

Environmental Impacts on Mental Health and Resilience Subcommittee

December 14, 2020

Mental Health and COVID-19

- Physical Distancing and Stay-at-Home Orders Have an Impact on Mental Health
- By June 2020, More than **41% Reported at Least One Adverse Mental or Behavioral Health Condition** (e.g., anxiety disorder, depressive disorder, symptoms of a trauma- and stressor-related disorder (TSRD), and started or increased substance use to cope with stress)
- **1-in-10 Adults** Considered Suicide; **1-in-4 Ages 18-24** (higher rates with minorities, unpaid caregivers for adults, and essential workers)

Mental Health and COVID-19

- The Illness Itself Can Impact Mental Health
- Hundreds of Thousands Suffer from **Grief** with the High Death Toll
- **Economic Hardship and Job Loss** has Contributed to Mental Health Concerns

Impact of Coronavirus Syndromes on Physical and Mental Health of Health Care Workers

Physical Health Outcomes

- Infection
- Fatigue
- Headaches

Long Haulers

- Fatigue
- Body Aches
- Shortness of Breath
- Difficulty Concentrating
- Inability to Exercise
- Headache
- Difficulty Sleeping

Mental Health Outcomes

- Fear
- Insomnia
- Psychological Distress
- Burnout
- Depressive Symptoms
- Anxiety Features
- Post Traumatic Stress Disorder Features
- Somatization
- Stigmatization Feelings



**Climate Change is a
Threat Multiplier**

July 21, 2019



July 21, 2019

2020 – A Year of Micro-Traumas

- Sudden Change (traumatic response)
- Loss of a Way of Life
- Job Loss and Economic Hardship
- World View Change Regarding Safety and Predictability

It is estimated that 40-100% of people in certain communities will experience PTSD.

“PTSD correlates closely with economic adversity and unemployment.”

