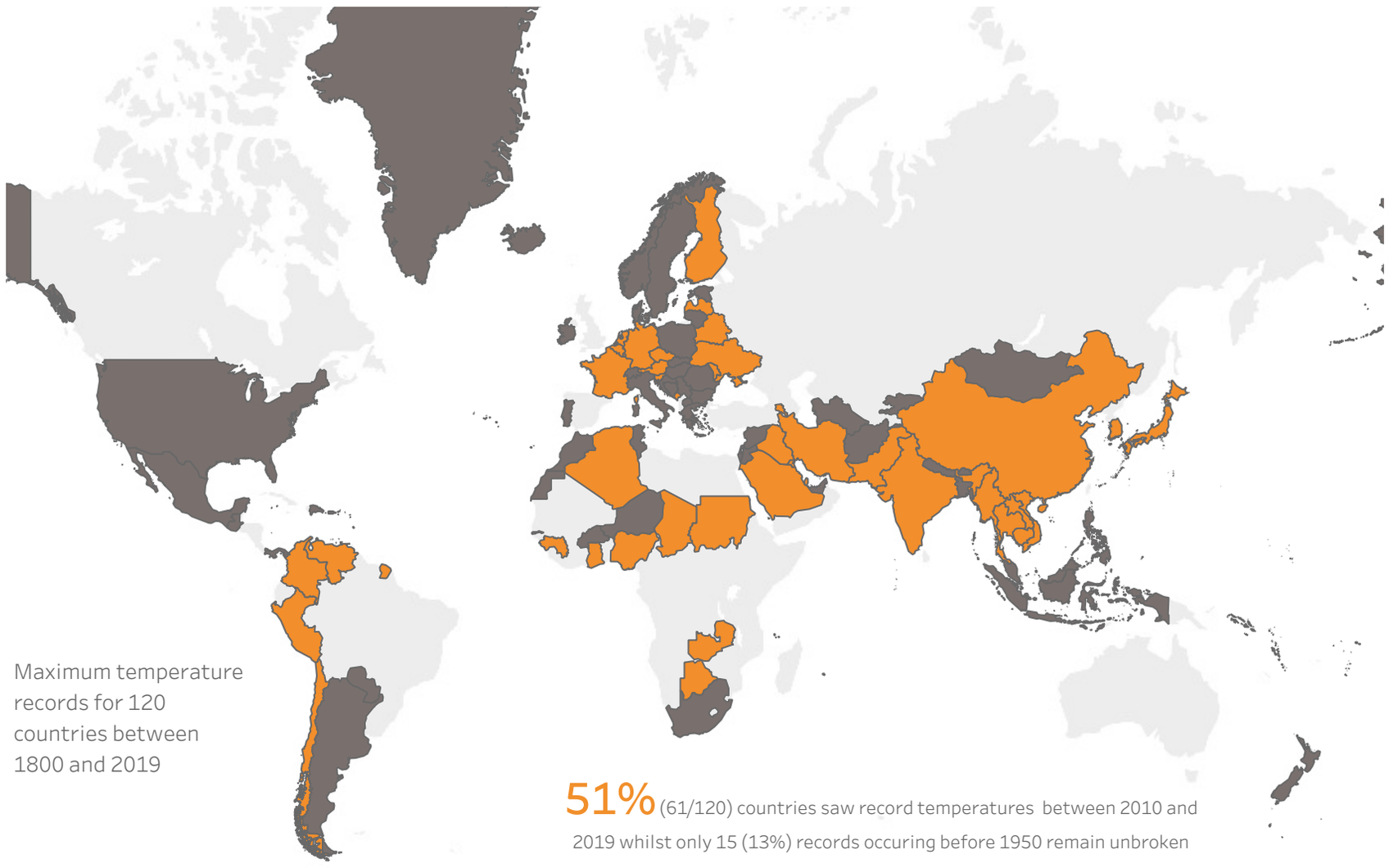
Rising Temperatures

As the Earth's temperature rises, we're witnessing a surge in extreme heat-related weather conditions - setting new heat records and intensifying the frequency, severity, and longevity of heatwaves, droughts, and wildfires. Currently over

