

WATERBORNE DISEASES

# WORLDS LEADING LIFE-THREAT

ACCORDING TO SEVERAL RECORDS, ANNUALLY 3.4 MILLION PEOPLE LOST THEIR LIVES GLOBALLY DUE TO WATERBORNE DISEASES

# WATERBORNE / DISEASE

Waterborne diseases are a global concern, affecting both developed and developing countries. They're caused by harmful germs like bacteria and protozoa contaminating our drinking water.

# TYPES OF WATER BORNE DISEASES



Diarrhea

Bloating

Diarrhea

Nausea

Fever

Loss of appetite

Abdominal pain

Dehydration

Severe abdominal cramps

Altered bowel movements

AMEBIASIS

Abdominal cramping / Stomach pain

# DIARRHEA

It is one of the most common waterborne diseases, which is characterized by loose, watery loose stool or frequent need to have a bowel movement.

Amebiasis is a gut infection caused by a

parasite. It happens when you eat or drink contaminated stuff. It spreads

when infected stool gets into water. Poor

sanitation areas are prone. Weak immune systems and travel to

immune systems and tr unsanitary places raise the risk.

Symptoms of Amebiasis

Symptoms of Diarrhea



#### CHOLERA

Cholera, a serious illness caused by contaminated water, starts mildly but can quickly become life-threatening. It spreads through unsafe water and unclean food. Prevention includes keeping water clean and maintaining good hygiene.

#### Symptoms of Cholera

- Diarrhea
- **Dehydration**
- Vomiting
- Muscle cramps
- Low blood pressure
- Thirst

## TYPHOID

Typhoid fever is a common illness in areas with poor sanitation. It's highly contagious and spreads through contaminated water, food, and bad hygiene. The bacteria live in the intestines and spread through contact with infected feces

Symptoms of Typhoid

- Headache
- High fever
- Abdominal pain
- Diarrhea or constipation
- Weakness or fatigue



## HEPATITIS A

Hepatitis A is a type of liver infection that occurs due to the consumption of food or water. It can also be developed by coming in close contact with the person infected with hepatitis A. It is a short-lived liver infection that is highly contagious.

#### Symptoms of Hepatitis A

Stomach upset, Yellowing of skin or whites of the eyes, Fever, Diarrhea, Joint pain, Fatigue





In Pakistan, the arrival of the monsoon season heralds heavy rainfall, but it also brings with it a host of challenges regarding waterborne diseases.



# **CONTAMINATED WATER SOURCES:**

The flooding caused by monsoon rains can disrupt sanitation infrastructure, leading to open defecation and further contamination of water sources. Lack of access to clean water and proper sanitation facilities exacerbates the spread of waterborne diseases.



# **POOR SANITATION:**

The heavy rain can flood sewage systems, contaminating water sources with human and animal waste. This contamination increases the risk of waterborne diseases like cholera, typhoid, and amebiasis.



