USA

## Hazard focus

The flooding that was Harvey's primary hazard resulted from two areas of high pressure blocking the path of the storm northwards. The storm was able to draw water vapour from a particularly warm part of the Gulf of Mexico, sustaining it's energy and producing record-breaking amounts of rainfall—up to 131.8cm over 5 days in Houston, Texas.

Flood defences were overwhelmed, as were emergency services, and the ability of the local population to mitigate the effects. Several deaths were caused by electrocution and vehicle collisions. Key forecast models did not accurately forecast the track of the storm, nor it's high rainfall. In fact, a recent 'improvement' to the US model made their prediction worse, and so increasing the hazard for local populations.

| USA | | Life expect. | 79.5y |
|---|---|---|---|
| HDI (2017) | 13th/0.94 | Poverty | N/A |
| GPDpc (2018) | $57,808 | Internet use | 76.2% |
| Urban pop. | 82.3% | Water/Sanit. | 100/100% |

# Hurricane Harvey
August 17—September 2 2017

Cat. 4 / landfall 0300 26 August
Rockport, Texas, USA

## Quick facts

**$125 billion** in damage (2017 prices) - joint with Katrina (2005) **// 1** years worth of rain in **2 days // 88 deaths** (by October 2017) **// 103 trillion** litres of rain **// 6.1 million** cubic metres of rubbish

## Statistics
280 miles wide **//** 130mph winds at landfall **//** 3 landfalls over 6 days **//** 13 million affected **//** 204,000 home damaged , 75% had no insurance **//** 738,000 needed government assistance **//** 117,000 children affected **//** 10,000 trapped in home **//** 39,000 in shelteres **//** 3,900 homes without water after 3 weeks **//** 19 water & 31 wastewater systems offline **//** 72/275 schools closed **//** 800 sewage works flooded **//** 13 highly-toxic superfund sites flooded **//** a million cars wrecked **//** unusually, the storm stalled over Southern Texas because of nearby weather systems and didn't move for a couple of days.

## Short-term impacts
Drowning **//** disease **//** overcrowding **//** looting/crim **//** powercuts **//** heat stress **//** lack of basic services **//** price gouging **//** property loss / drop in value **//** loss of income. Vulnerable population—poor, homeless, elderly, ill, low-income—disproportionately hit hardest.

## Long-term impacts
Public heath problems due to toxins release into air/land/water from refineries & superfund sites **//** long-term mental health impacts **//** mold exposure **//** increased mosquito exposure, and persistent increased disease exposure.

## Short-term responses
Curfew **//** National Guard S&R **//**free school meals for 18 months **//** donations **//** NGOs, business, celebrities provided support **//** free meals **//** helicopters/planes/relief from foreign governments

## Long-term responses
Baby boom **//** Federal Emergency Management Agency (FEMA) and direct government support for rebuilding of infrastructure **//** Improved preparedness and assessment of risk using GIS **//** provision of long-term healthcare & support **//** provision of medicines and personnel by NGOs