Climate Change and the Climate Emergency

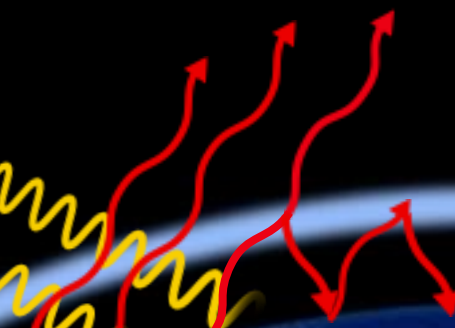
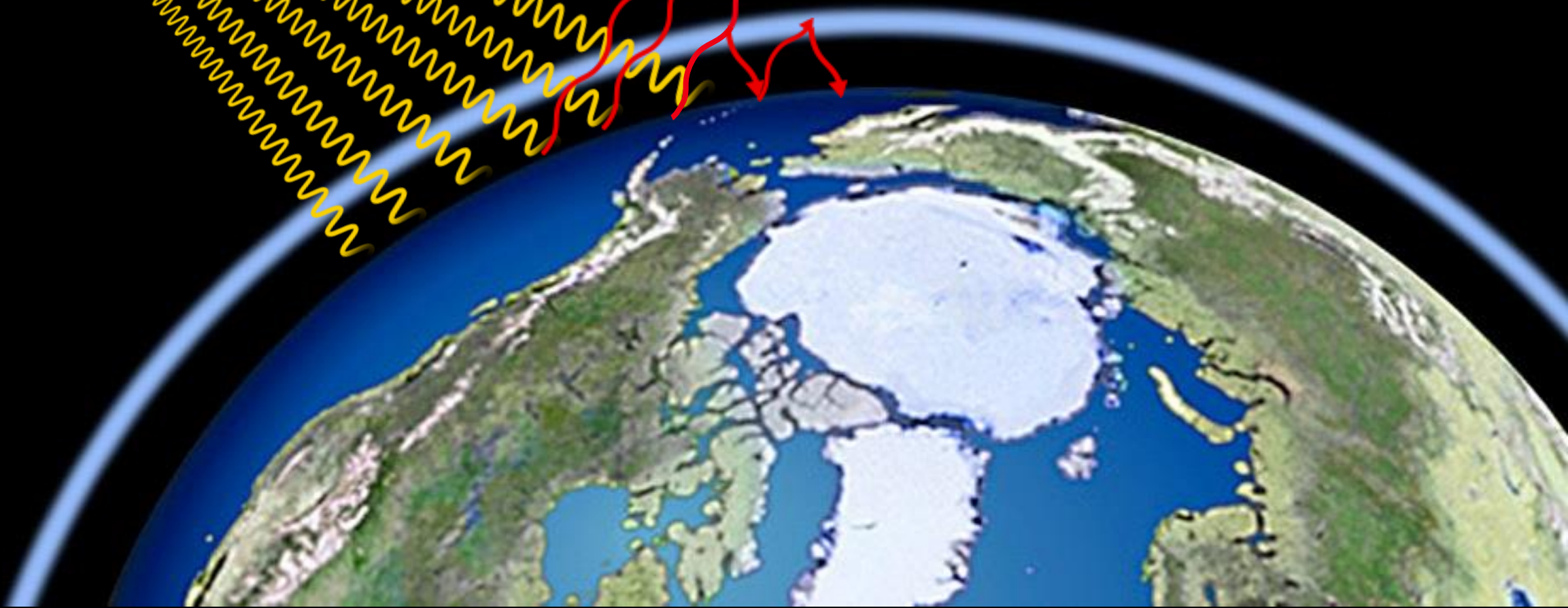
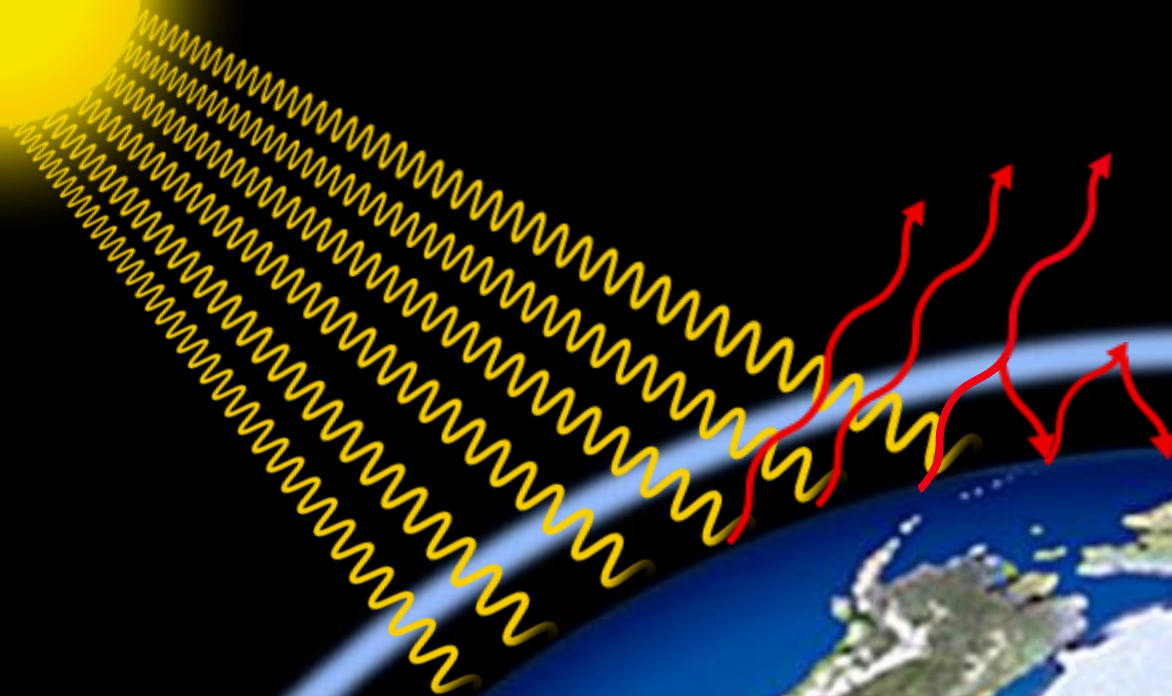
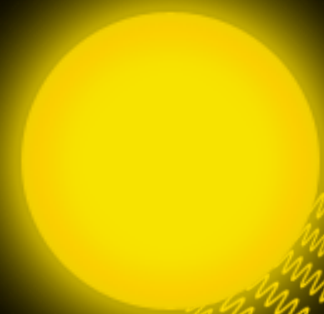


