

Psychosocial Impacts of Climate Change and Integration Into Community Resilience

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DISCLAIMER



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I AM NOT A:

- Psychiatrist
- Psychologist
- Counselor
- Social Worker
- Mental Health Worker

BUT

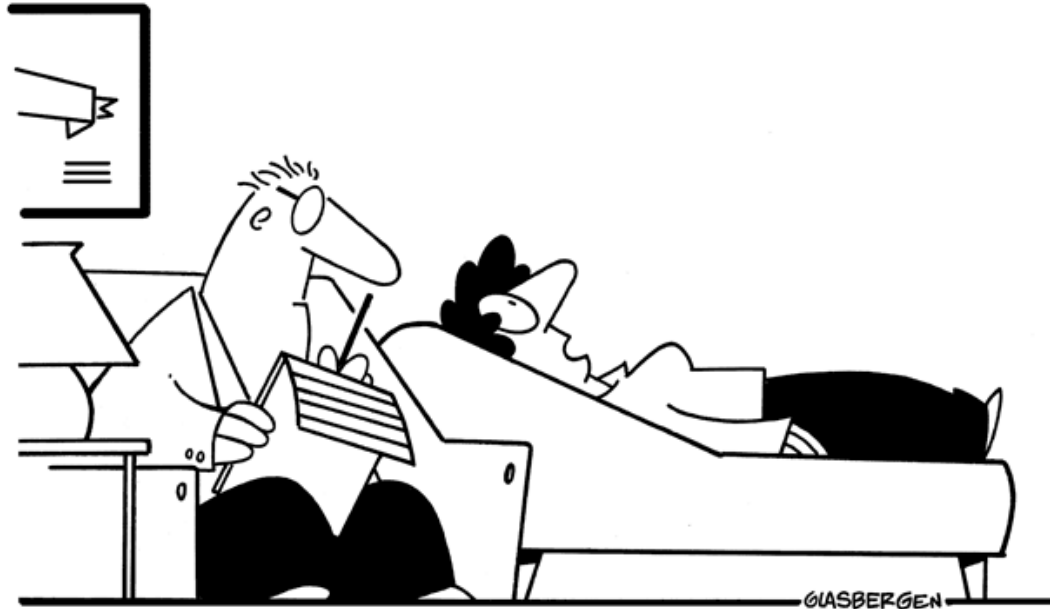


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I HAVE FRIENDS WHO ARE

© Randy Glasbergen / glasbergen.com



"All I want to do is lie around all day. This isn't helping."



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AGENDA

- What is Climate Change
- Health Effects of Climate Change
- Psychosocial/Psychological Impacts of Climate Change
- Building Psychosocial/Psychological Resilience
- Building Community Resilience/Health Resilience

What is Climate Change



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Climate Change

- Refers to any distinct change in measures of climate lasting for a long period of time, including major changes in temperature, rainfall, snow, or wind patterns lasting for decades or longer. Climate change may result from:
 - natural factors, such as changes in the Sun's energy or slow changes in the Earth's orbit around the Sun;
 - natural processes within the climate system (e.g., changes in ocean circulation);
 - human activities that change the atmosphere's make-up (e.g, burning fossil fuels) and the land surface (e.g., cutting down forests, planting trees, building developments in cities and suburbs, etc.).



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Global Warming

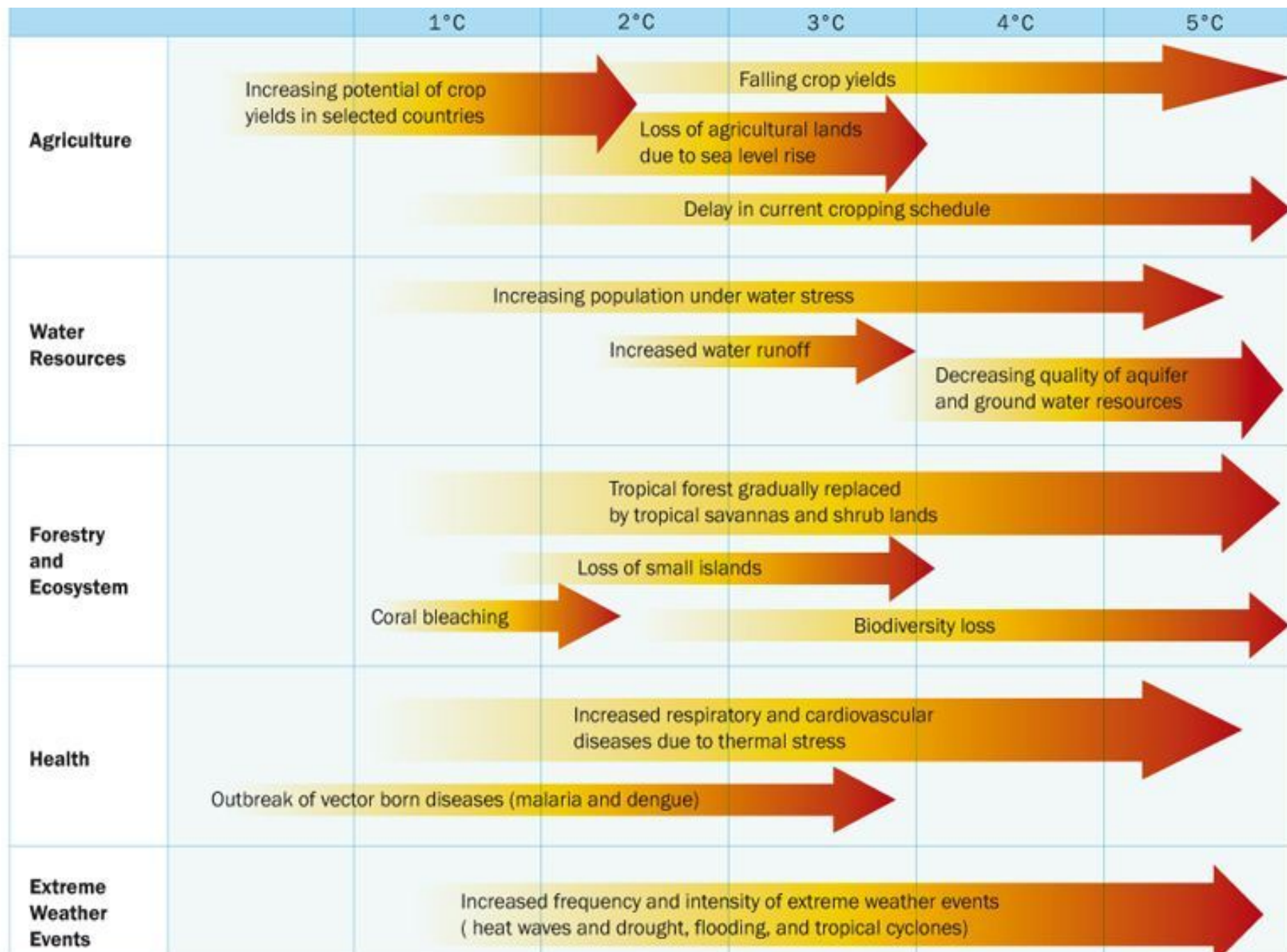
- Is an average increase in temperatures near the Earth's surface and in the lowest layer of the atmosphere.
- Increases in temperatures in our Earth's atmosphere can contribute to changes in global climate patterns.
- Global warming can be considered part of climate change along with changes in precipitation, sea level, etc.



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Ghaiath Hussein
MBBS, MHSc. (Bioethics)





Major global killers are affected by climate

Each year:

- Weather– related disasters kill over 60,000
- Undernutrition kills 3.5 million
- Diarrhea kills 2.2 million
- Malaria kills 900,000 (WHO, 2003, 2008)



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EFFECT OF CLIMATE CHANGE ON AGRICULTURE



- Climate change may have beneficial as well as detrimental consequences for agriculture.
- A warming climate and decreasing soil moisture can also result in increasing need for irrigation.
- Benefits to agriculture might be offset by an increased likelihood of heat waves, drought, severe thunderstorms and tornadoes.
- With the virtually certain likelihood of warmer and more frequent hot days and nights, there are projected to be increased insect outbreaks impacting agriculture, forestry and ecosystems. (IPCC)



Increased Probability and Intensity of Droughts and Heat Waves



Water Resources

- In a warming climate, extreme events like floods and droughts are likely to become more frequent
- More frequent floods and droughts will affect water quality and availability
- Increases in drought in some areas may increase the frequency of water shortages and lead to more restrictions on water usage
- An overall increase in precipitation may increase water availability in some regions, but also create greater flood potential



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Climate Change- Examples

Colorado River,
Arizona

June 2002



Dec 2003



Coasts

- For those living along the coast, homes and property may be impacted by sea level rise and an increase in storm intensity
- Rising seas may contribute to enhanced coastal erosion, coastal flooding, loss of coastal wetlands, and increased risk of property loss from storm surges.



