

INFECTIOUS DISEASE AND CLIMATE CHANGE

NAME: Asma Essa
Student no: 2811
YEAR: 2
BLOCK: PTS
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OBJECTIVES:

- Define climate change
- Influence of climate change on infectious disease
- Vector borne disease and temperature sensitivity effect
- Discuss the El Niño and La Niña impacts
- Outline climate change prevention



Climate change

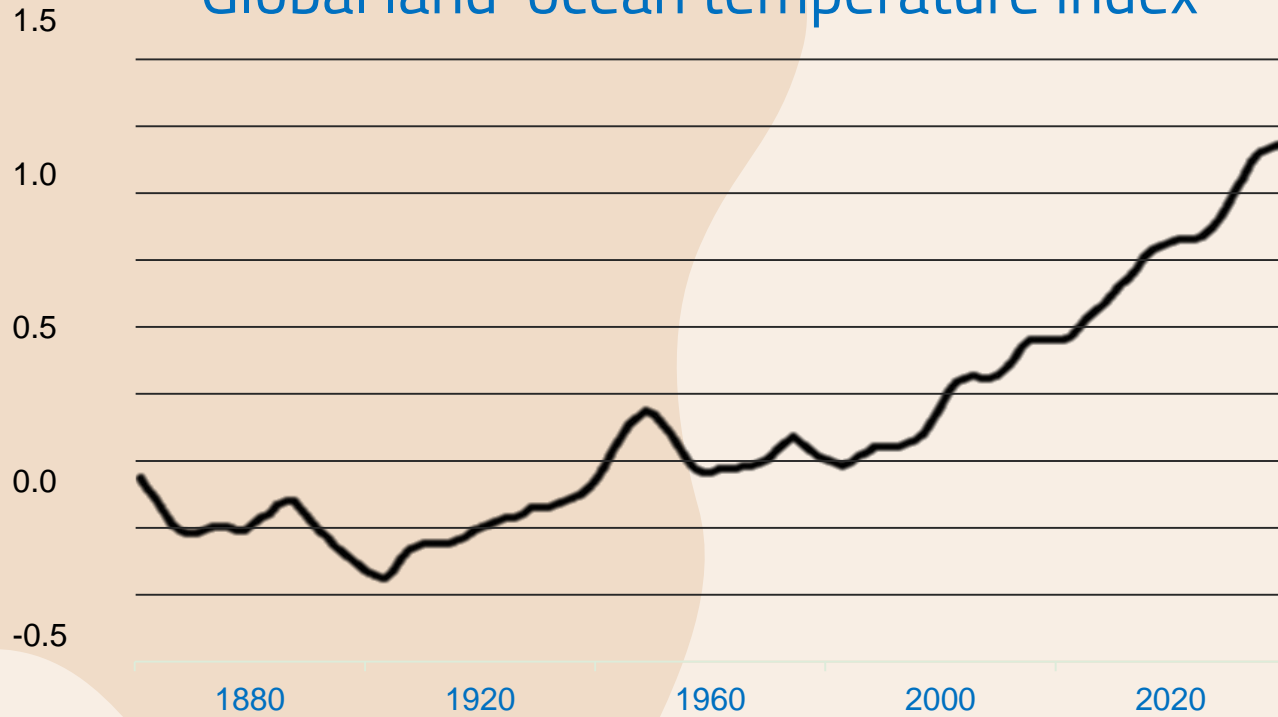
It's the alteration of climate over long time periods variations in temperature, humidity and atmospheric pressure.

The major reason of the earth's continued warming :
The increase in carbon dioxide and other greenhouse gases