Source: NASA – December 7, 1972



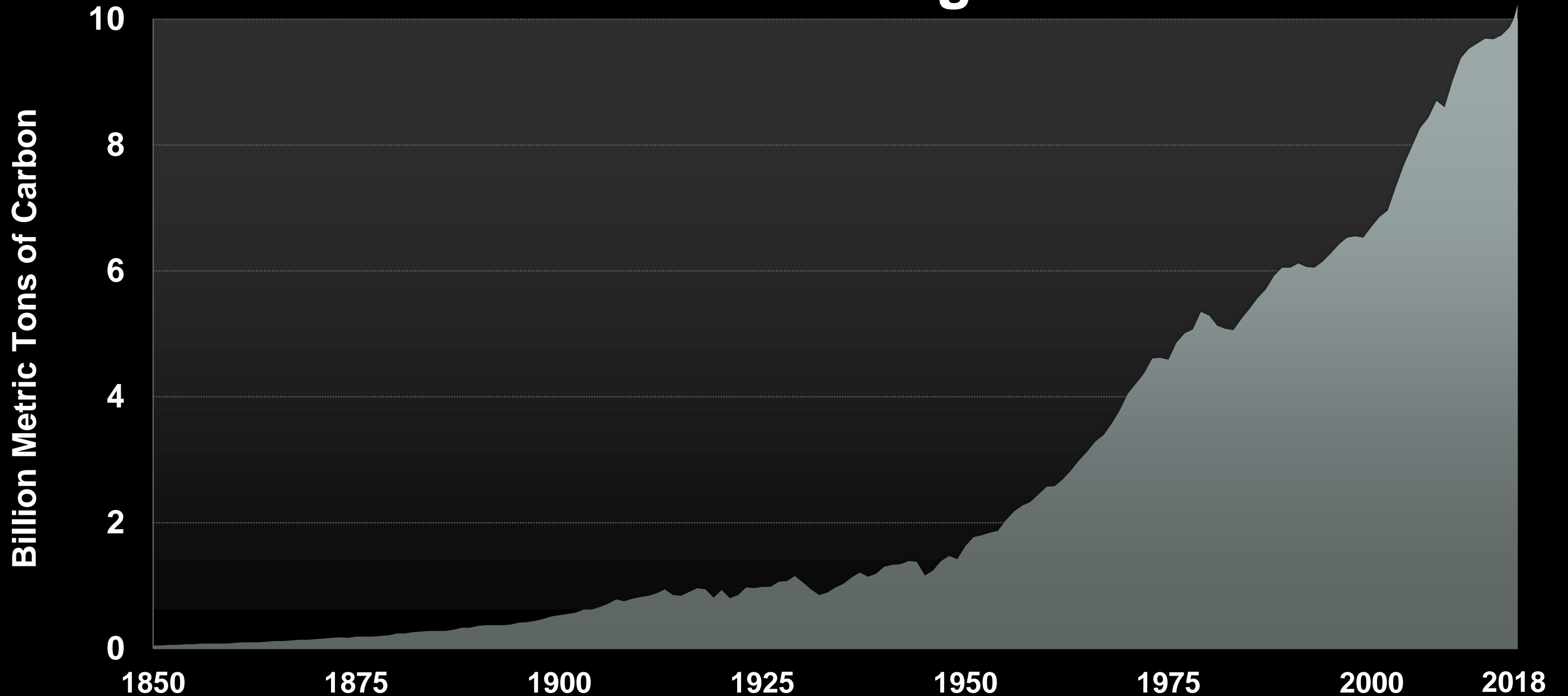
Source: NASA Troposphere and Stratosphere

We are now emitting 110 million tons of manmade global warming pollution into the thin shell of our atmosphere every 24 hours.



As the CO₂ concentration increases, more of the outgoing infrared radiation is trapped.