Climate Change- Examples

Portage Glacier,
Alaska

1914



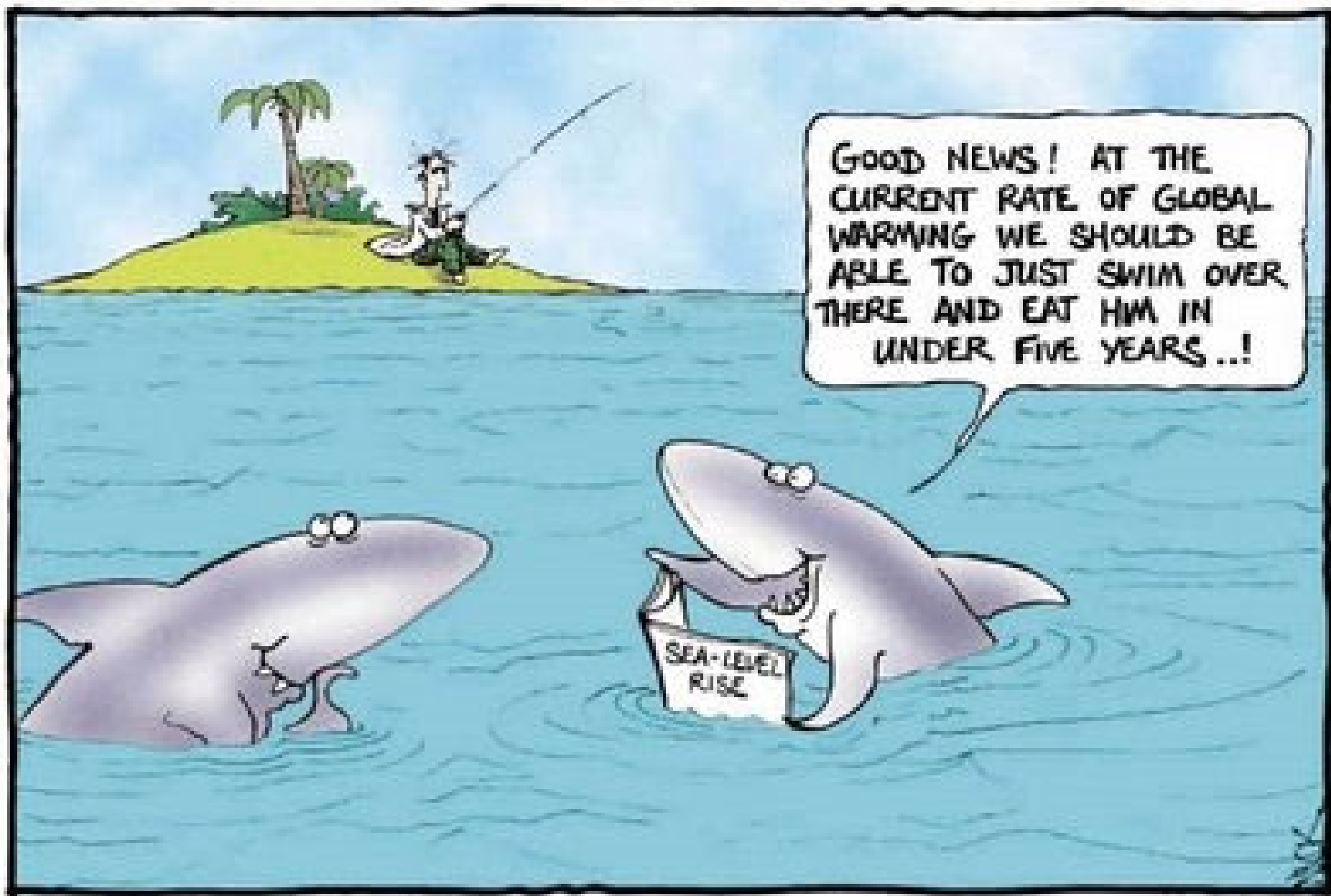
2004



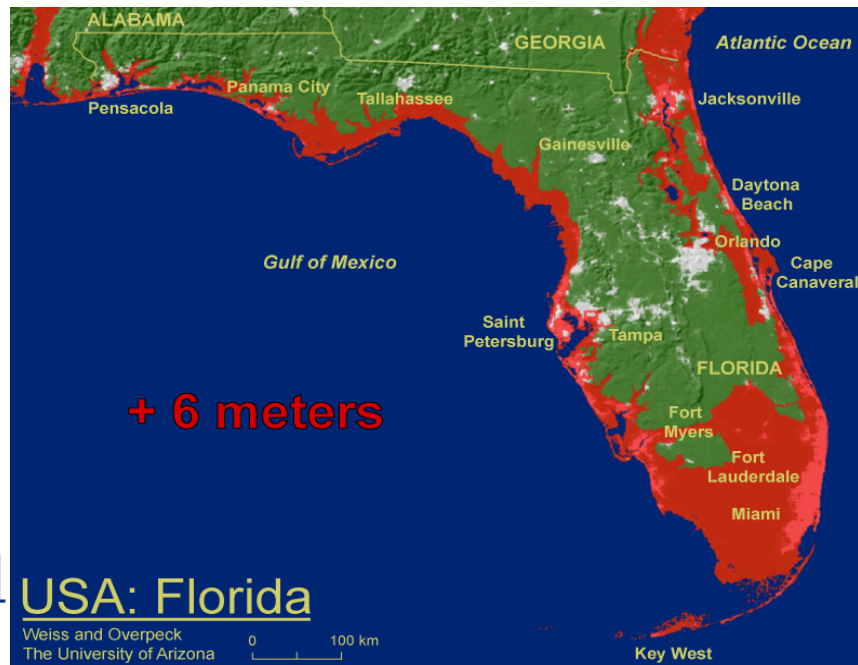
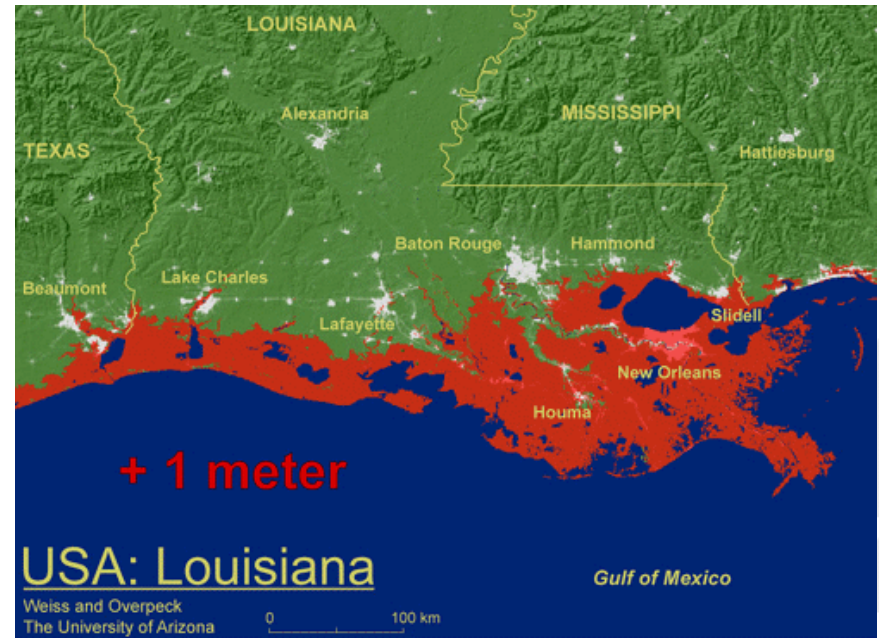
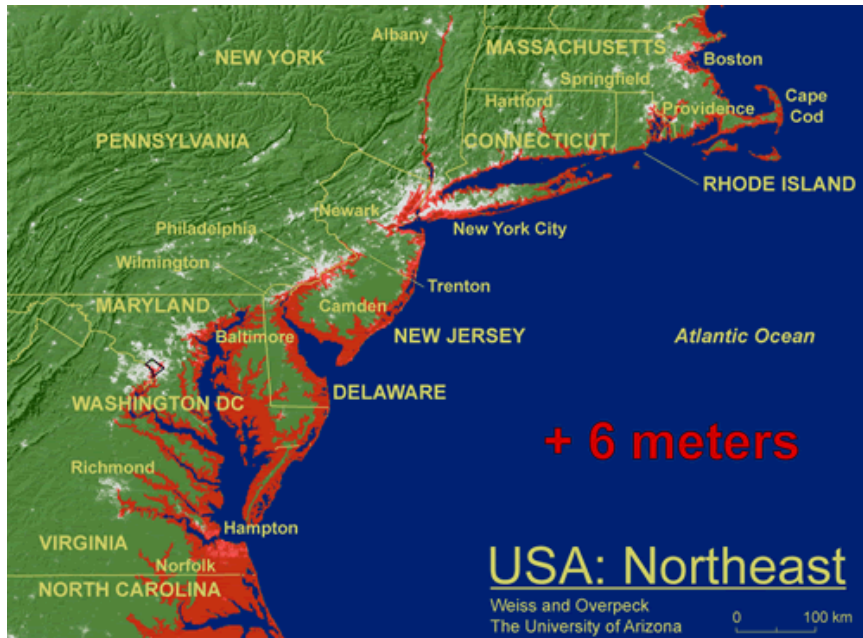
Climate Change Effects on Health: Dr Amol Nath, Dr Naveen Phuyal

Sea-level Rise Projections :

- **More than half** of the world's population now lives within 60km of the sea.
- Most vulnerable regions: Nile delta in Egypt, the Ganges-Brahmaputra delta in Bangladesh, many small islands, such as the Maldives, the Marshall Islands



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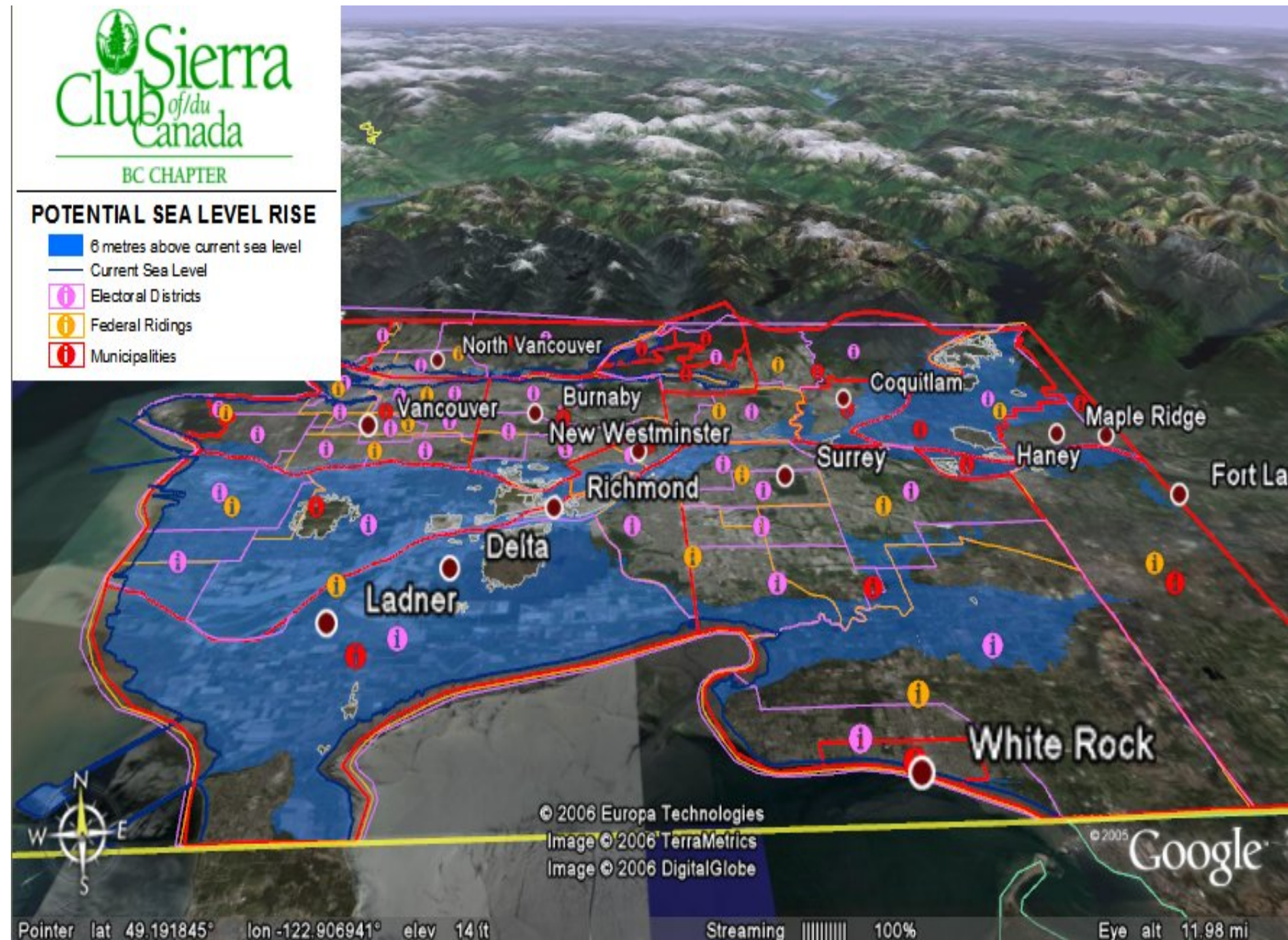


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POTENTIAL SEA LEVEL RISE

- 6 metres above current sea level
- Current Sea Level
- ⓘ Electoral Districts
- ⓘ Federal Ridings
- ⓘ Municipalities



Wildlife

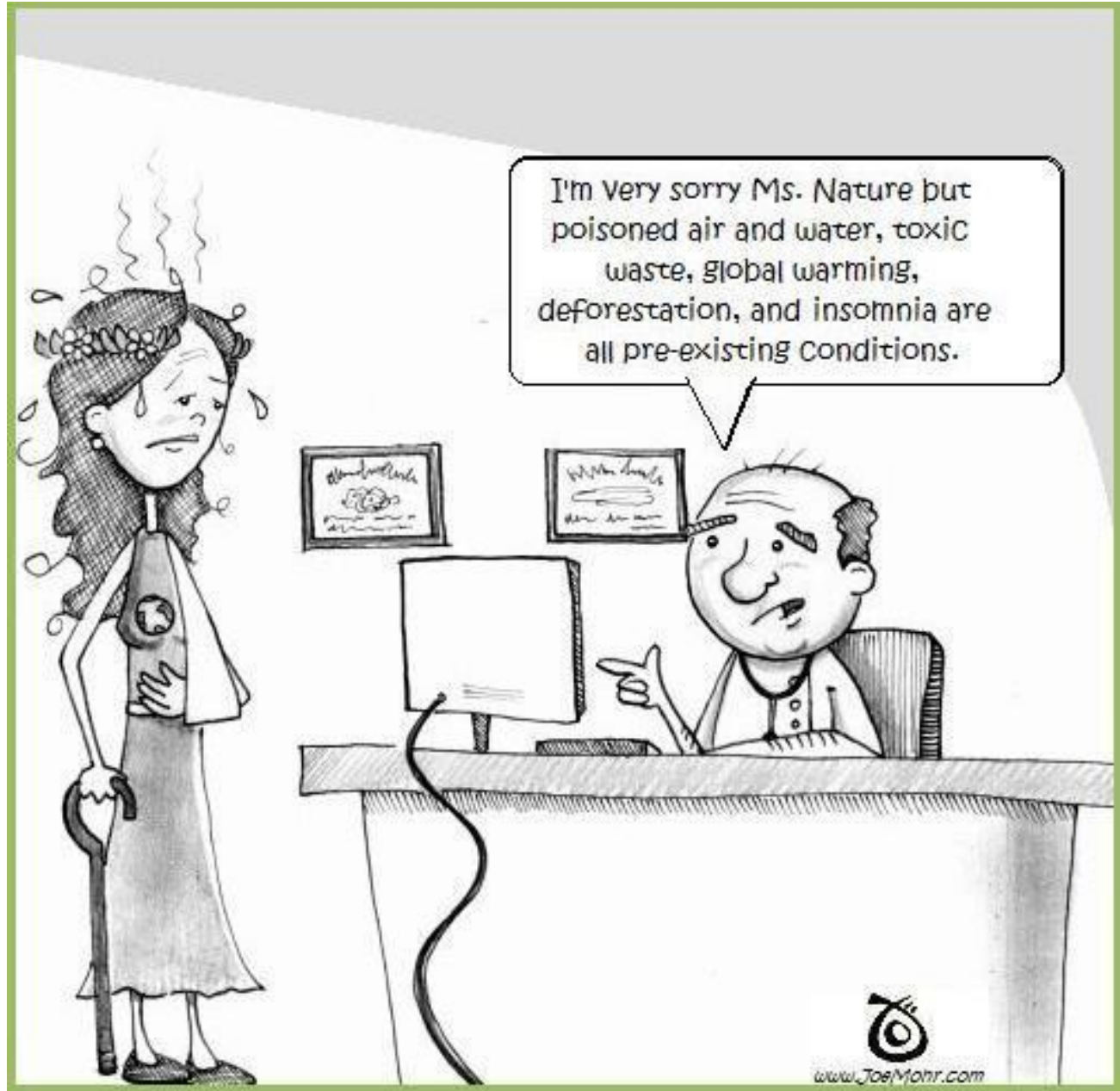
- Warmer temperatures and precipitation changes will likely affect the habitats and migratory patterns of many types of wildlife.
- The range and distribution of many species will change, and some species that cannot move or adapt may face extinction.



