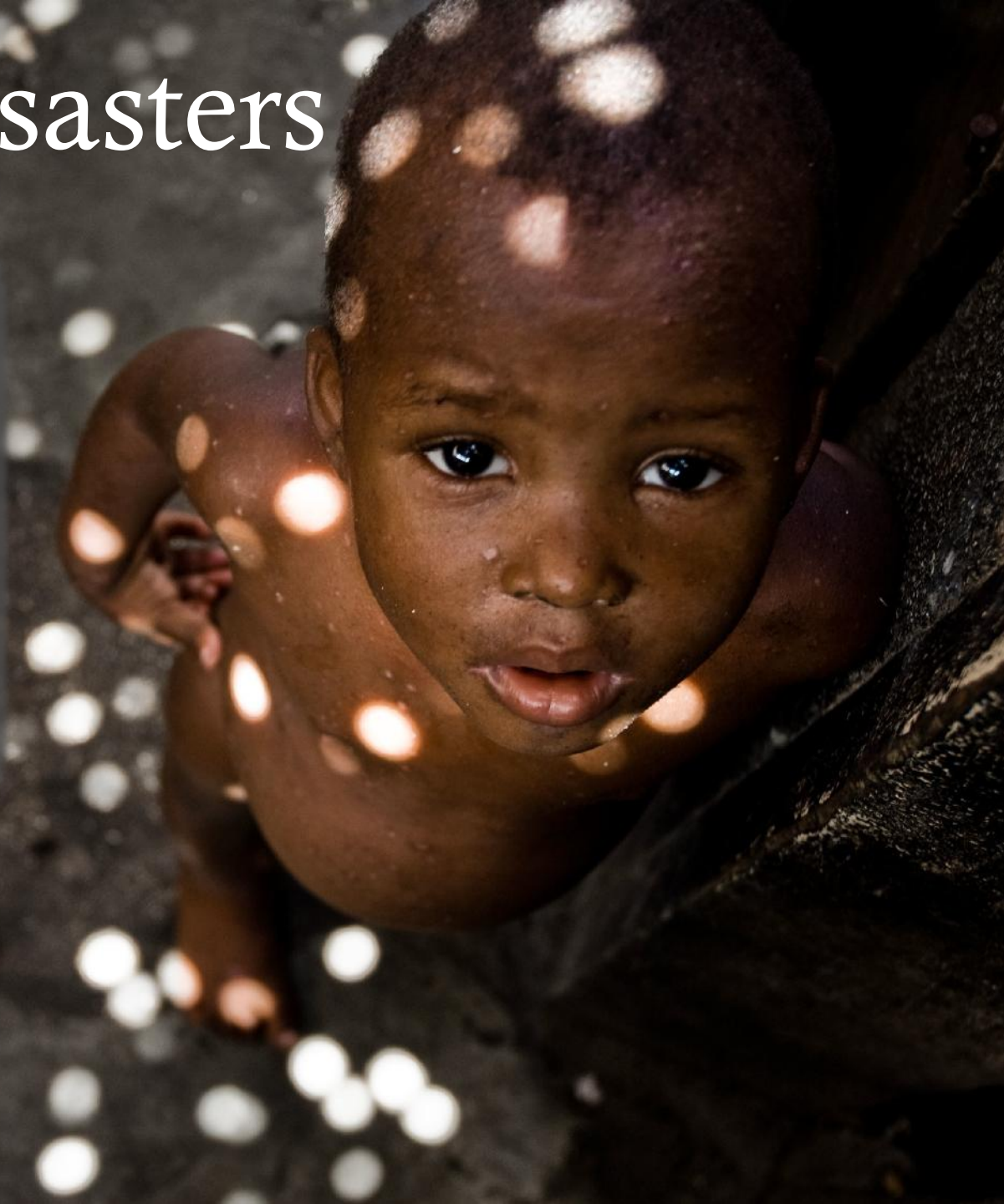
## Refugees

Forced movements of  
large number of people  
usually across the frontiers



# Effect of disasters

- ✦ Injuries, Death
- ✦ Emotional stress
- ✦ Disease outbreak-communicable diseases, mental illness





# Effect on health and healthcare systems



## Factors

- ✦ Pre existing Diseases in the Population
- ✦ Ecological Changes resulting from Natural Disasters-  
vector-breeding, zoonosis
- ✦ Population displacement
- ✦ Damage to public utilities
- ✦ Interruption in public health services
- ✦ Decreased immunity



## Disaster Management

### Disaster Mitigation

#### Risk Assessment

Hazard  
Assessment

Voluntary  
Assessment

#### Prevention

Structural  
Measures

Non Structural  
Measures

#### Preparedness

Contingency  
Planning

Warning &  
Evacuation

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### Disaster Response

#### Relief

- Search & Rescue
- Security
- Food & Water
- Shelter

#### Rehabilitation

- Sanitation
- Clothes
- Health care

#### Reconstruction

# Disaster response



- ✦ Search, rescue and first-aid
- ✦ Triage



## TAG

Patient Name:

Filled out by:

**IMMEDIATE**  
Life Threatening

Respirations – Over 30/Minute  
Profusion – Over 2 Seconds  
Mental Status – Can't Do

Injuries:

## TRIAGE TAG

Patient Name:

Filled out by:

**MINOR**  
Walking

All Walking Wounded are Classified as  
Minor.