The Largest Source of Global Warming Pollution Is the Burning of Fossil Fuels

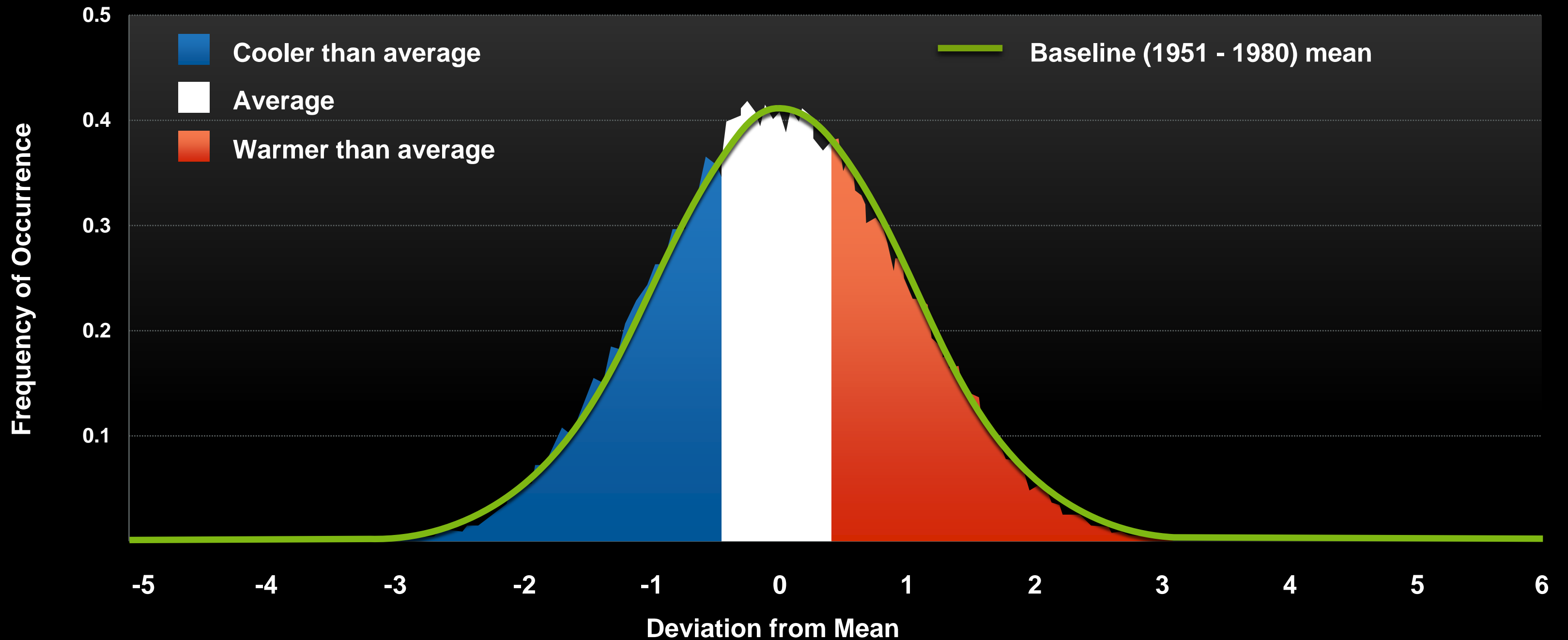


Data: U.S. Department of Energy/CDIAC

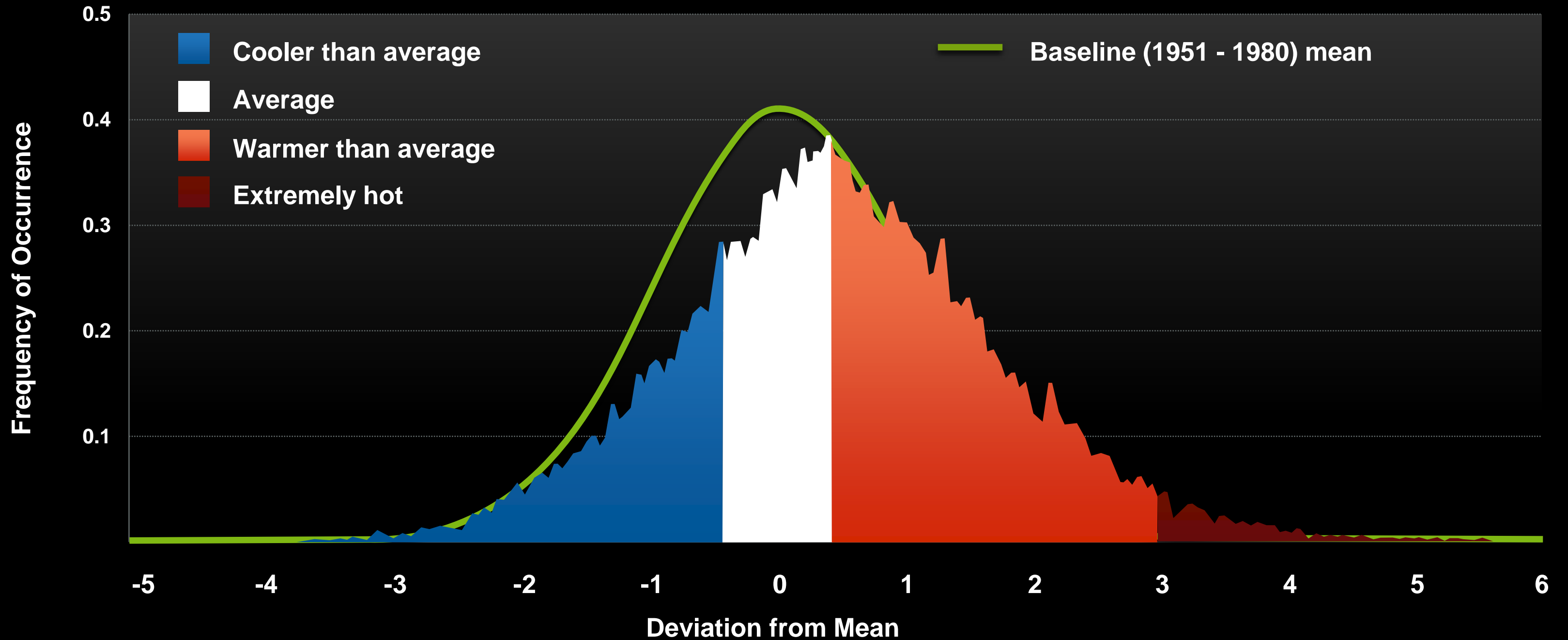
**CO₂ is being released
into the atmosphere
faster than at any time in
at least the last
66 million years.**