Health Effects of Climate Change



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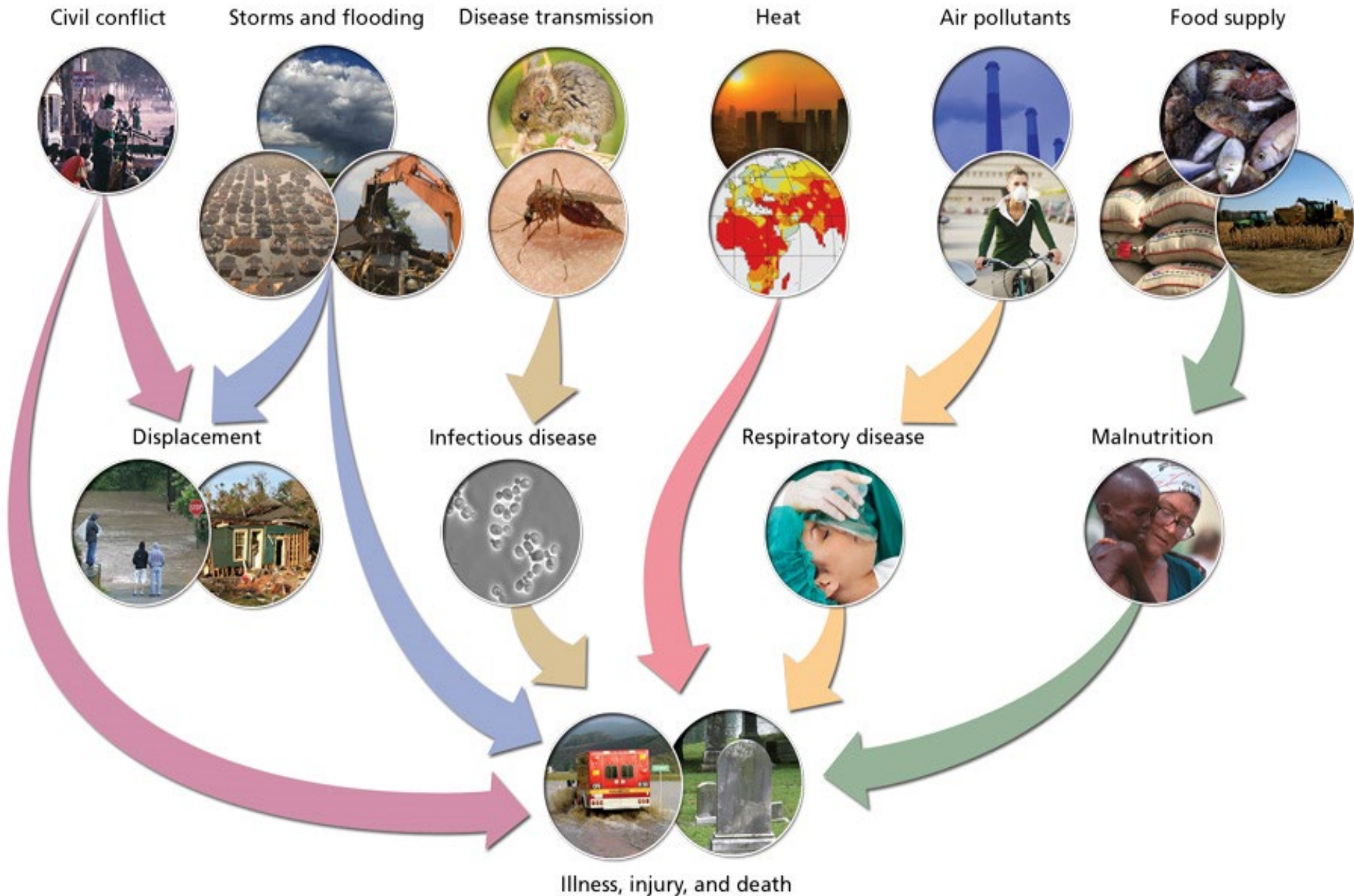
Vulnerable Populations

- Chronic medical conditions including mentally ill, clients with special needs
- Socially isolated
- Costal Communities
- Poor & vulnerable communities
- Subsistence Farmers
- Required medical treatments (Dialysis)
- Outdoor workers
- Very young children
- Elderly suffer the greatest effects of heat-waves (impact on mortality greater in women)

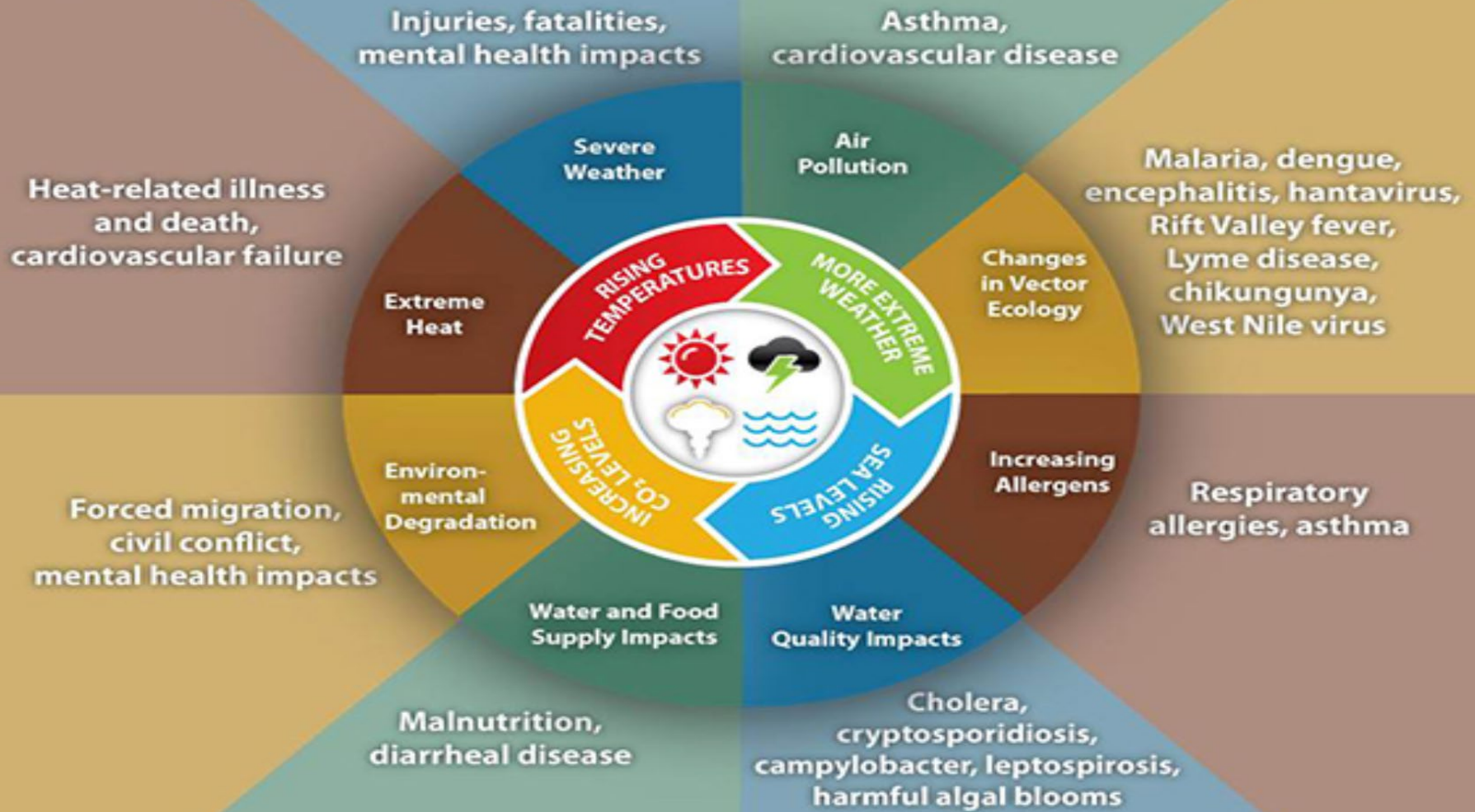


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Climate Change Influences on Health



Impact of Climate Change on Human Health



Source: CDC Climate Effects on Health (<http://nca2014.globalchange.gov/report/sectors/human-health>)



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WHO: Five Major Health Impacts of Climate Change

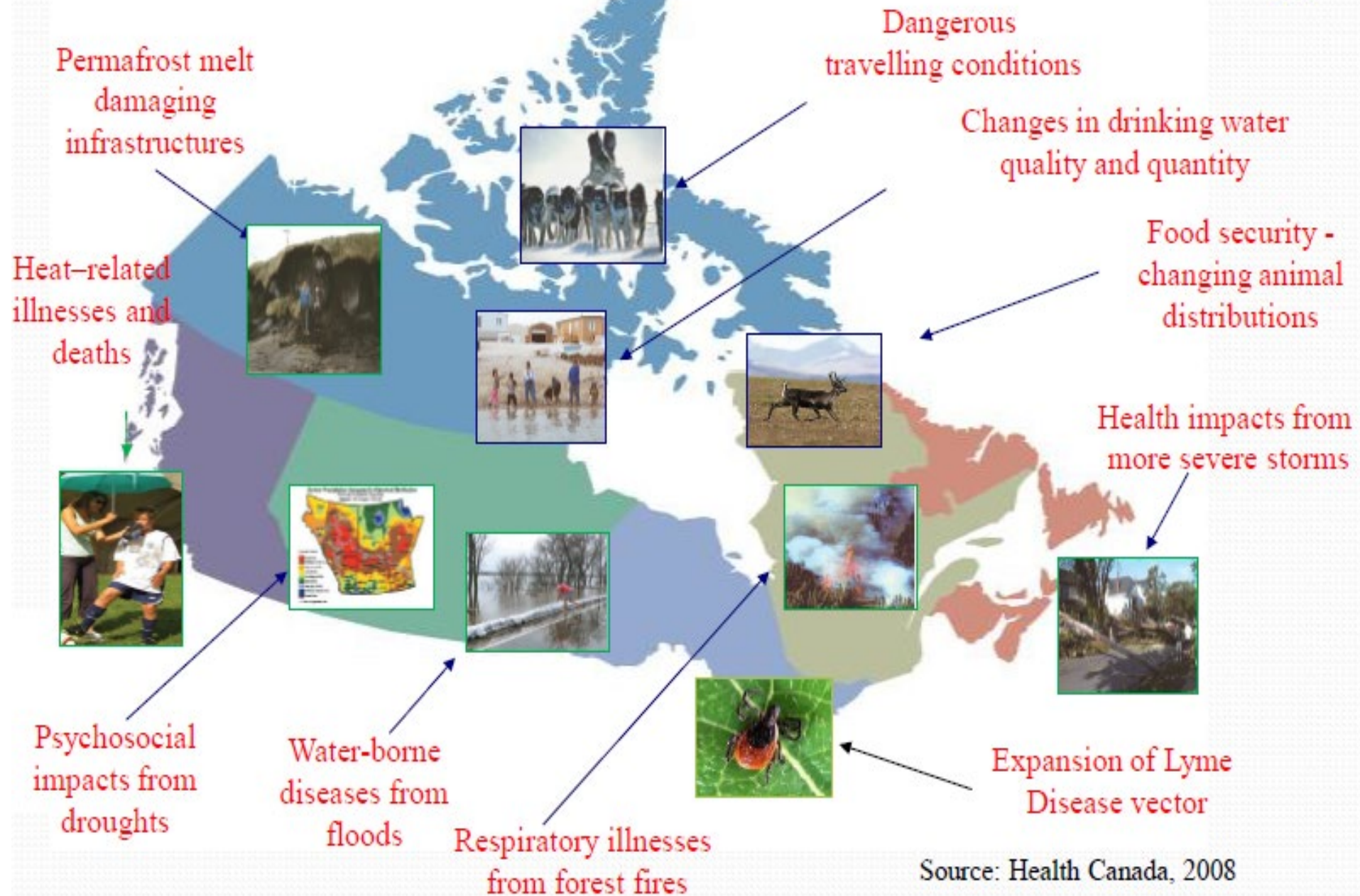
1. Malnutrition
2. Deaths and injuries caused by storms and floods.
(Flooding can also be followed by outbreaks of diseases, such as cholera) Water scarcity
3. Contamination (droughts and sudden floods) – increased burden of diarrheal disease
4. Heatwaves – direct increases in morbidity and mortality; indirect effects via increases in ground-level ozone, contributing to asthma attacks
5. Vector-borne disease – malaria and dengue.