700 million people

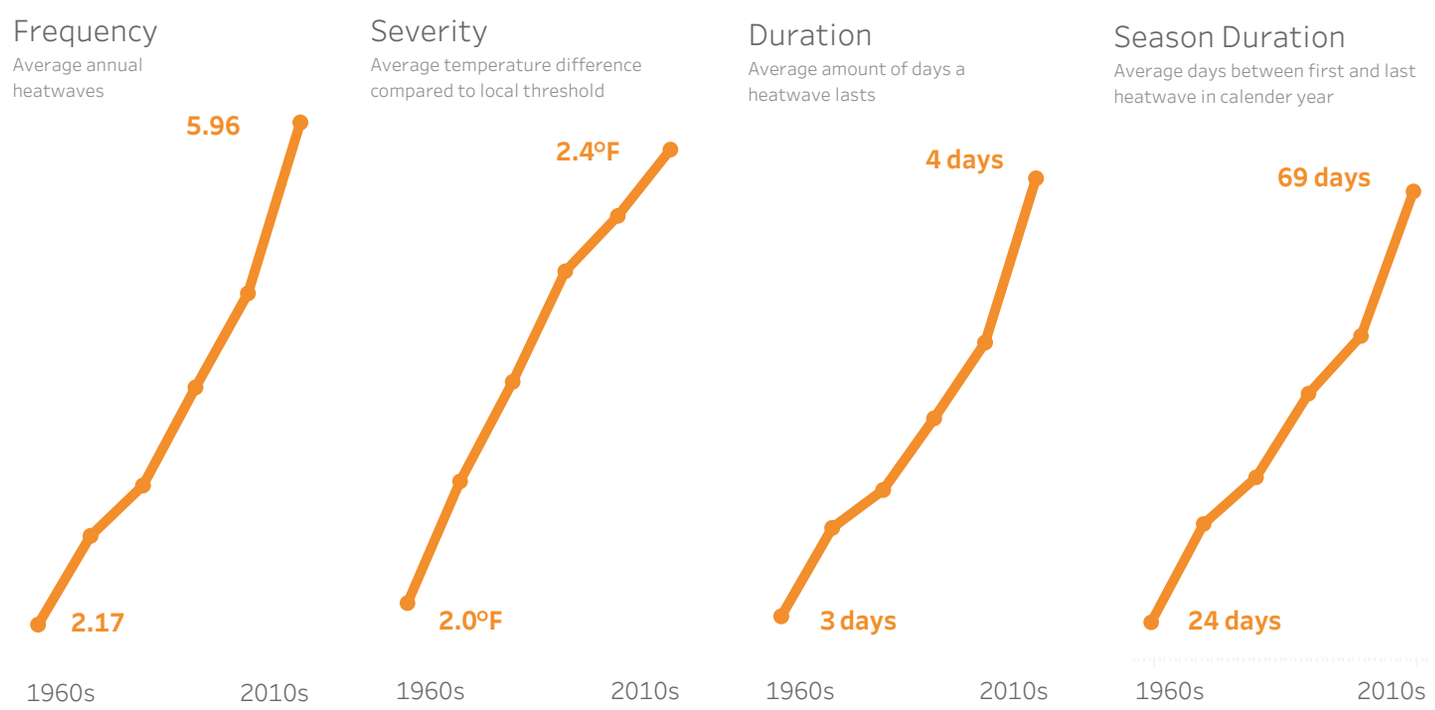
are affected by heat related weather events events every year.



Maximum temperature records for 120 countries between 1800 and 2019

51% (61/120) countries saw record temperatures between 2010 and 2019 whilst only 15 (13%) records occuring before 1950 remain unbroken

US heatwaves between 1960 and 2019, by decade average



An analysis of heatwave metrics in the US reveals a rising trend in their impact. From 2010 to 2019, the average number of annual heatwaves reached 6, compared to only 2 in the 1960s.

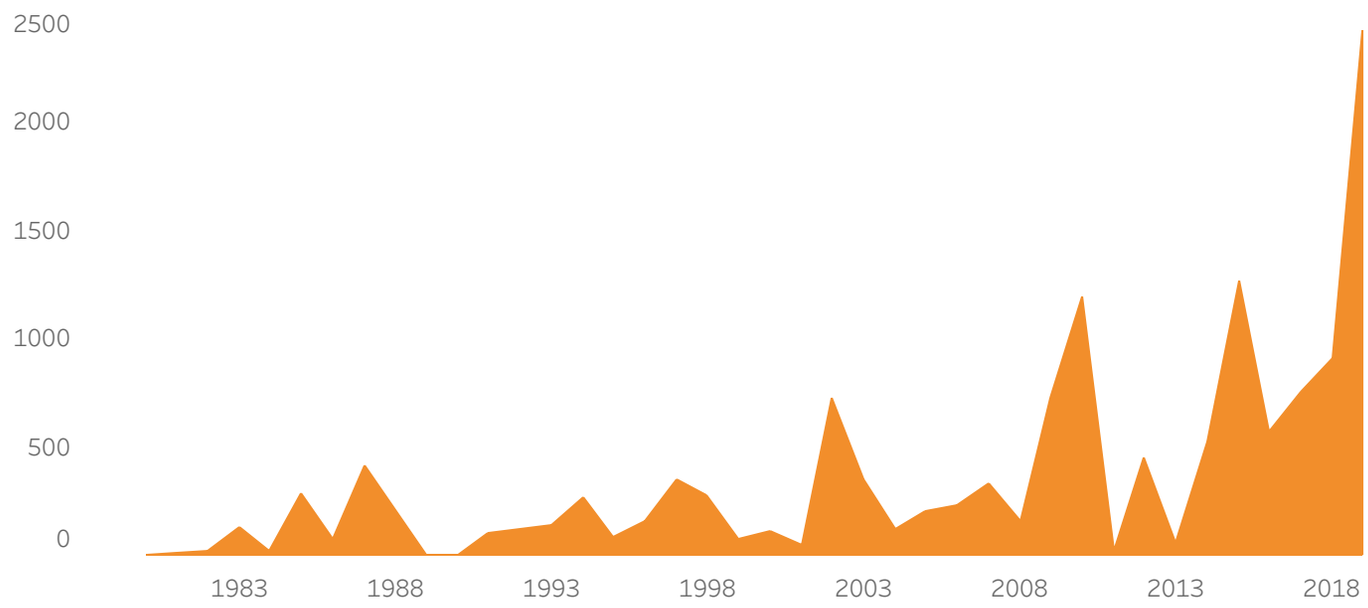
Furthermore, heatwaves in the 2010s were more intense than those in the 60s, with average temperature deviations rising by 0.4 degrees.