Summer Temperatures Have Shifted

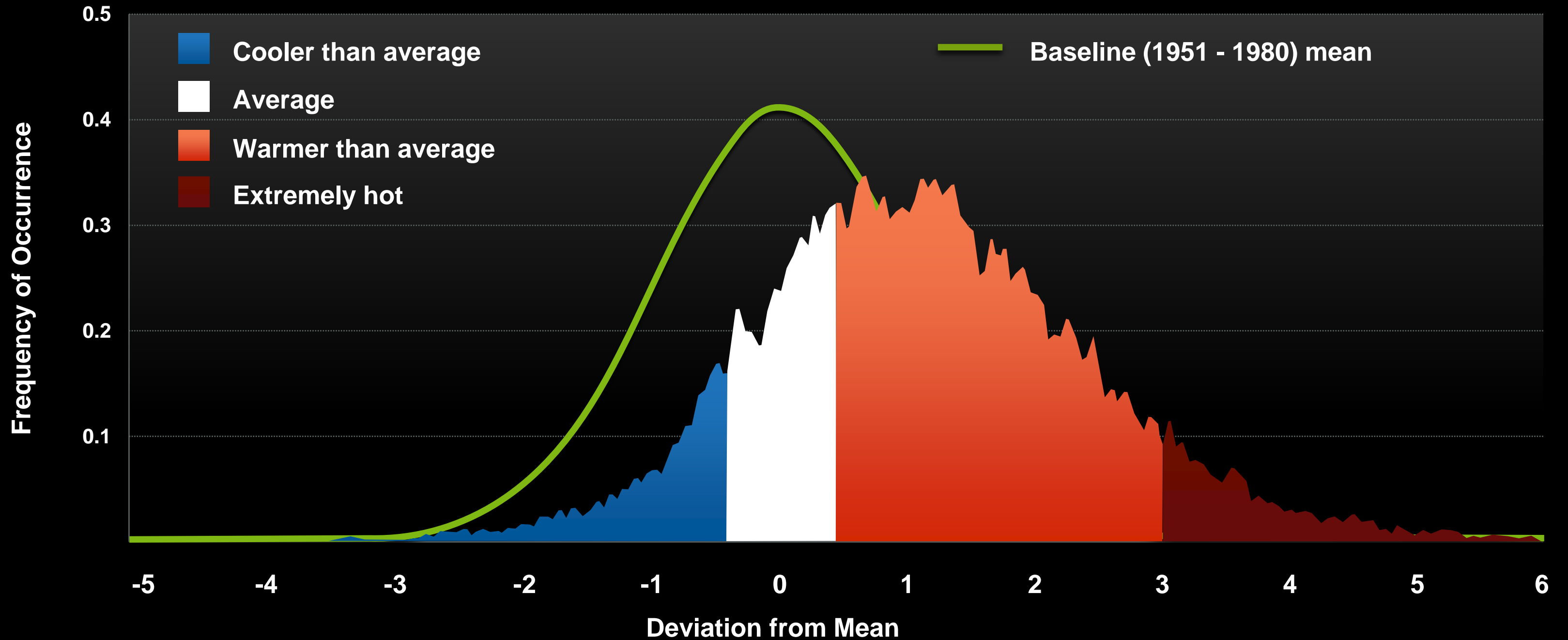
1951 – 1980



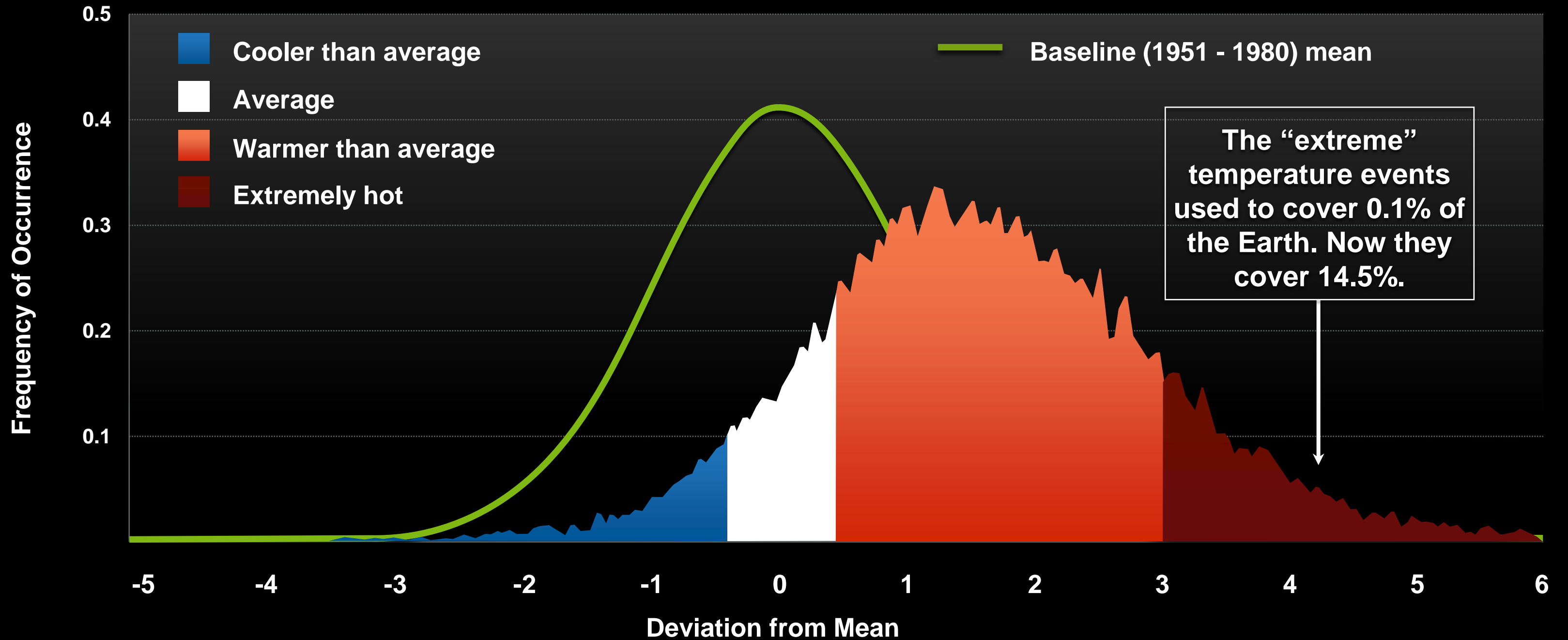
1983 – 1993



1994 – 2004



2005 – 2015



The mental health impacts of climate change are significant!