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Health risks in Canada from climate change



Source: Health Canada, 2008

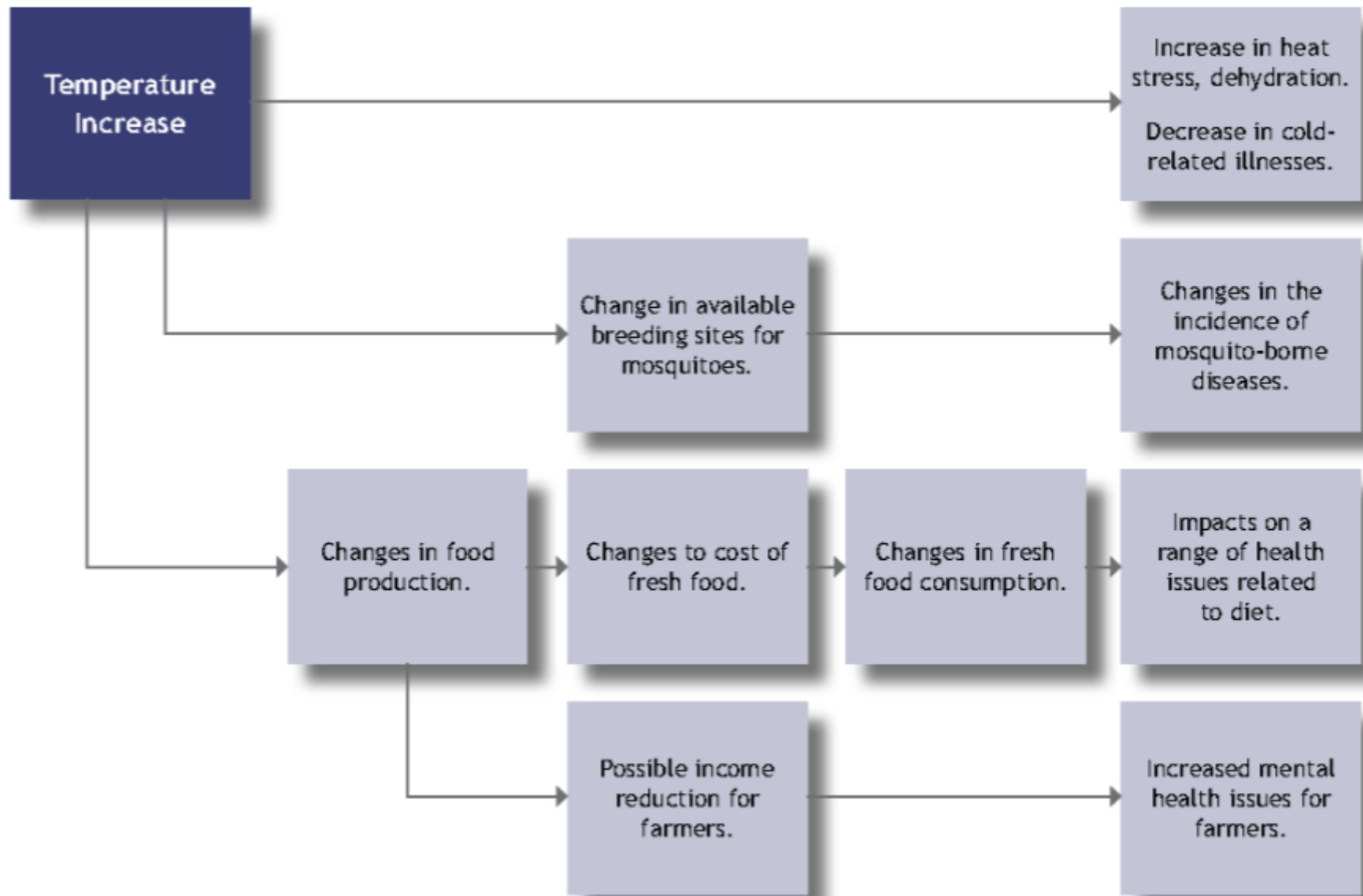
Food insecurity

- Chronic and acute child malnutrition, low birth weights, and suboptimal breastfeeding.
- Climate change will compound existing food insecurity
- Hunger, illness, and death due to under nutrition are set to worsen as climate change affects crops, forestry, livestock, fisheries, aquaculture, and water systems.
- Rising food prices.



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Figure 1: Examples of potential direct and indirect health impacts of temperature increase in 2030.



Health impact of climate change

- **Flooding** – increased frequency of severe coastal and river floods
- Analysis of more recent river flooding shows that mental health problems are the most important health impact among flood victims due to experience of personal and economic loss and stress.



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Extreme events

- In the long term-after a disaster- depression and anxiety
- Extreme meteorological phenomena, including heat waves and cold waves, floods, droughts, and windstorms
- Most meteorological extreme events are expected to continue to rise
- Hot conditions, heat waves, and heavy precipitation events will continue to become more frequent



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Extreme Weather-Related Events

Lead to:

- Social disruption
- Homelessness
- Injuries, deaths, disability
- Impacts on food and water supply



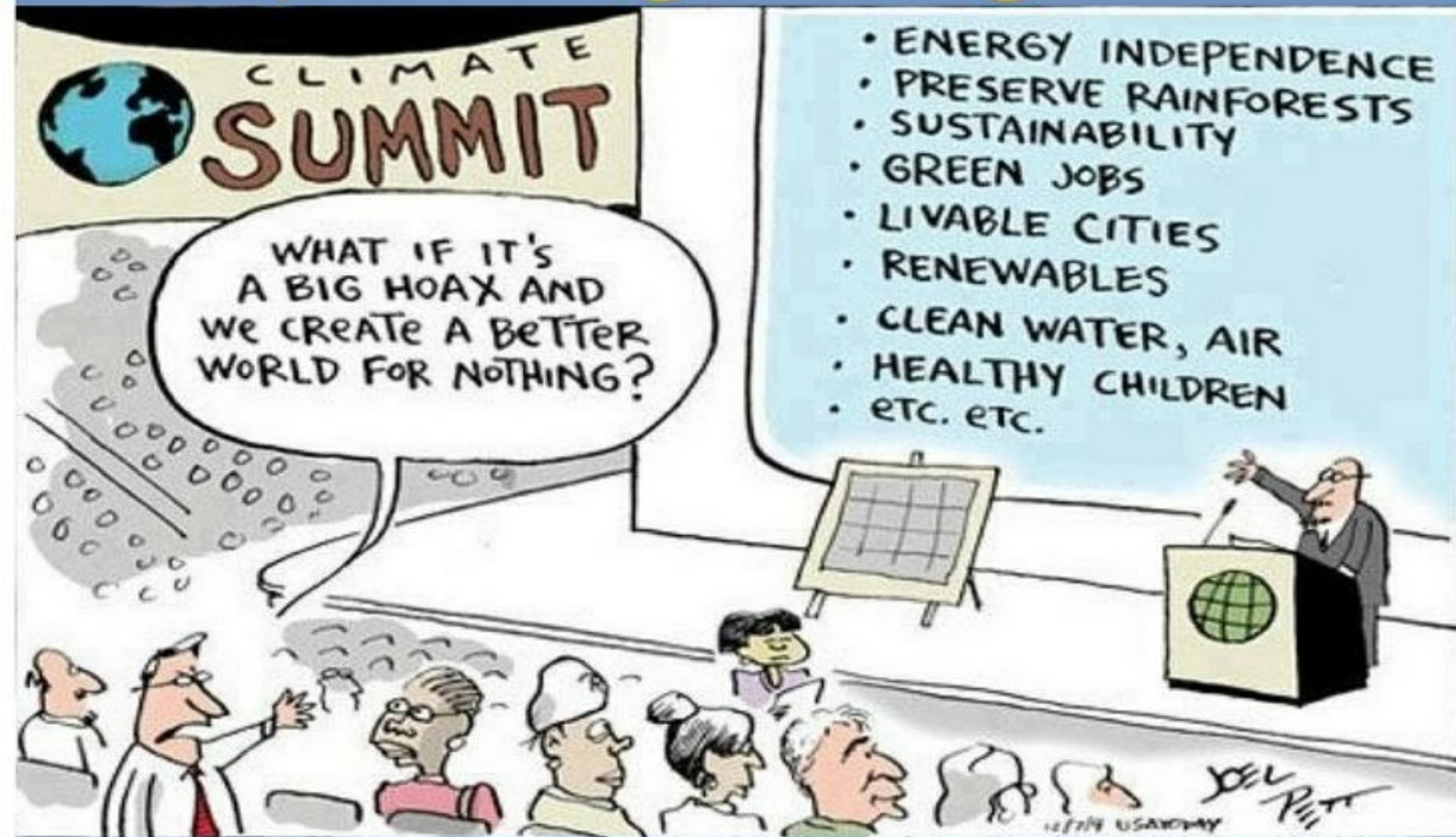
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Psychological/Psychosocial Effects of Climate Change



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Psychological Egoism



Humans are always motivated by self-interest

What Is the Problem?

- Left unaddressed, the harmful human mental health and psychosocial reactions to climate change are likely to be as bad as the physical impacts
- Post-trauma treatment is important, but too late, deals mostly with acute traumas, and response systems will never be robust enough

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Psychological Considerations in Response to Climate Change

A key characteristic of climate change risks is that they are psychologically distant for many people.¹

- Temporal, social and geographic and uncertain.
 - Lower Psychological distance – higher concern.
 - Various strategies to increase positive actions to climate change by reducing the distance of reality to peoples lives to become more real, local , relevant and immediate via risk communication strategies.
 - Issues related to skepticism and uncertainty. – future events not impacting them directly now.
 - Temporal issues, no direct impact in locale (more distant geographic concerns) and people, future considerations.
 - Skepticism enhances unsustainable actions and cognitive dissonance (i.e., CC is too complex and uncertain to be understood).
 - Uncertainty transfer may occur where a change or greater prominence given to one aspect of CC could lead to similar changes in other aspects of certainty, uncertainty and skepticism when the risk is not well defined and communicated,
 - Relevancy of CC to people in their geographic locales is essential to elicit sustainable behavioral change and preparation.



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¹ Spence, Poortinga, Butler and Pigeon (2011) and Pidgeon. Schools of Psychology at University of Nottingham, Cardiff University.

THIS PROVES THAT
GLOBAL WARMING
IS HAPPENING!

THIS PROVES THAT
GLOBAL WARMING
IS RUBBISH!