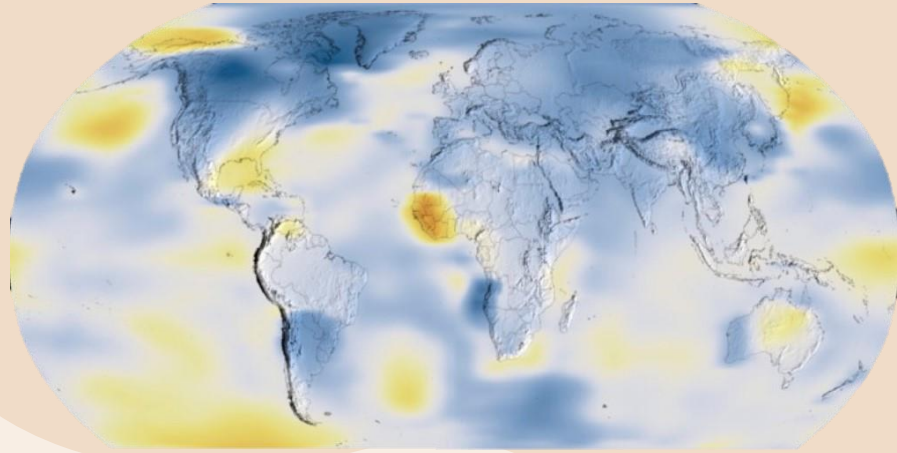
Which are a result of human activities that led to an extreme weather events



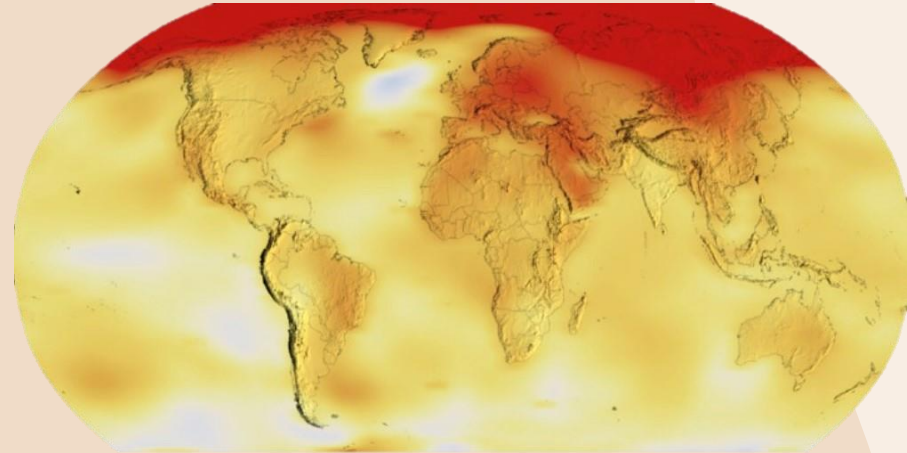
Global land-ocean temperature index



Temperature difference



1884



2021

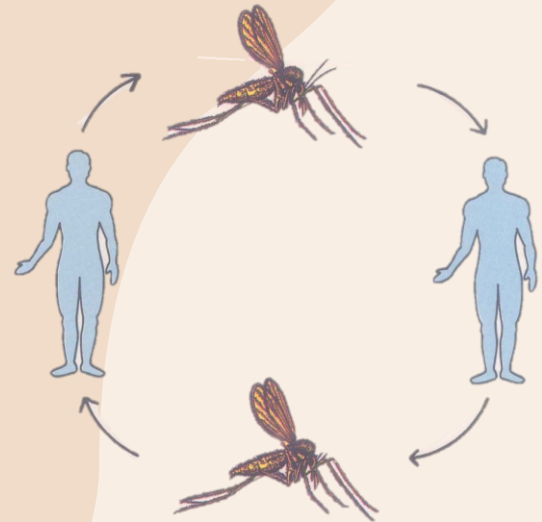
Climate change and infectious diseases



- Many infectious agents and their vector are sensitive to climatic conditions
- Both salmonella and cholera bacteria proliferate more rapidly at higher temperatures
- Change in the temperature can change the geographical distribution for malaria
- Increase of the humidity can increase the vector survival of dengue fever