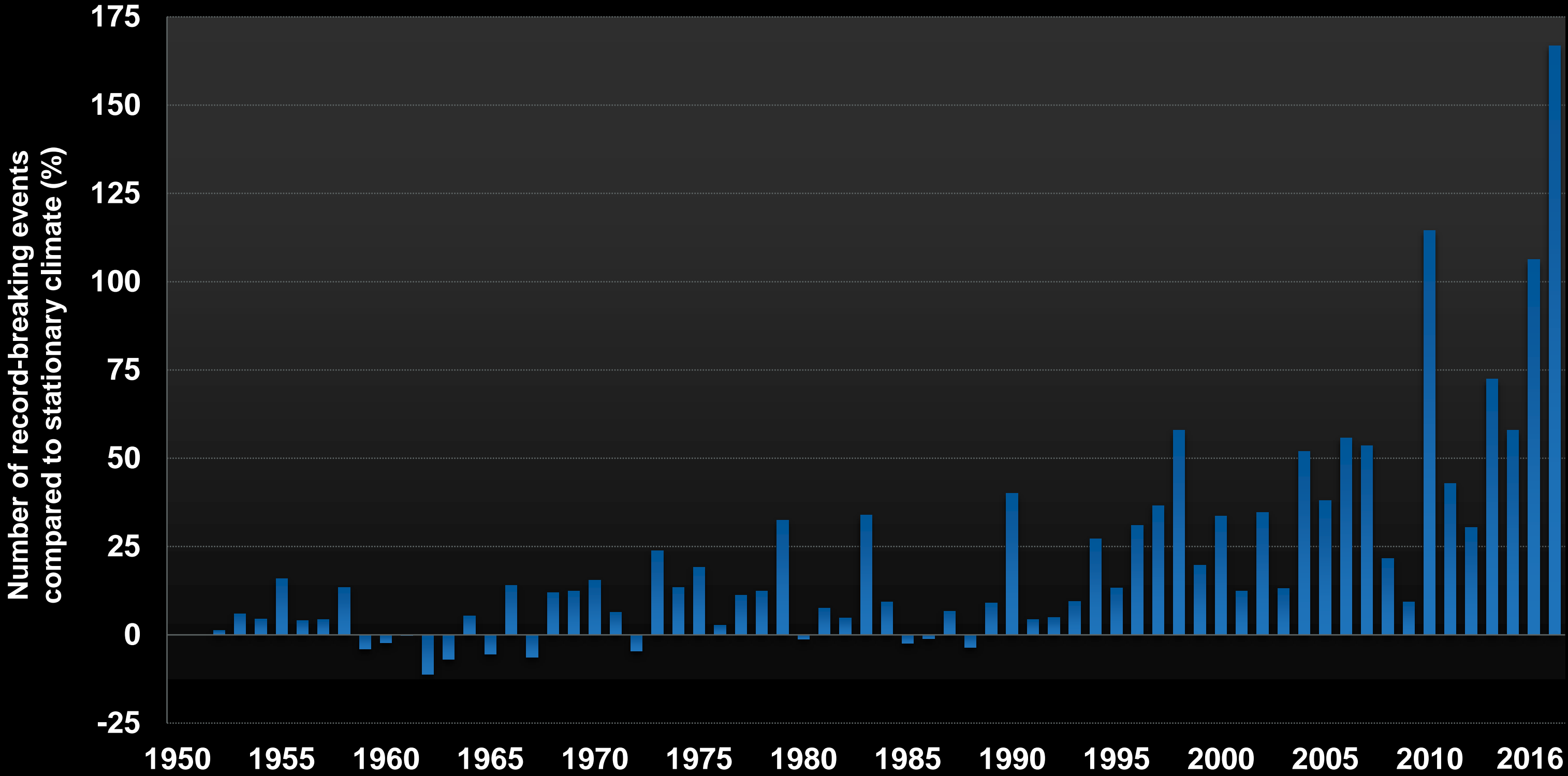
- **Violence**
- **Mood**
- **Cognition**
- **Insomnia**
- **Medication Effectiveness**

With **each additional 1° (C)** of
Temperature, there is **5%** more water
vapor over the city than there
was **30 years ago**
increases by 7%.