THE EYE OF THE BEHOLDER

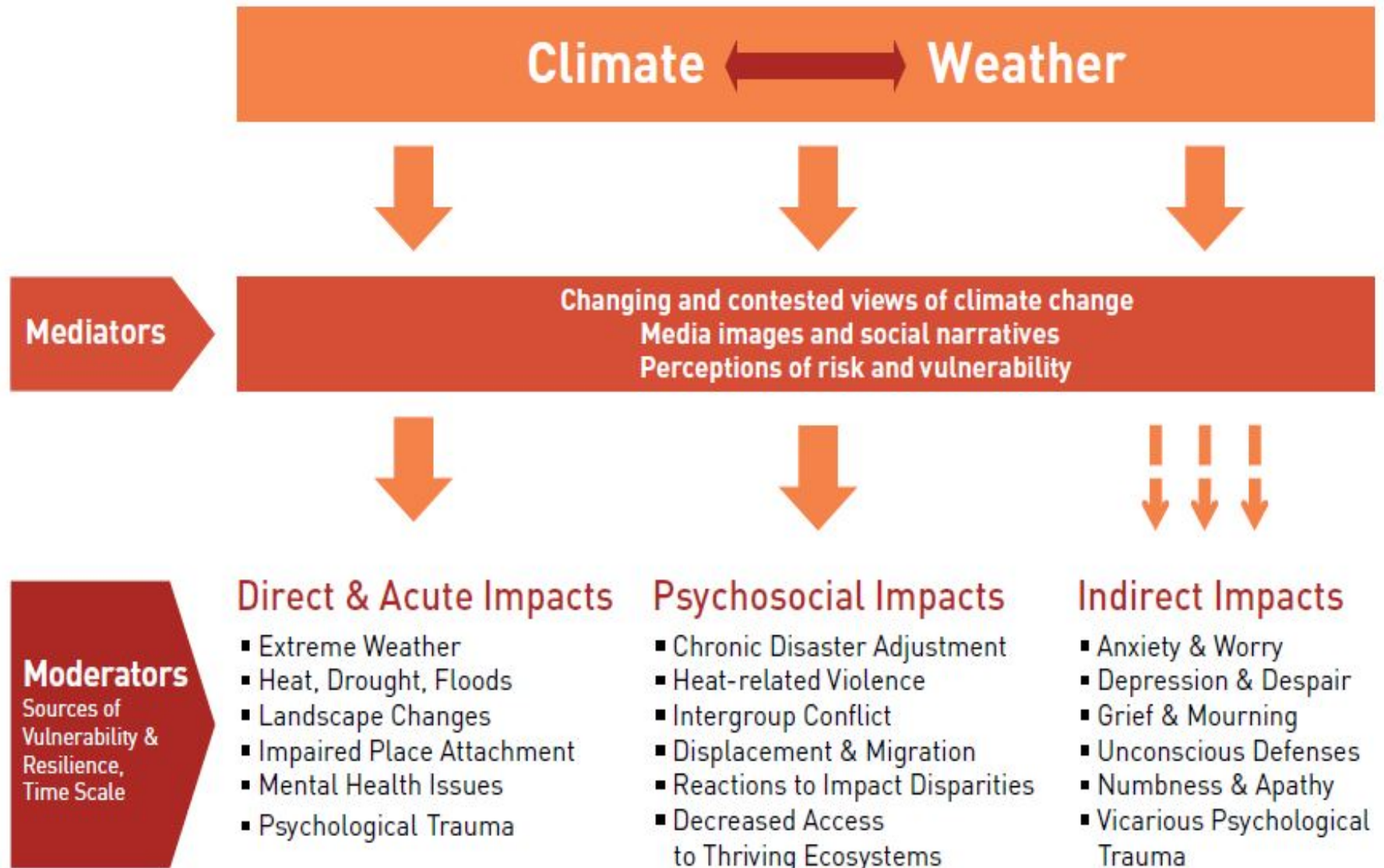
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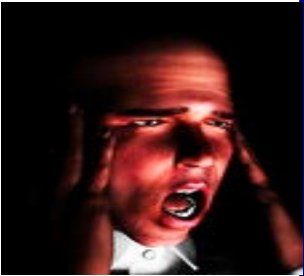
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Fig. 1

The psychological impacts of climate change and extreme weather



How the Innate Human Capacity for Resilience Can Be Overwhelmed



- When traumatic events are overpowering— “too much too fast.”
- When chronic stressors continue with no time for recovery.
- When high levels of threatening uncertainty & unpredictability persist.
- When the social supports needed to cope are absent or lost.
- When physical and economic resources needed to cope are depleted.
- When people feel persistent lack of personal safety.
- When sense of meaning, order and justice in the world are shattered.



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Why Be Concerned About Psychosocial Resilience?

Most people have a natural capacity for resilience—
Yet the scale & scope of today's adversities can cause it to get buried.

- Past and current individual and family traumas
- Organizational-derived trauma and stress
- Racism, sexism, and other forms of systemic oppression
- Rapidly increasing speed of life, information overload
- Wage stagnation and diminished job opportunities
- Secondary trauma: moral distress and compassion fatigue



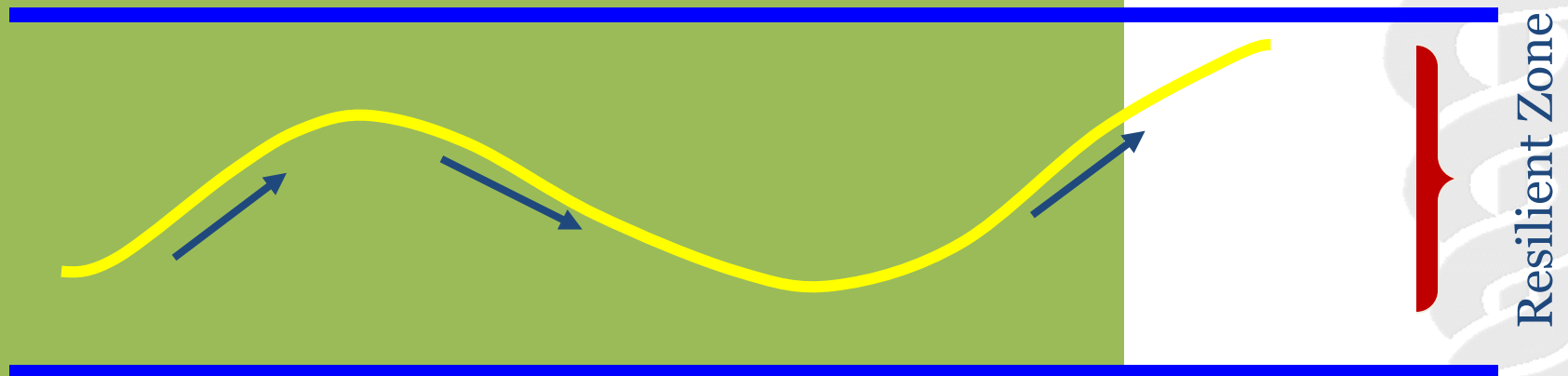
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Simplicity of the Key Concept

The Elegant Design of the Human Nervous System

- All human beings have a Resilient Zone
- All human beings can be bumped out of their Resilient Zone by life events
- All human beings can learn to get back into their Resilient Zone by learning to distinguish between sensations of distress and well being



Natural rhythm of the nervous system
The vitality of human existence

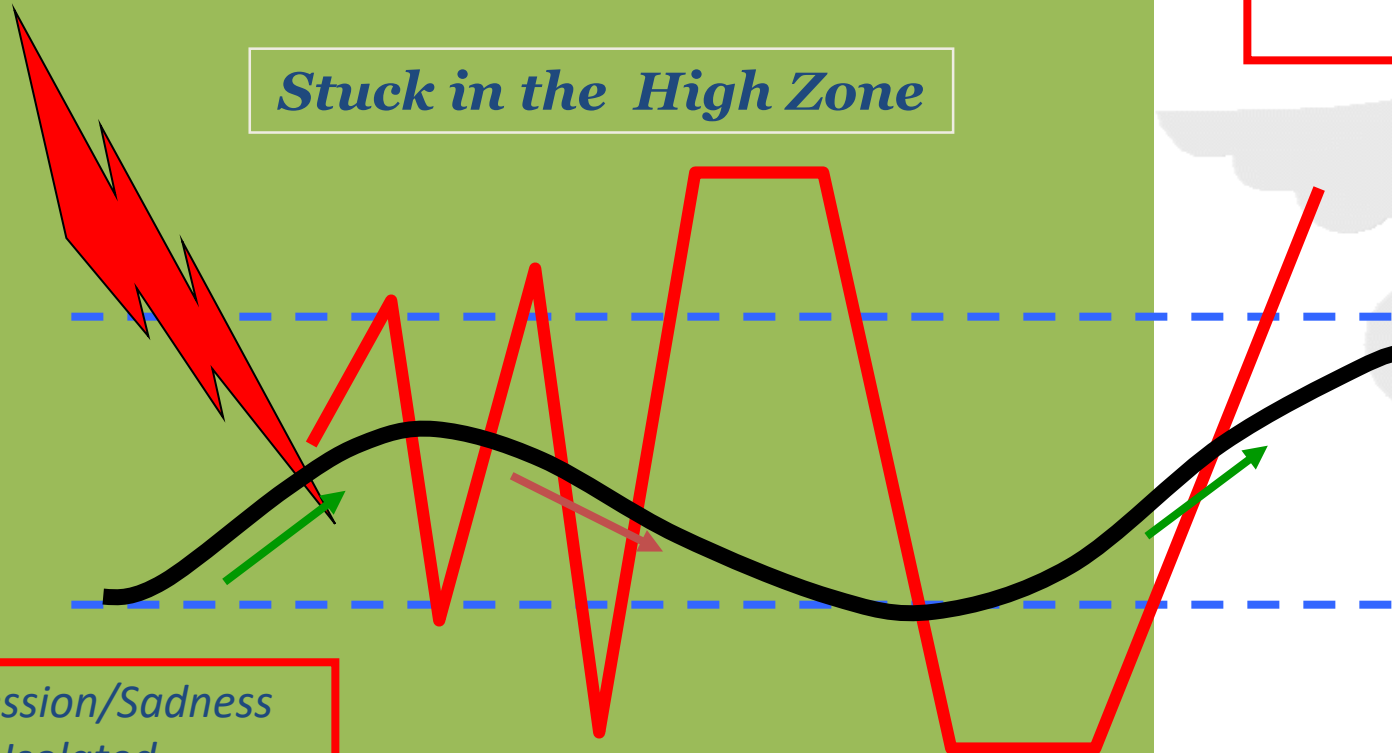


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Traumatic/Stressful Event or Stressful/Traumatic Triggers

*Edgy
Irritable
Mania
Anxiety & Panic
Angry outbursts
Pain*

Stuck in the High Zone



*Depression/Sadness
Isolated
Exhaustion/Fatigue
Numbness*

Stuck in the Low Zone

Resilient Zone



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Miller-Karas (2013)

Graphic adapted from an original graphic of Peter Levine/Heller, original slide design by Genie Everett

The Psychosocial Consequences of Acute Trauma & Chronic Stress

Individual Stress Reaction

Body releases neurochemicals to prepare us to fight, flee, or freeze causing hyperarousal & contraction:

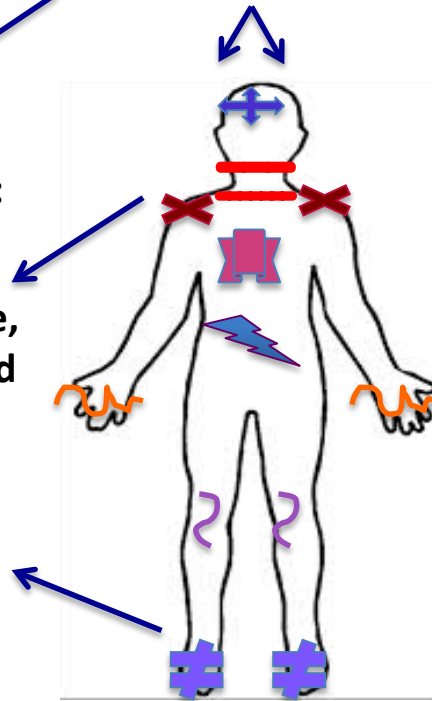
• Physical Reaction:

Increased blood pressure, pulse rate, difficult breathing, muscle, head and stomach aches, sleep disorders etc

• Mental Reaction:

Mind racing, excessive worry, tension, fear, anxiety etc.

External Stressors



Trauma-Organized Communities and Societies

- Despair, loneliness, meaninglessness
- Aggression, crime, violence
- Extremism
- Genocide, war, terrorism
- Racism & other systemic oppressions
- Disregard for human & all other life

Self-Destructive Coping

- Alcohol, drug, and food abuse
- Legalized drug abuse
- Workaholism
- Dissociation, reenactment
- More constrained lives

Personal Breakdown

- Emotional problems
- Cognitive problems
- Behavioral problem
- Spiritual problems
- Physical health problems

Trauma-Organized Organizations

- Short-term, quick-fix thinking
- Groupthink
- Pervasive distrust and conflict
- Rigid rules and regulations
- Dissociation, denial, reenactment



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Climate Change Aggravates All Of These Existing Stresses And Generates Many Direct and Indirect Surprising New Ones!

Temperature will rise by around 3.6 F (2C) leading to rising frequency and intensity of:

Fast Moving Acute Traumas

- Record rain & snow storms
- Record hot and cold temperatures
- Record windstorms
- Record flooding
- Record wildfires
- Larger tides and storm surges
- Black Swan & other surprise traumas

Slow Growing Chronic Stresses

- Drought and water shortages
- Desertification
- Sea level rise
- Ocean acidification
- Saltwater intrusion into groundwater
- New illnesses and diseases
- Many other surprise chronic stresses

In Sum

Climate change is a *direct source* and *indirect multiplier* of adversity



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Examples of Psychological Impacts of Fast Moving Climate Events

Effects depend on the intensity, duration, and level of exposure to the event.