Injuries:

## TRIAGE TAG

Patient Name:

Filled out by:

**DELAYED**  
Serious, Not Life  
Threatening

Respirations – Under 30/Minute  
Profusion – Under 2 Seconds  
Mental Status – Can Do

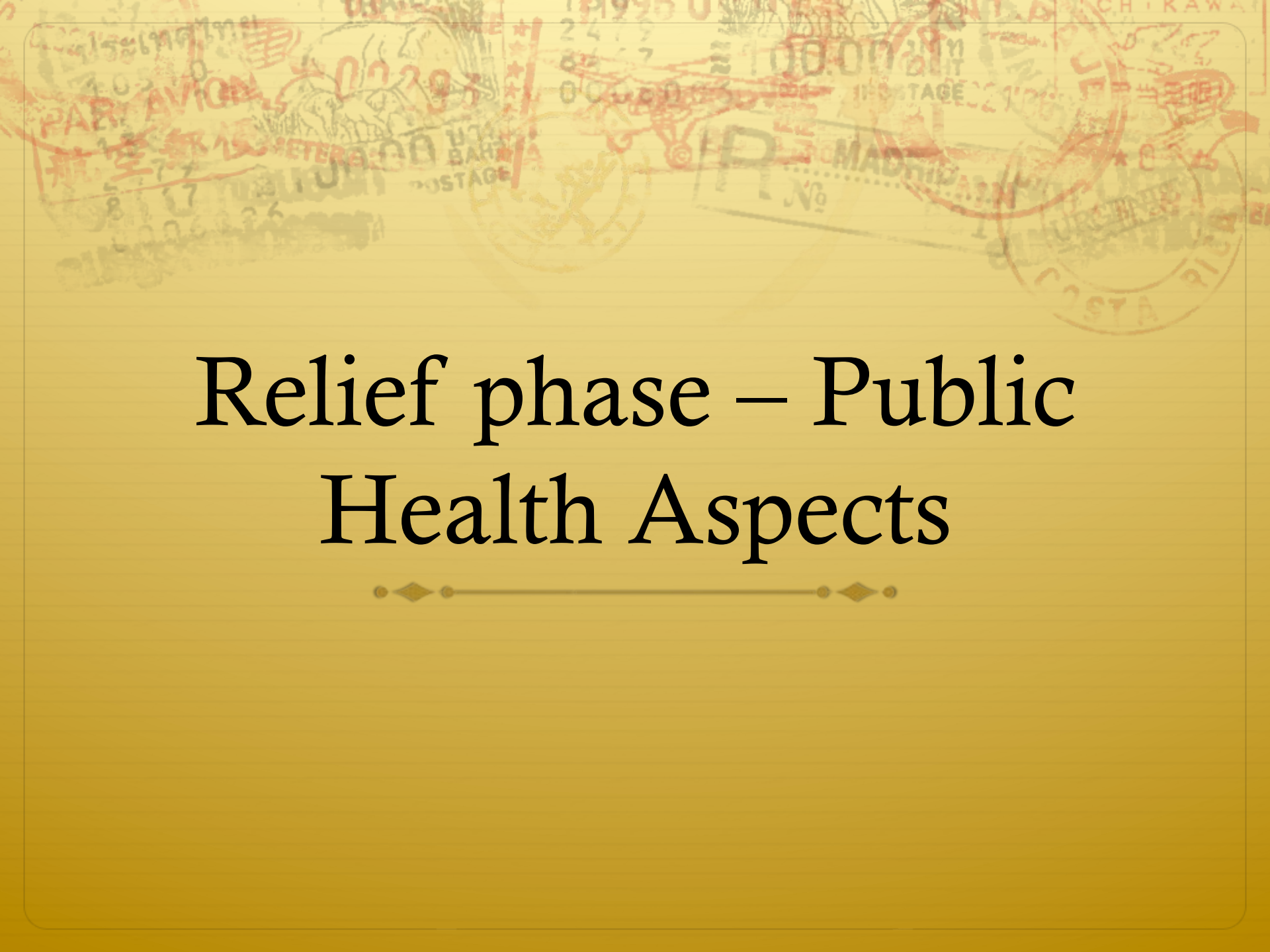
Injuries:

## TRIAGE TAG

Patient Name:

Filled out by:

**DEAD**  
No Respirations



# Relief phase – Public Health Aspects

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# Excreta disposal



# Accommodation





# Water supply



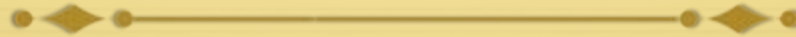


# Solid waste management





# Vector Control



# Food and Nutrition





# Disease surveillance

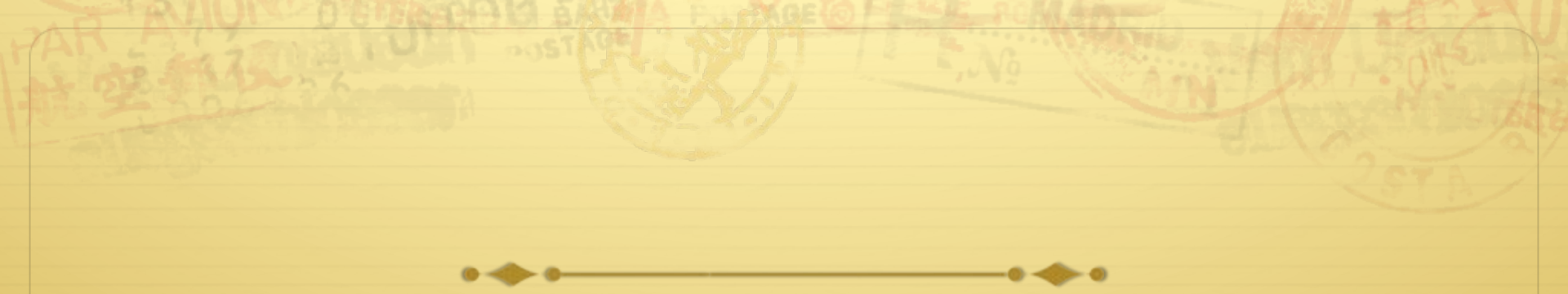




# Vaccination







**All of the following are examples of natural disasters except**

- (a) Meteorological Disasters
- (b) Topological Disasters
- (c) Accidents
- (d) Biological Disasters.



**Relief, Rehabilitation and reconstruction are essential components of**

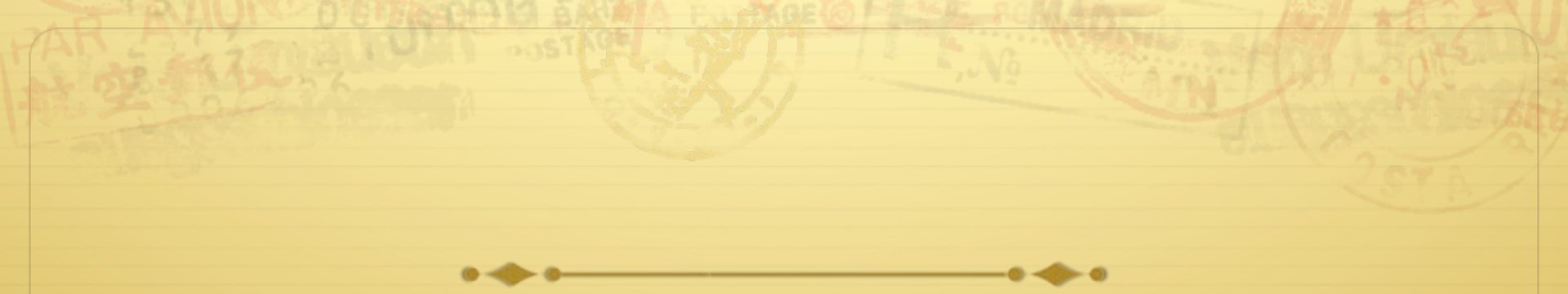
- (a) Disaster Mitigation
- (b) Disaster Response
- (c) Both of the above
- (d) None of the above.





**All of the following factors influence the transmission of communicable diseases after natural disasters, except**

- (a) Damage to public Utilities
- (b) Population Movements
- (c) Interruption in Public Health Services
- (d) Social reactions.



**Mass vaccination campaigns against one of the following diseases would be imperative and helpful in times of disasters**

- (a) Typhoid
- (b) Cholera
- (c) Scrub Typhus
- (d) Measles.



The background features a collage of vintage postage stamps and postmarks. Visible elements include a red circular postmark from 'PAR AVION' (Airmail) with a date of '02 29 35', a yellow circular postmark from 'MADRID', and a red circular postmark from 'COSTA RICA'. There are also various numbers and text fragments like '100.00', 'POSTAGE', and 'CHITRAWA' scattered across the top half of the image.

# Questions??

A decorative horizontal line with diamond shapes at each end, positioned below the main text.