So the downpours get bigger!



Global Record-Breaking Precipitation Anomalies



Data: Jascha Lehmann, Potsdam Institute for Climate Impact Research

**Globally, floods and
extreme rainfall events
now occur
four times more often
than in 1980.**

**The U.S. could see up to
an additional
400% increase
in extreme downpours
by the end of this century.**

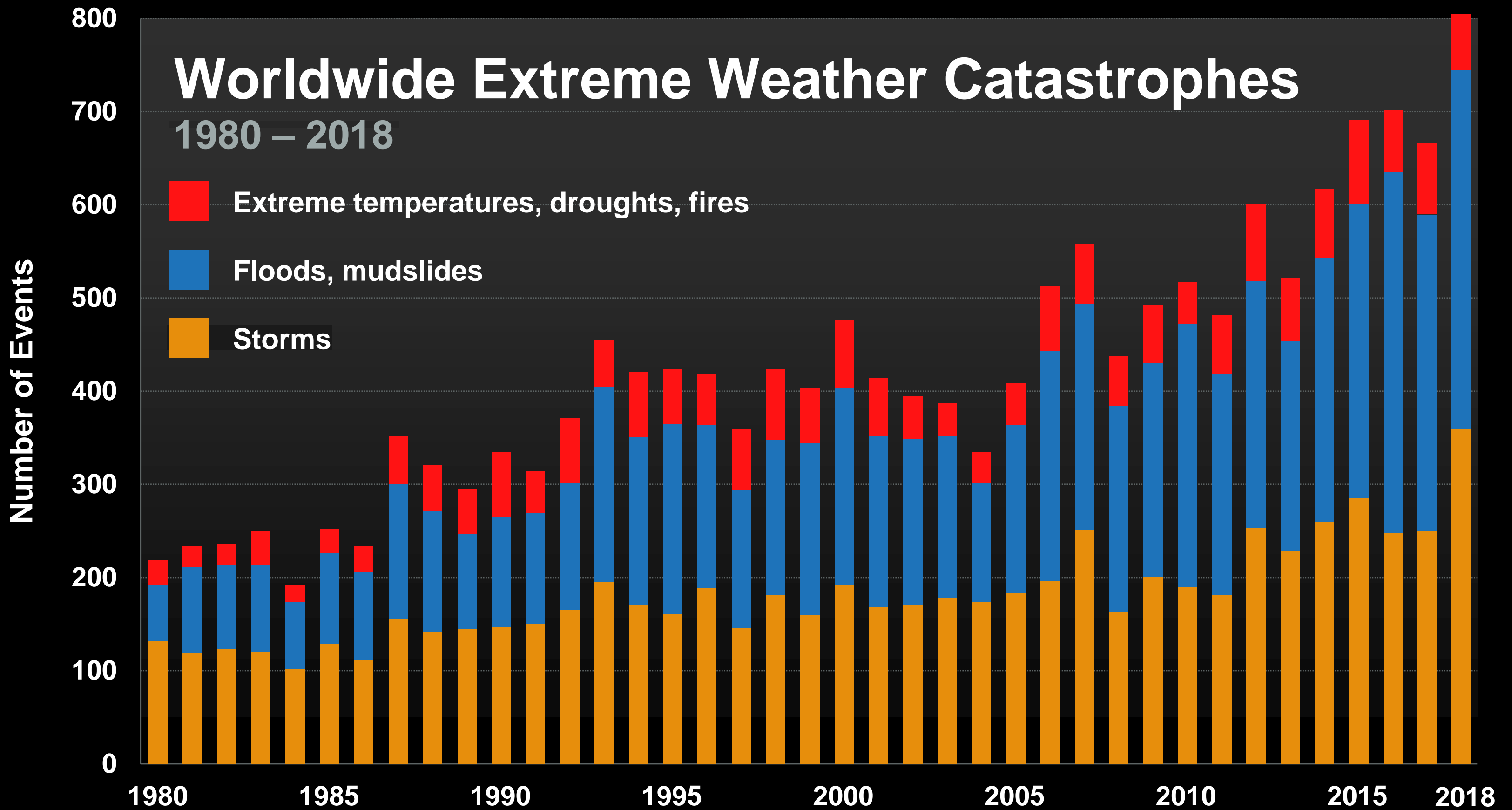
Ellicott City, Maryland

May 27, 2018



Worldwide Extreme Weather Catastrophes

1980 – 2018



**Economic losses
from extreme weather
totaled \$653 billion over the
past two years alone.**

“...the gravest effects of all attacks on the environment are suffered by the poorest.”

**Encyclical Letter of
His Holiness, Pope Francis
On Care for our Common Home
June 18, 2015**

“Climate change is the biggest global health threat of the 21st century.”