Research shows 25 to 50% of people impacted by major storms and other extreme weather events can experience debilitating levels of:

- Anxiety
- Depression
- PTSD
- Suicide
- More

Example

New Orleans after Katrina saw levels of depression, hopelessness, despair, PTSD, and suicide unprecedented in modern disaster history.

High levels of co-morbidity still existed 2 years later--& even today.



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Examples of Psychological Impacts of Fast Moving Climate Events

Effects depend on the intensity, duration, and level of exposure to the event.

Research shows common affects of flooding often include:

- Anxiety
- Depression
- PTSD
- Increased aggression in children
- Higher suicide rates
- More

Example

In the UK, almost 75% of the people directly impacted by the 2007 summer floods experienced significant psychological distress, almost 50% experienced anxiety and depression, and about 25% suffered from PTSD.



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Examples of Psychological Impacts of Fast Moving Climate Events

Effects depend on the intensity, duration, and level of exposure to the event.

Extreme weather can also cause distress by shattering an individuals sense of meaning, order, and justice in the world.

This risk is amplified when people believe others have caused their suffering.

Example

After Katrina the mental distress felt by people of color in N.O. was aggravated by belief that government failed to protect them by building strong dikes and failed to help them after the storm hit.

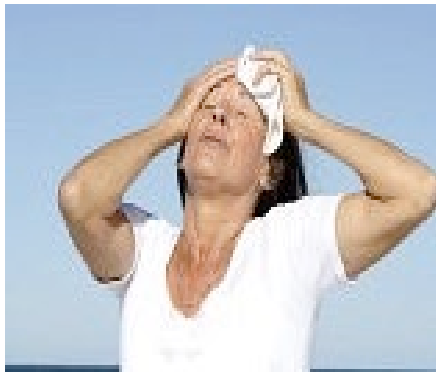


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Examples of Psychosocial Impacts of Slow Growing Climate Impacts

Effects depend on the intensity, duration, and level of exposure to the event.



Research shows hotter temperatures tends to increase alcohol & drug abuse, domestic violence, assault, rape, robbery, burglary, suicide, aggression and violence.

Examples

- One study looked at 30 years of monthly crime and weather data for 2997 U.S. counties and found that as temperatures warmed so did aggravated assaults, simple assaults, robberies, burglaries, larceny and vehicle theft.
- Hotter weather in the Europe has also been linked to higher crime rates.



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Examples of Psychosocial Impacts of Slow Growing Climate Impacts

Effects depend on the intensity, duration, and level of exposure to the event.



Research shows droughts produce different types of psychological distresses.

Examples

- Studies in Australia found that family dysfunction, depression, anxiety, hopelessness and suicide rose in mist of drought due to the financial impacts and constant mental strain.
- During the droughts of the 1980s, male farmers and ranchers in Wisconsin, Minnesota, North Dakota, South Dakota, and Montana demonstrated rates of suicide twice the national rate.
- Studies have found that alcohol & drug abuse rise in droughts.



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Psychosocial Impacts of Climate Change on Groups and Organizations

Effects depend on the intensity, duration, and level of exposure to the conditions.

Organizations can become trauma-organized.

Common Signs

- Pervasive fear about lack of safety
- Poor emotional management
- Communications breakdown & unresolved conflict
- Groupthink
- Reenactment or destructive responses
- Learned helplessness
- Unethical and illegal behaviors
- High turnover/dropout rates

Example

Sandy Bloom's work (*Destroying Sanctuary*) shows many health and social service organizations today are trauma organized.



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Psychosocial Impacts of Climate Change on Communities

Effects depend on the intensity, duration, and level of exposure to the conditions.

Communities can also become trauma-organized.

Examples

- Hotter cities in the U.S. experience significantly higher violence rates than cooler cities, even when poverty, unemployment, age, and other risk factors are statistically controlled.
- In addition to reducing quality-of-life, these patterns can undermine confidence in government, place more pressure on police, fire, emergency response etc. while raising costs and creating risk a vicious cycle.



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Psychosocial Impacts of Climate Change on Communities

Effects depend on the intensity, duration, and level of exposure to the conditions.

Entire societies can also become trauma-organized.

Examples

- A meta analysis of 60 research reports and 45 data sets from 27 industrial nations found that in all parts of world social conflict and violence rose when drought, extreme weather and temperatures increased.
- The International Organization for Migration concluded that by 2050 between 25 million and 1 billion people will be forced to migrate impacting both the nations they leave and migrate to.
- The Pentagon predicts rising wars & terrorism from more heat and resource shortages.



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Building Psychosocial Resilience



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Psychological/Psychosocial Impacts of Climate Change



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Why Resiliency Skills are Critical

The American Psychological Association & EcoAmerica reported that the likely impacts of climate change on adults and children are as follows:

- post-traumatic stress disorder (PTSD)
- distress, depression, and anxiety
- hopelessness
- increases in violence, aggression, and crime
- strains on social relationships

Children and Women are particularly vulnerable

Beyond Storms & Droughts: The Psychological Impacts of Climate Change June 2014 by American Psychological Association and EcoAmerica

COMMUNITY ACTION PREPARE FOR CLIMATE CHANGE

- ✓ Strengthening existing social groups and networks
- ✓ Psychological Preparedness-taking steps to prepare for the psychological impacts
 - ❖ The Community Resiliency Model is one strategy of preparedness
 - ❖ San Bernardino County Department of Behavioral Health using the wellness skills of CRM for disaster preparedness
- ✓ Community Collaboration across public and private organization to plan for the mental health impact following disasters, for example
 - ❖ TRI's collaboration with UUSC/ADRA International-The Philippines Hurricane Yolanda Projects
 - ❖ Community Resiliency Model Trainers of the Philippines

PREVENTION IS KEY

But almost NO focus exists on preparing people to cope psychologically, emotionally, and spiritually with climate impacts

- Adults and children must learn preventative resilience skills
- Organizations and communities must become psychosocial resilience-enhancing "Safe-Havens."
- The mental health elements of emergency services infrastructure must be strengthened.



**Business, Non-Profit, and
Government Resilience Zone**



**Household
Resilience Zone**



**School
Resilience Zone**



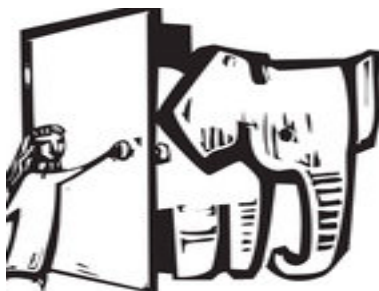
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Ignoring the Adverse Human Psychosocial Impacts of Climate Change Is a Grave Mistake

**Left unaddressed, they will diminish quality-of-life for everyone
and threaten to stall or derail emission cuts and climate preparedness.**



But Ample Research Also Shows
It Is Possible to Build Positive Psychosocial Resilience
and Doing So Can Motivate Many to Cut Emissions!



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Core Elements of Building Psychosocial Resilience

Requires Conscious Efforts to Build Resilience Skills Not Just Eliminate Mental illness

1. Proactively teach preventative resilience building skills to youth and adults—Resilience education should become as common as learning to read and write!
2. Teach organizational and community leaders how to recognize signs of trauma and stress and become trauma-informed resilience enhancing entities.
3. Strengthen local social support networks of all kinds.
4. Strengthen mental health elements of emergency services infrastructure.
5. Identify and prepare the most vulnerable populations.
6. Address the socio-economic-environmental factors that influence psychosocial health.



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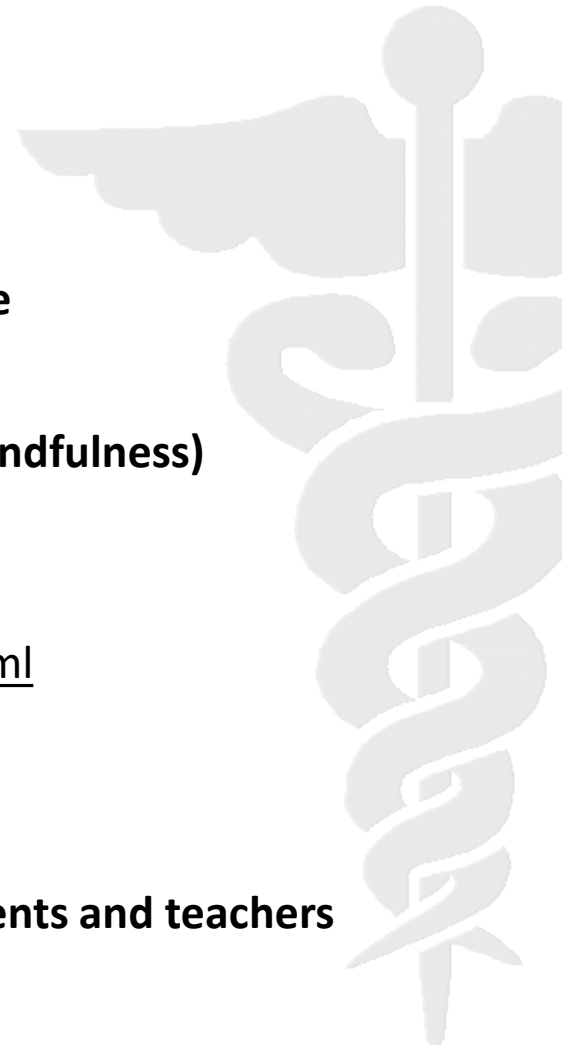
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Examples of Resilience Education Programs

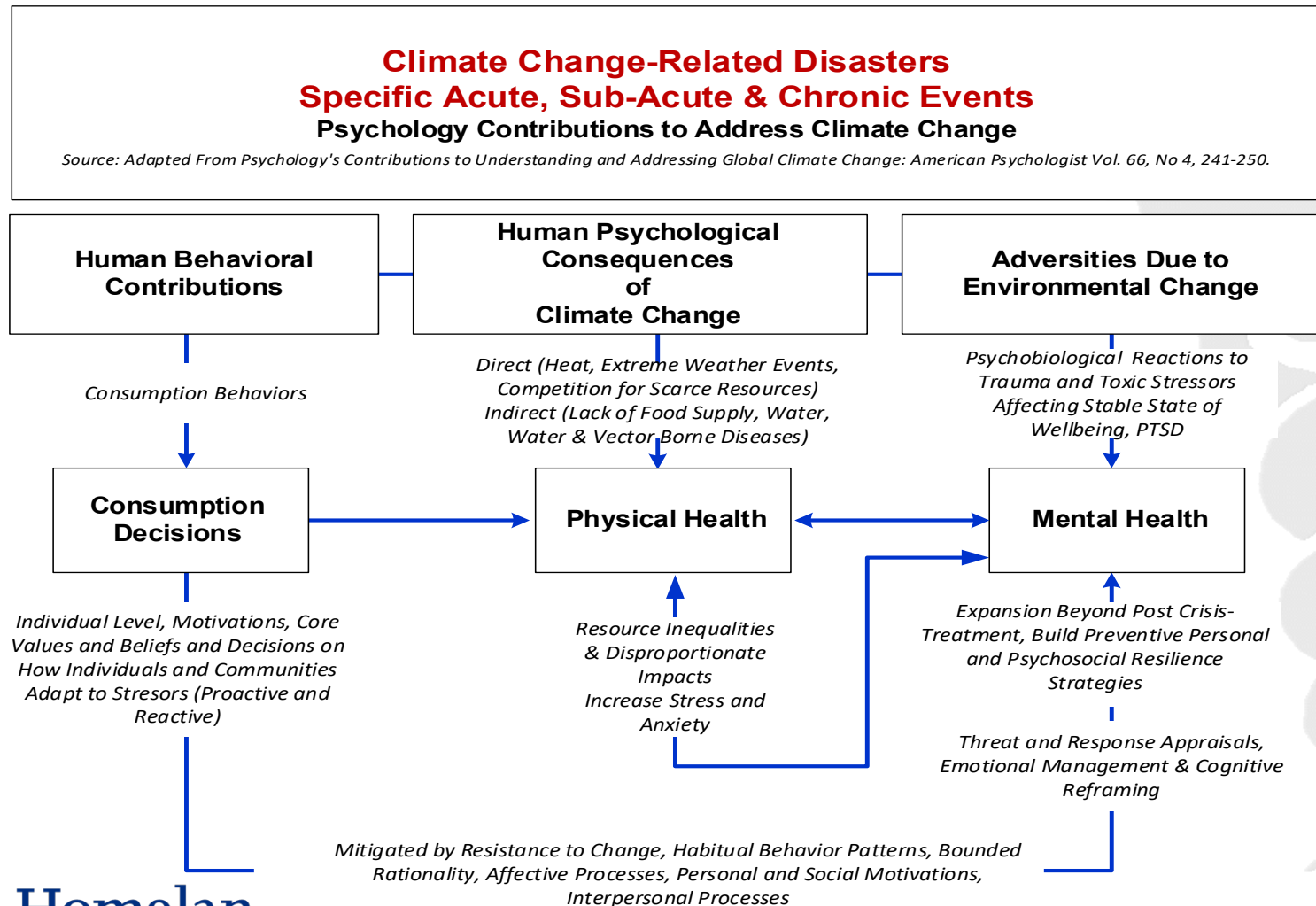
- **The Transformational Resilience Program of The Resource Innovation Group**
<http://www.theresourceinnovationgroup.org/transformational-resilience/>
- **Trauma Resource Institute Community Resilience Model**
<http://traumaresourceinstitute.com/>
- **Resilience Training International**
<http://www.resiliencefirst.com/>
- **The Andrus Sanctuary Institute—for organizational resilience**
<http://www.thesanctuaryinstitute.org/>
- **Mindfulness-Based Stress Reduction (U. Mass. Center for Mindfulness)**
<http://www.umassmed.edu/cfm/>
- **Innerkids Foundation**
<http://www.susankaisergreenland.com/inner-kids-program.html>
- **Penn Resiliency Program for Children:**
<http://www.ppc.sas.upenn.edu/prpsum.htm>
- **The Inner Resilience Program-developed after 9/11 for students and teachers**
<http://www.innerresilience-tidescenter.org/index.html>