The length of heatwaves and the heatwave season have also expanded, with the average heatwave duration increasing by 33% and the heatwave season tripling between the 1960s and the 2010s.

Rising heat and reduced rainfall result in increased evaporation, making soil and vegetation dryer, thus making them more vulnerable to wildfires. These wildfires then become more intense and widespread, resulting in a rise in the frequency of catastrophic fires and the number of people being affected by them.

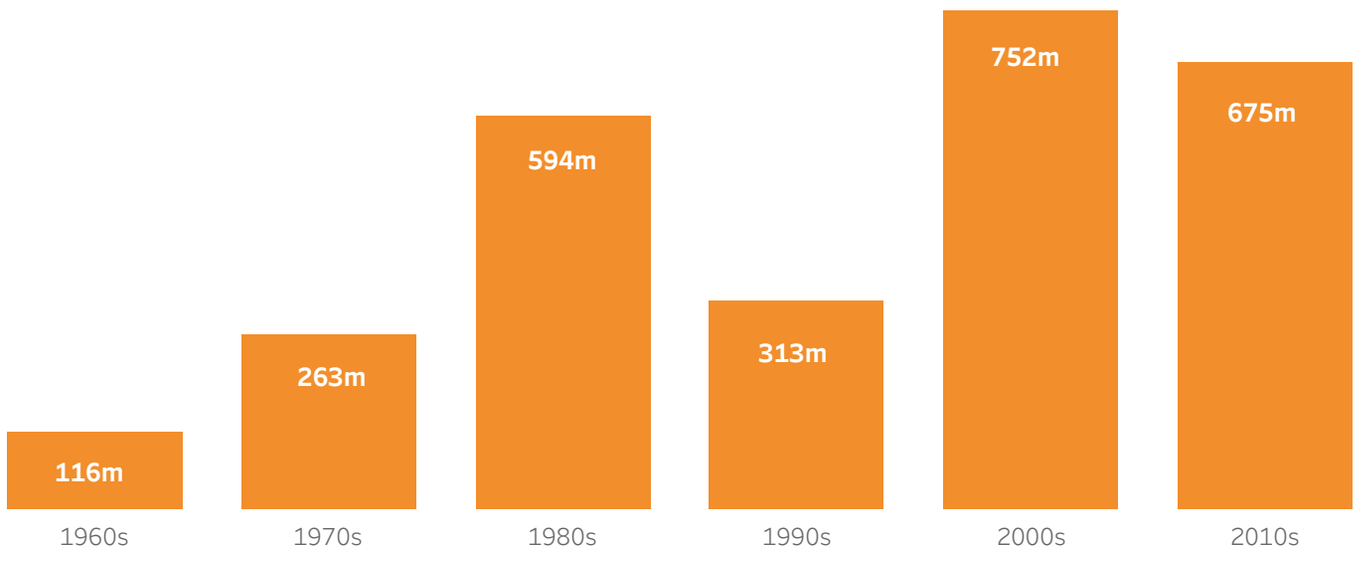
In 2019 almost 2500 people were injured or killed by wildfires with the number of people displaced or left homeless reaching the six figures, far higher than any other year on record.

Number of people injured or killed by wildfires worldwide between 1980 and 2019



People affected by droughts worldwide between 1960 and 2019, by decade average (millions)

People affected are the sum of injured, requiring assistance and homeless due to event



The drying soil due to high temperatures removing liquid water from soil and plant leaves, transforming it into water vapor is resulting in an increase in ground level drying in some parts of the world. This drying causes harsher conditions for agriculture and increases the likelihood and severity of droughts.

Since 2000 over 1.5 billion people have required assistance as a consequence of a drought.

Sources: (1), Wikipedia.org/wiki/List_of_weather_records#Highest_temperatures_ever_recorded, (2), EPA's Climate Change Indicators in the United States: www.epa.gov/climate-indicators, (3), www.ourworldindata.org/natural-disasters