**The 2018 Report of the Lancet Countdown
on Health and Climate Change**

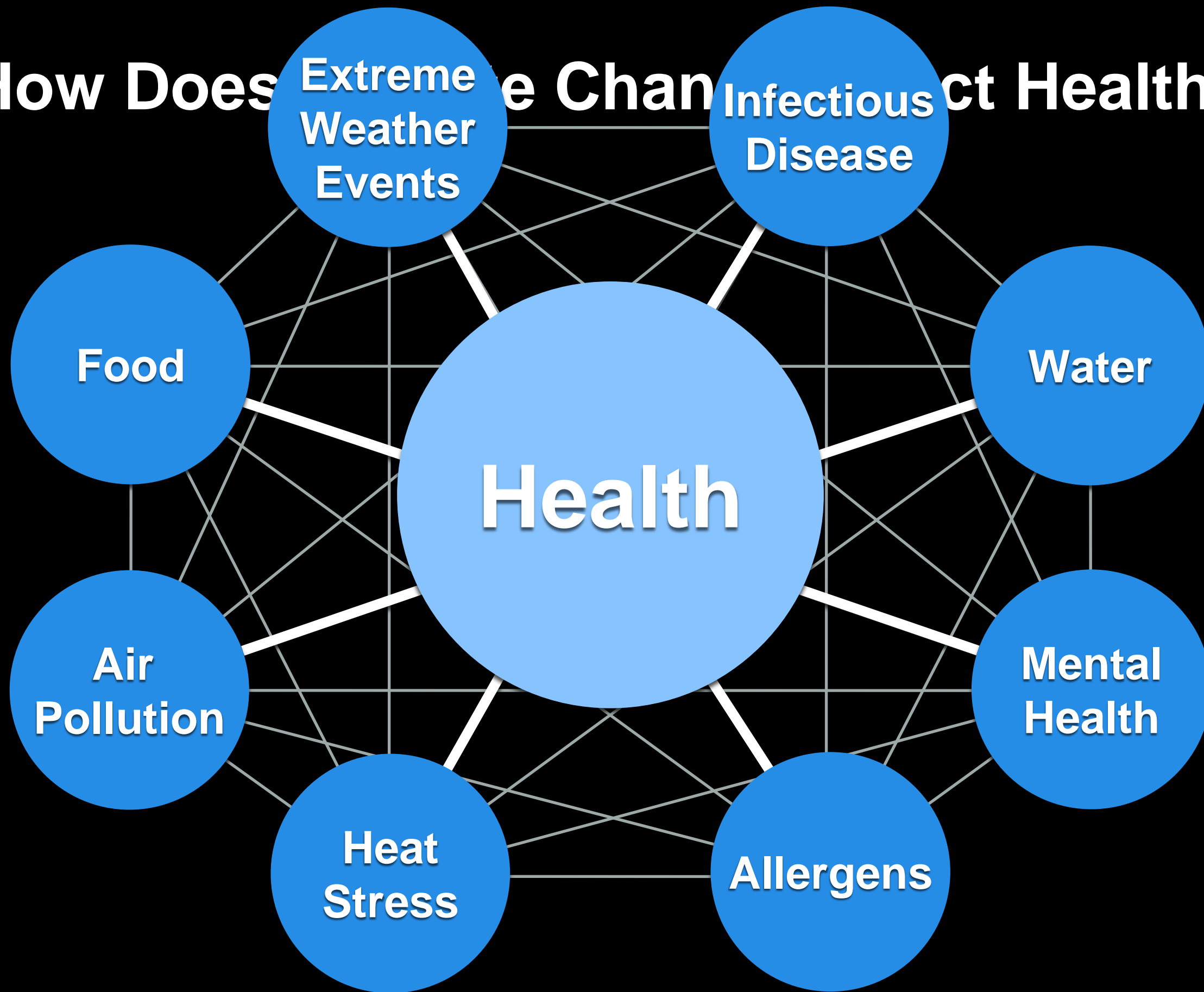


“The health impacts of climate change demand immediate action.”

Declaration on Climate Change and Health

2017

How Does Climate Change Affect Health?



**Extreme heat events cause
more deaths annually
in the U.S. than all other
extreme weather events combined.**

**We Need to Reduce Carbon
– and We Also Need to
Focus on RESILIENCE**

Factors of Resilience

- **Cognitive Flexibility**
- **Altruism**
- **Strong or Heroic Role Models**
- **Adeptness at Facing Fears**
- **Physical Fitness**
- **A Supportive Social Network**
- **Active Coping Skills**
- **A Sense of Humor**
- **A Personal Moral Compass or Shatterproof Set of Beliefs**

Key Protective Factors Specific to COVID-19

- **Empowered to do Something About the Crisis**
- **Connection to Good Social Support**
- **Providing a Sense of Agency (especially with kids)**
- **Openness and Compassion Whenever Someone is Ready to Process What has Happened**
- **Psychological First Aid**
- **Psycho-education (normalizing what's happening)**
- **Healthy Modes of Coping (exercise, meditation, talking with a friend, good sleep)**
- **Shared Experience = Deeper Sense of Empathy**