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Psychological Considerations in the Alleviation of Impacts of Climate Change



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Building Community Resilience

Health Resilience



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ST JOHNS REGIONAL MEDICAL CENTER TAKES DIRECT HIT: JOPLIN, MO

Walter Hays, Global Alliance for Disaster Reduction, University of North Carolina, US



ST JOHNS: DAMAGE TO EMERGENCY MEDICAL VEHICLES

Walter Hays, Global Alliance for Disaster Reduction, University of North Carolina, US



Community Resilience Basics

- Community resilience and particularly community *health* resilience has emerged as a priority goal from the national to local levels in recognition of the fact that after a disaster, a community should focus on returning to functionality and prosperity as quickly as possible
- Over the last several years, there have been a number of public-private sector collaborative initiatives undertaken by national, state, and local governments with stakeholders which have used an approach that has brought together public and private sector and non-profit stakeholders to identify the community's collective needs to prepare for, respond to, and recover from an emergency event, and determine what capabilities are required to be resilient for all-hazards events



Mobilizing the “Whole Community”

HEALTH (Public Health, Mental Health, Physical Health)

Federal Authorities

Neighborhoods

Schools/Academic Institutions

Local Authorities

NGO & Volunteers

Infrastructure

Business Community

A Resilient Community:

Integrated plans for continuity and recovery

Traditional pillars

- Local authorities
- Public utilities
- First responders
- Infrastructure
- Medical resources

Grassroots resources

- Academic institutions
- NGOs/volunteers
- Neighborhoods
- Schools

Public information

- Pre-event citizen education and outreach
- Emergency information

Business community

- Financial sector
- Manufacturers
- Retailers
- Chamber of Commerce

Coordinated, regionally available assets and resources

- Emergency response augmentation
- Recovery support
- Infrastructure restoration



Community Resilience Properties

Community resilience is often described as having three properties: resistance, recovery and creativity.

- *Resistance* – the degree of disruption that can be accommodated without the community undergoing long term change.
- *Recovery* – the community’s ability to pull through or bounce back rapidly with limited damage to its pre-disaster state or a “new normal” state.
- *Creativity* – the community’s ability to build on lessons of a crisis or disaster, to gain an improved level of functioning and increased levels of resilience.



What Community Resilience Is and Requires

- There is no agreed definition of community resilience, but can be described as:
The ability of a community to (1) understand the consequences it faces from disasters or other events that affect public health and safety, (2) recognize the preparedness gaps, and (3) develop or strengthen capabilities that help the community:
 - *Prevent, mitigate, and withstand the effects of such events*
 - *Enable rapid recovery to a similar level of health and social well being, and*
 - *Take lessons learned and actively improve resilience*
 - *In other words **“To take a Licking and Keep on Ticking”***
- This holistic approach has been further developed and applied specifically to community *health* resilience by two independent pilot projects, a national community health resilience conference, and a follow-on Community Health Resilience Initiative sponsored by the DHS Office of Health Affairs in cooperation with the U.S. Department of Health and Human Services

Capabilities Essential for Preparedness, Response, and Recovery

- *At the individual level*, it is important to help improve personal preparedness and resilience for the at-risk populations and their caregivers through education by local government and human services
- *At the organizational level*, capabilities are needed to assure service continuity and medical surge healthcare facilities
- *At the community level*, necessary capabilities include informed first responders and public health on how to meet at-risk populations; plans and procedures; and training and exercising with social service groups, institutions that serve this community, and healthcare practitioners
- Resilience requires a holistic approach that focuses on improving resilience from the individual, organizational, to the community levels, healthcare and caregivers need to become engaged in, and help improve community health resilience



Other Fundamental Principles

Cross-function and discipline collaboration

- Cooperation is necessary among public health with emergency management and practitioners in other functional areas in an holistic approach covering all aspects of resilience—preparedness, medical and other response and recovery needs to address any event that has significant impacts on health and safety
 - Such an event will challenge healthcare organizations with dramatic increases in patient load and reductions in available health and medical capacity, while at the same time disrupting critical infrastructures and other essential service providers on which healthcare organizations depend
- Managing environmental hazards is integral to regional disaster resilience
 - Waste products and toxic holding sites should be considered security risks as well as environmental risks, and taken into account in response and particularly recovery
- The private sector and many non-profit organizations have resources and capabilities that can be incorporated into regional disaster response and restoration planning and activities



Community Health Resilience— Emerging Component of Overall Resilience

Resilience means the ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions. Resilience includes the ability to withstand and recover from deliberate attacks, accidents, or naturally occurring threats or incidents.¹

¹Based on resilience definition in the Presidential Policy Directive on Critical Infrastructure Security and Resilience (PPD-21)



People fleeing New Orleans Post-Katrina



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Community Health Resilience, cont.

While there is no established definition of Community *Health* Resilience, for the purposes of this Initiative, a useful definition is:

Community Health Resilience entails the ongoing and developing capacity of the community to account for its vulnerabilities and develop capabilities that aid that community in (1) preventing, withstanding, and mitigating the stress of a health incident; (2) recovering in a way that restores the community to a state of self-sufficiency and at least the same level of health and social functioning after a health incident; and (3) using knowledge from a past response to strengthen the community's ability to withstand the next health incident.

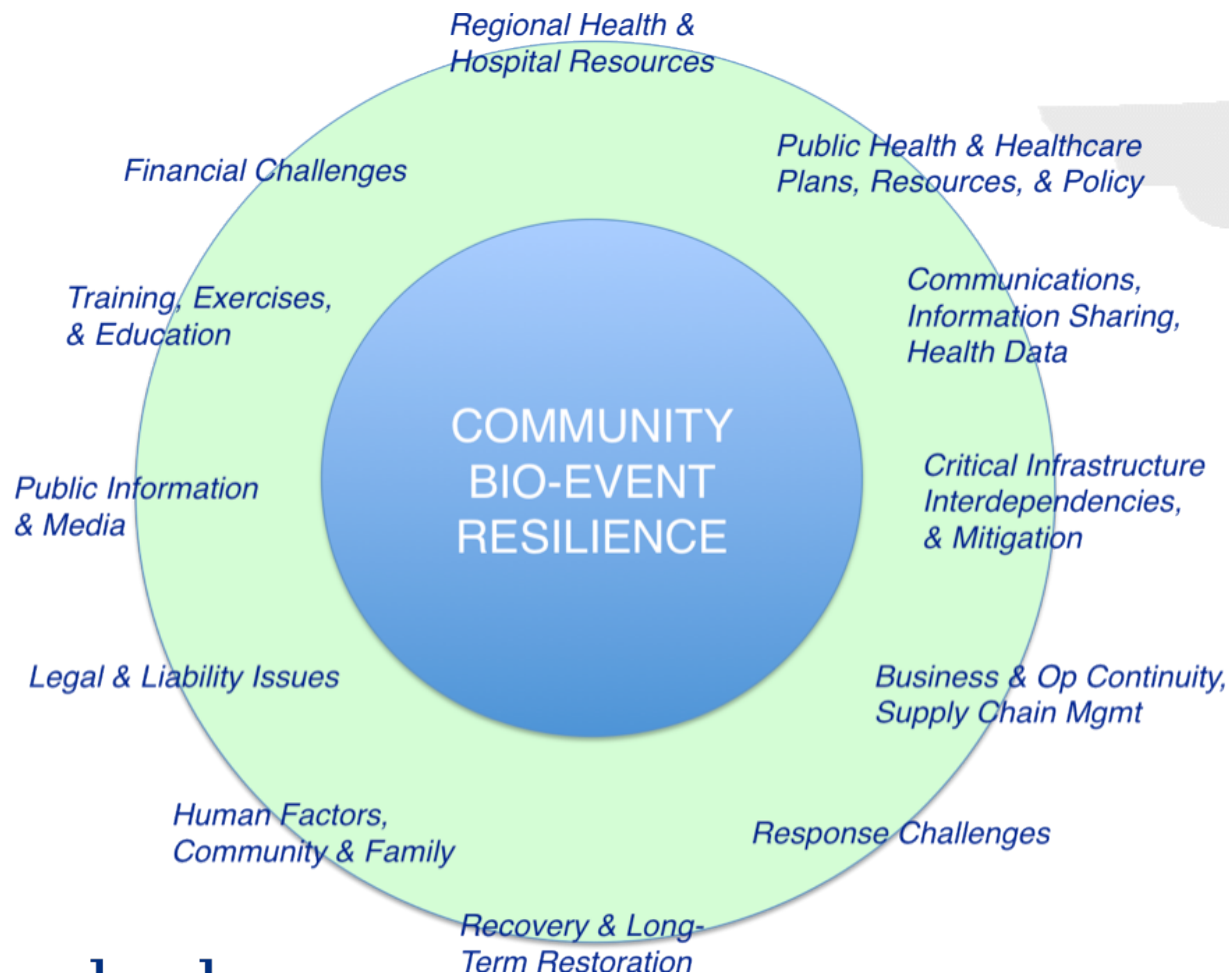
From: Building Community Health Resilience to Disasters (www.Rand.org)



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Resilience Focus Areas

Fundamental Intersections with Health



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Mobilizing the “Whole Community” Memphis

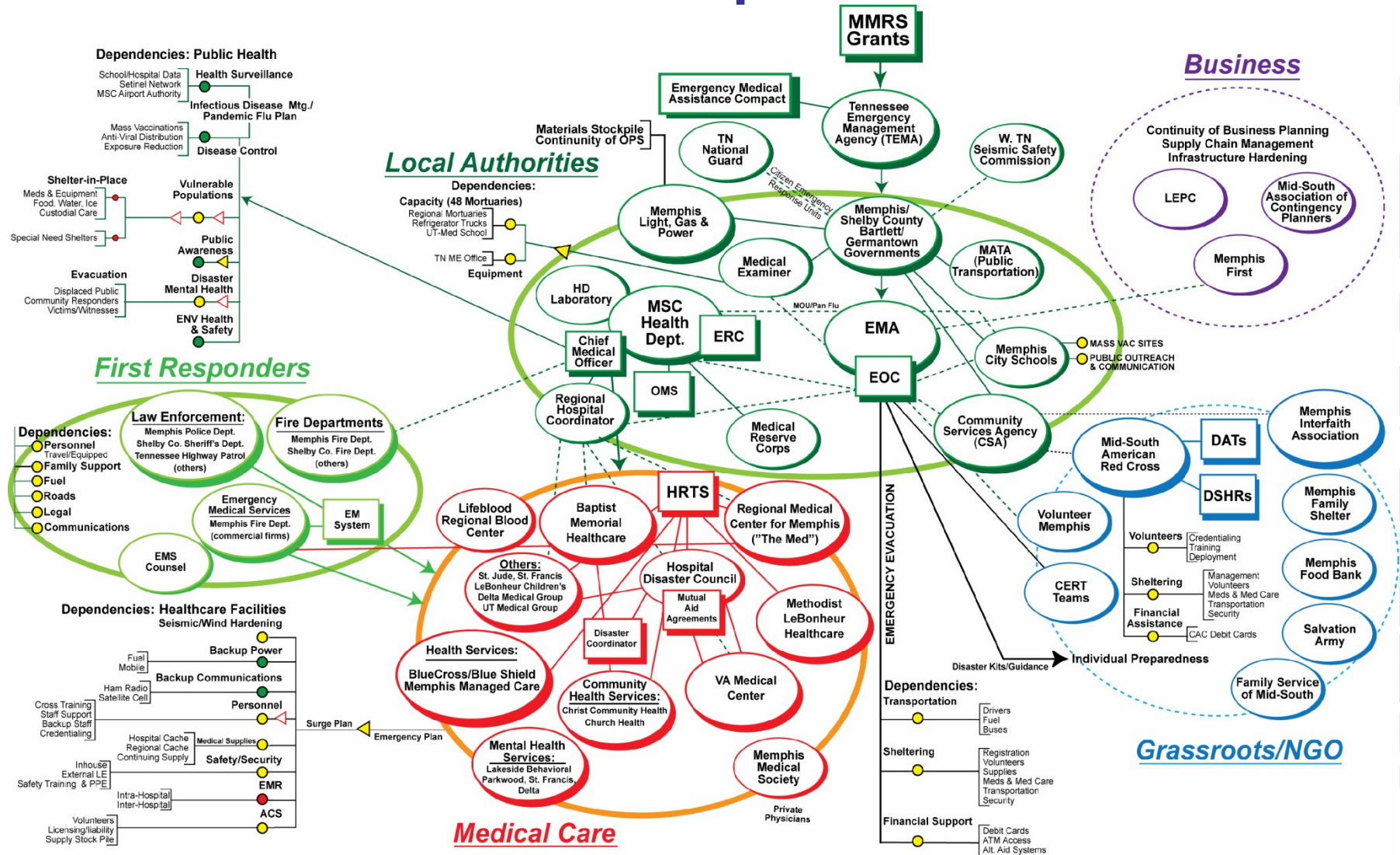


Figure 5. Taxonomy for Health Security: Memphis

Needs of the At-Risk Populations, cont.