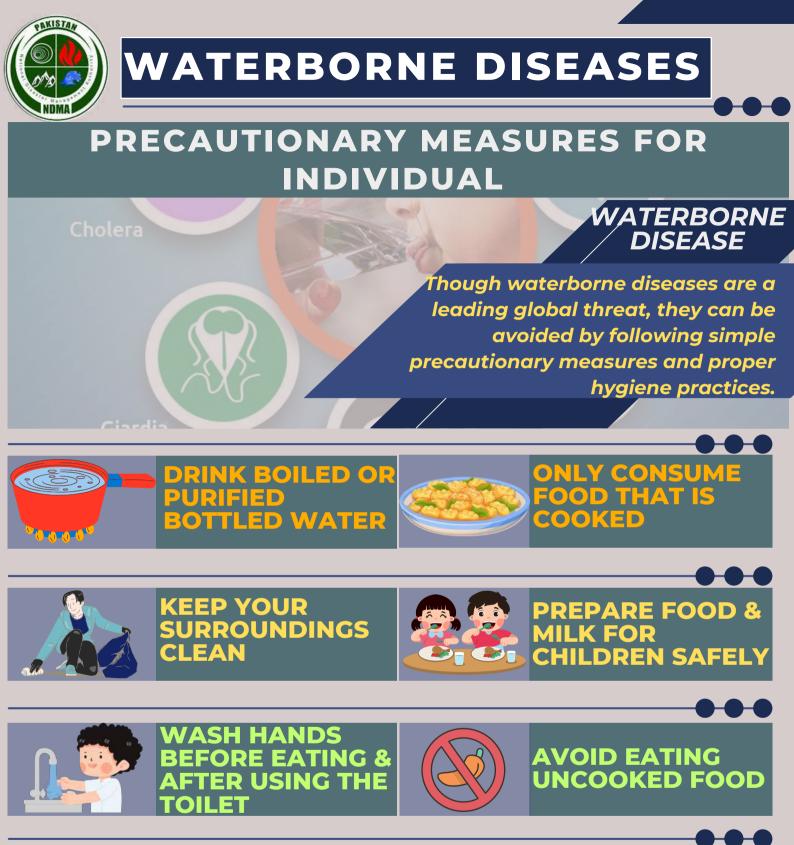
# **STAGNANT WATER:**

The stagnant water left behind by the monsoon rains creates breeding grounds for mosquitoes, which can transmit diseases like dengue fever and malaria, in addition to waterborne diseases.



# DISPLACEMENT AND OVERCROWDING:

Monsoon-related disasters such as floods and landslides can displace populations and lead to overcrowding in temporary shelters or refugee camps. These crowded conditions increase the risk of disease transmission, including waterborne diseases.





CHECK FOOD FOR APPEARANCE, SMELL, & TASTE



AVOID FOOD EXPOSED FOR OVER 4 HOURS



KEEP FOOD SAFE FROM PESTS



AVOID FLOOD-CONTAMINATED ITEMS



# WATERBORNE DISEASES

# **GUIDLINES FOR DEPARTMENTS**

Departments can tackle waterborne diseases by promoting awareness and basic sanitation. Collaborating with health authorities and monitoring water quality are key.



# **ENSURE CLEAN WATER SUPPLY:**

Maintain water treatment facilities and conduct regular testing to ensure safe drinking water for the community.



## SANITATION INFRASTRUCTURE:

Invest in proper sewage systems and waste management to prevent contamination of water sources.



#### **HYGIENE PROMOTION:**

Educate the public about the importance of handwashing, proper food handling, and sanitation practices to prevent waterborne diseases.



## **COLLABORATION:**

Work with local health authorities, NGOs, and community organizations to address water and sanitation issues effectively.



## MONITORING AND SURVEILLANCE:

Implement systems for monitoring water quality, disease surveillance, and early detection of outbreaks to respond promptly and effectively.



## **EMERGENCY RESPONSE PLANS:**

Develop and implement plans for managing waterborne disease outbreaks during natural disasters, including flood preparedness and response measures.



## **CAPACITY BUILDING:**

Provide training and resources to staff members and communities to enhance their capacity in water and sanitation management and emergency response.



# WATERBORNE SKIN DISEASES

PRECAUTIONARY MEASURES FOR INDIVIDUAL

Departments can tackle waterborne skin diseases by promoting awareness and basic sanitation. Collaborating with health authorities and monitoring water quality are key.

P	SCHISTOSOMIASIS:	
	CUASES:	Parasitic worms from the Schistosoma specie
	TRANSMISSION:	Contact with contaminated freshwater where the parasite's larvae live
	SYMPTOMS:	Itchy rash, fever, chills, muscle aches, later potentially chronic conditions affecting organs
	PREVENTION:	Avoiding swimming in contaminated water, proper water sanitation
Lepiospirocis	LEPTOSPIROSIS:	
	CUASES:	Bacteria Leptospira
	TRANSMISSION:	Contact with contaminated water or soil, especially through cuts or abrasions on the skin.
	SYMPTOMS:	Fever, headache, chills, muscle aches, rash
	PREVENTION:	Avoiding contact with contaminated water, proper protective clothing, and sanitation
	DERMATITIS:	
	CUASES:	Larvae of certain parasites (often from birds and mammals)
	TRANSMISSION:	Direct contact with contaminated water, particularly in freshwater lakes and ponds
	SYMPTOMS:	Itchy rash, raised red spots
	PREVENTION:	Avoiding swimming in contaminated water, drying off with a towel immediately after swimming
VIZ:	HOOKWORM INFECTION:	
	CUASES:	Larvae of hookworm species.
	TRANSMISSION:	Walking barefoot on contaminated soil or through direct contact with contaminated water
	SYMPTOMS:	Itchy rash at the site of entry, abdominal pain, diarrhea, anemia
	PREVENTION:	Wearing shoes, avoiding contact with contaminated soil and water
	HOT TUB RASH	(PSEUDOMONAS DERMATITIS)
- Aller	CUASES:	Bacteria Pseudomonas aeruginosa
	TRANSMISSION:	Contact with contaminated water, often in inadequately treated hot tubs or pools
	SYMPTOMS:	Itchy, red rash, pus-filled blisters
~	PREVENTION:	Proper maintenance and chlorination of hot tubs and pools