Vector borne diseases and temperature sensitivity effects

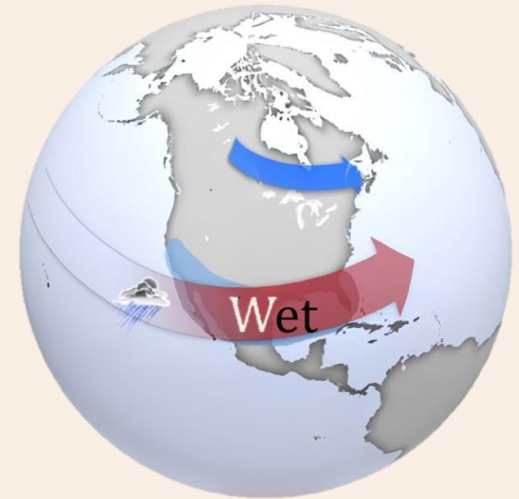
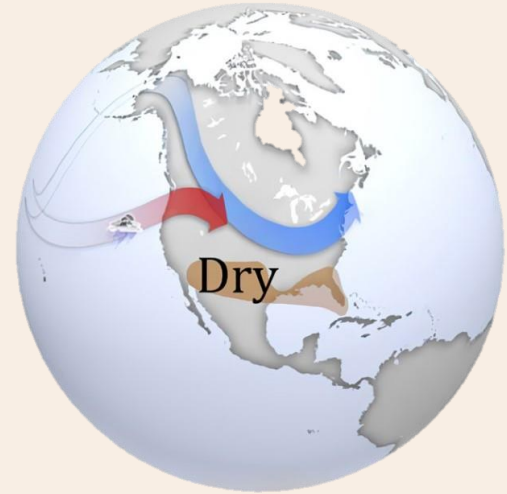
1. Chance of survival
2. Transmission season
3. Distribution
4. Genetic shift



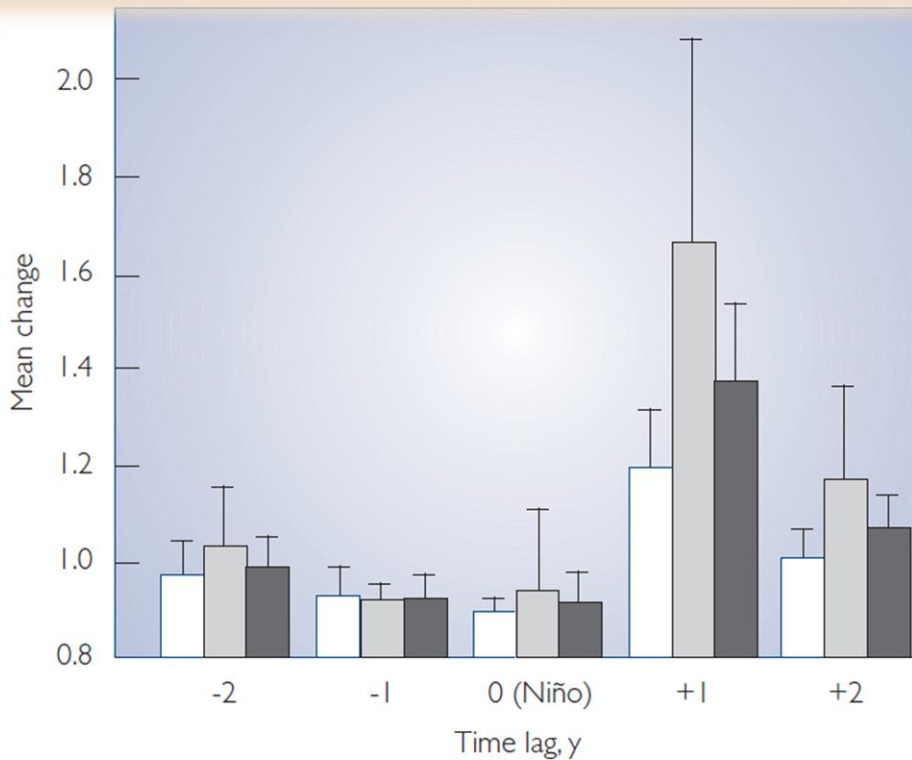
El Niño and La Niña

Both events start in the Pacific Ocean, but they are opposites.

La Niña causes water in the eastern Pacific to be colder than usual with drought to the area while, El Niño can cause the water to be warmer than usual causing lots of rain.



Relationship between reported malaria cases and El Niño in Venezuela.



Prevention

- Raise awareness
- Green energy
- Water waste
- Food waste and eat more greens
- Less electricity
- Recycle



Conclusion

- Climate change is a very serious thing that we're facing
- Climate change has a huge influence on infectious diseases
- We can prevent it with a little change in our routine
- Raising awareness is the most important move



Reference

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**THANK YOU FOR
YOUR ATTENTION !!!**

