#### **Base Frequency**

#### **Base frequency set to AA**

- 1. Hold your On/Off button for 2 seconds (your current frequency will flash).
- 2. Press A, then A.
- 3. Your selected frequency will display on the remote display.

#### LS 2X03 - Lecture 6 – Impacts on Health of Climate Extremes

- 1. Earth's Future Climate
- 2. What are Climate Extremes?
- 3. What are Heat Waves?
- 4. Climate Change and Future Impacts on Health
- 5. Responses to Risks

#### **Key Concepts**

- Climate Extremes
- Exposure trends
- Heat waves
- Future Health Risks
- Options for Response

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(a)	RCP2.6 Change in average surface	e temperature (1986–200	RCP8.5 5 to 2081–2100)	
(		n of the second		***
(b)	-2 -1.5 -1 -0.5 0 0.5 Change in average pre	1 15 2 3 4 ecipitation (1986–2005 to	5 7 9 11 2081–2100)	
(		n e e e e e e e e e e e e e e e e e e e		N N

## 2. What are Climate Extremes?

- 1. those based on simple climate statistics, which include extremes such as:
- •
- 2. more complex event-driven extremes, i:e:
- do not necessarily occur every year at a given location

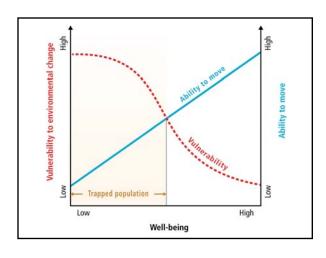
## Hurricane Katrina, August 2005

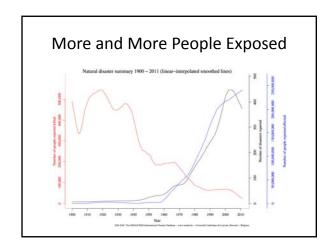


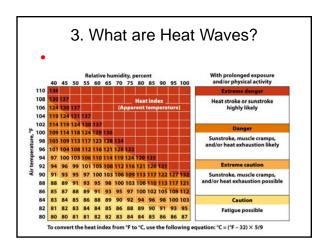
# North India Floods, 2013

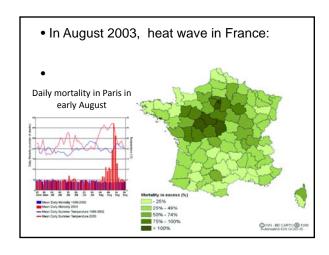


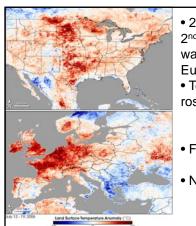
# Vulnerability to Climate Extremes Prevalent Wilnerability Index (PVI) Evaluated for 2007 No. respus Jamels Countenals US shades US shades US shades Used as 10 lags Evaluated for 2007 No. respus Jamels Countenals US shades US shades





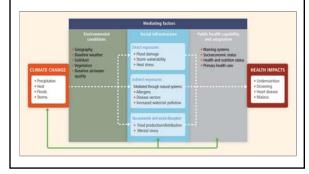




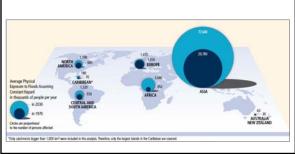


- 2006 Heat wave: 2<sup>nd</sup> massive heat wave to hit Europe in 4 years
  • Temperature
- rose to:
- France:
- Netherlands:

# 4. Climate Change and Future Impacts on Health

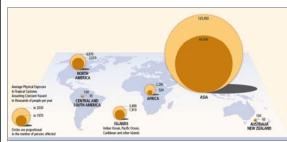


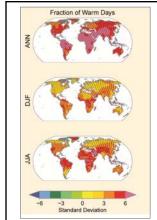
## Floods as a Future Health Risk

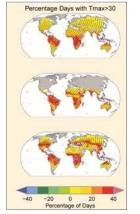


#### Hurricanes as a Future Health Risk

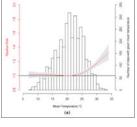


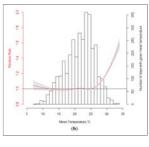


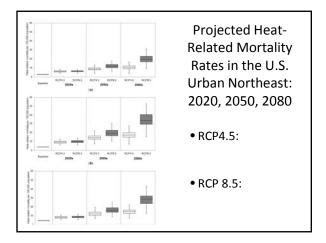


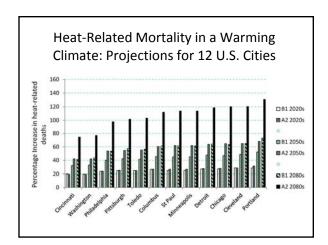


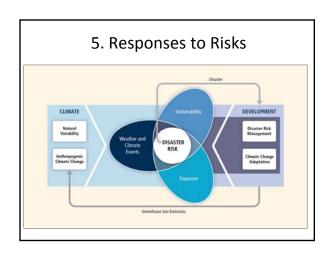
# Temperature–mortality curves of overall cumulative relative risk for days of summer











# Opportunities for Risk Management



#### **End of Lecture Question**

1. For populations to live sustainably and with good long-term health, the health sector must work with other sectors in reshaping how human societies plan, build, move, produce, consume, share, and generate energy.

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#### TO DO!

- 1. For next Lecture: read Article 6
- 2. Tutorials next week:
- Group Discussion: Bring Discussion Worksheet (posted on A2L)
- Term Paper: Bring Annotated Bibliography and Annotated Bibliography Review Grid