- Many may refuse to evacuate
- First responders, caregivers, and family may need assistance with managing an individual who is unstable physically and/or mentally, or has a terminal or contagious condition that requires observation and treatment
- Individuals who live at home and rely on homecare assistance may lose this support during an emergency and also medical and specialized supplies (diapers, formula, bandages, colostomy supplies, etc.), refills on medications, medical equipment (wheelchairs, walkers, scooters, etc.), service animals, and/or attendants or caregivers



Community Health Resilience Toolset:

Overview

What is it?

- Collaborative project, involving both public and private-sector partners, to strengthen and enhance community health resilience across the Nation
- Community Health Resilience-related resources to assist communities maintain or improve health resilience for man-made and environmental disasters to include the effects of Climate Change
 - During steady-state conditions
 - During and after a disaster
- Efforts are guided by a National Stakeholder Group of key practitioners and representatives from sectors, disciplines, or functional areas with roles or responsibilities in assuring health and human care
 - Stakeholder Group represents:
 - Federal, State, Regional, Tribal and Local Governments
 - The Private Sector and Educational Institutions
 - Non-Governmental Organizations (NGO's)



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Community Health Resilience Toolset:

Guide and Toolkit

The CHRI Guide and Toolkit provide users with a comprehensive overview of the many elements and characteristics of holistic community health resilience

- **So what does it help with??**
 - As a planning template to develop or enhance public health and organizational preparedness, response, mitigation, and recovery/continuity plans
 - As a means to engage the broad stakeholder base toward community health resilience; to provide a high-level checklist of community health resilience capabilities
 - To learn about community health resilience best practices that public/private-sector and non-profit organizations have or are developing
 - To access policy and educational resources to provide information in specialty areas such as Geriatric/Elder and Pediatric/Children's disaster resilience issues
 - To help identify and point toward actions to improve community health resilience under steady-state conditions and during emergencies
 - To train and enhance strategic and operational needs and actions necessary for building health-resilient communities and organizations



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Additional Work Related to the CHRI

- Based on Stakeholder input regarding specialized areas of Health Resilience, OHA developed and leads the following International Groups
 - Pediatric/Children's Disaster Resilience Group (120 members)
 - Geriatric/Elder Disaster Resilience Group (70 members)
 - **Psychosocial Disaster Resilience Group (40 members)**
- Group calls occur every 45 to 60 days from 11:00 to 12:30 eastern
- Two to three presenters/call
- Presentations are on topics/work related to operational disaster resilience
- Major goals are to inform colleagues, generate collaborations and provide tools

Participants include Federal, State and Local governments, the Private Sector, NGO's And Educational Institutions.

Most States are now represented to include Alaska and Hawaii

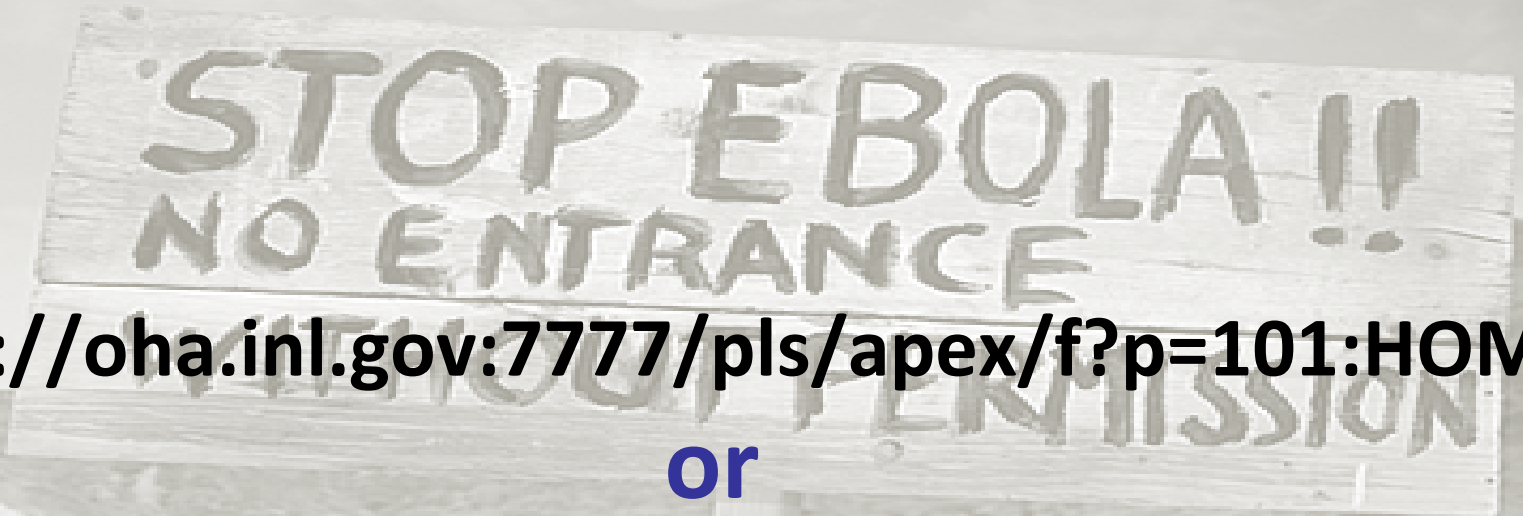
Canada is now participating



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TO JOIN: SEND ME AN EMAIL
JEFFREY.STIEFEL1@HQ.DHS.GOV

Community Health Resilience Website



<http://oha.inl.gov:7777/pls/apex/f?p=101:HOME>

or

communityhealthresilience.anl.gov



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1. Search by keyword:

2. Enter optional filters:

3. Search!

State

Resource Type

Hazard

Mission Area

Functional Capability

Search Clear

- Ebola, Enterovirus and Emerging Infectious Disease Resources
- US Climate Resilience Toolkit
- Health Resilience Guidance
 - Draft Review
 - Web Version
- Functional Capabilities
- Mission Areas
- Add a Resource

About the Initiative and this Toolset

The goal of the CHR Toolset is to provide practitioners and experts from all sectors, disciplines, and functional areas who have roles, responsibilities, or interests in CHR access to guidance and resources to make their community (or organization) more resilient. The CHR Toolset:

- Provides users a comprehensive overview of what CHR is—its many elements and characteristics—and what CHR requires.
- Provides guidance, information, resources, and best practices needed to enable and empower communities, organizations, and individuals to be health resilient through the Toolset's website.
- Provides a source of information on capabilities and solutions that public/private-sector and non-profit organizations have, or are developing, as well as other policy and educational resources to improve CHR under steady state conditions.



Enabling incident recovery in communities

Community Health Resilience: A Description

Regardless of the event, a community's ability to successfully return to a "new normal" is based on its *resilience*, or its capacity to withstand, respond positively to, adapt, and recover expeditiously from a crisis or adversity.

To date, there is no single-definition accepted for community resilience or CHR. In addition, the term *resilience* has different meanings depending on the professional function or discipline (e.g., sociologists, engineers, or emergency managers). Although there is no agreed definition, there are useful descriptions of both community resilience and CHR.

Useful descriptions include

"The ability to prepare for and adapt to changing conditions and withstand and recover rapidly from disruptions, including deliberate attacks, accidents, or natural occurring threats and incidents."

News/ blog entries

- November 20, 2014 - [The U.S. Climate Resilience Toolkit](#) The U.S. Climate Resilience Toolkit provides scientific tools, information, and expertise to help people manage their climate-related risks and opportunities, and improve their resilience ([read more...](#))
- November 17, 2014 - [Listen, Protect, Connect: Model and Teach A psychological first aid tool for teachers to help students bounce back from a disaster.](#)
- November 17, 2014 - [Listen, Protect, and Connect: Psychological First Aid for Children and Parents](#) A psychological first aid tool for children and parents to help children bounce back from a disaster ([read more...](#))
- November 10, 2014 - [How to Talk to Your Children About Ebola](#) Save the Children's emergency health experts have created tips for caregivers on how to educate chi ([read more...](#))
- November 10, 2014 - [Ebola Virus Information for Maryland Residents](#) The Maryland Department of Health and Mental Hygiene's Ebola website includes fact sheets, Q&As, guidance for health care workers and sch ([read more...](#))



ENABLING COMMUNITY HEALTH RESILIENCE

The Community Health Resilience Toolset Guidance Document

Fourth DRAFT

**THE U.S. DEPARTMENT OF HOMELAND SECURITY
OFFICE OF HEALTH AFFAIRS**

July 2014

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Functional Capabilities: Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues

Ebola, Enterovirus and Emerging Infectious Disease Resources

US Climate Resilience Toolkit

Health Resilience Guidance

Functional Capabilities

Communications, Critical IT Systems, Information Sharing, and Health Data Issues

Continuity of Business and Operations, and Supply Chain Management

Coordination and Collaboration across Jurisdictions, Sectors, and Disciplines

Critical Infrastructure and Associated Interdependencies; Risk Assessment, and Mitigation

Ebola, Enterovirus and Emerging Infectious Disease Planning and Response

Education, Training, and Exercises

Environmental Health, Food, Agriculture, and Veterinary Medicine

Financial and Broader Resourcing Challenges

Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues

Human Factors, (Physical and Mental Health and related Community, Family, and Individual Issues)

Legal, Policy, and Liability Issues

Plans and Integration

Public Engagement, Empowerment, and Information, including Media

Recovery and Long-Term Restoration Issues

Response Challenges

Mission Areas

Add a Resource

Description

Documents

Tool/Resource Name	How this Tool is Useful	Key Capabilities	Functional Capability Sets
Personal Disaster Planning	This fact sheet provides useful links to a poster that addresses coping with biological, chemical, and "dirty Bomb" attacks.	<ul style="list-style-type: none"> Emergency public health and medical, including mental health services (e.g., availability, certification, mobile assets, emergency triage and pre-hospital treatment, use of remote care technologies) 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Personal Disaster Planning	This fact sheet provides useful links to a poster that addresses coping with biological, chemical, and "dirty Bomb" attacks.	<ul style="list-style-type: none"> Emergency public health and medical, including mental health services (e.g., availability, certification, mobile assets, emergency triage and pre-hospital treatment, use of remote care technologies) 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Emergency Medical and Public Health Response to Terrorism: Memorandum of Understanding	This memorandum of understanding outlines job actions to be taken by various authorities and entities in response to acts of terrorism.	<ul style="list-style-type: none"> Emergency public health and medical, including mental health services (e.g., availability, certification, mobile assets, emergency triage and pre-hospital treatment, use of remote care technologies) 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Emergency Preparedness and Response Program	This Website provides useful links background information and/or response guidance for bioterrorism, push partner program, preparing for emergencies, emergency kit preparation, emergency volunteers, pandemic Influenza planning, and people with disabl. Read More	<ul style="list-style-type: none"> Emergency public health and medical, including mental health services (e.g., availability, certification, mobile assets, emergency triage and pre-hospital treatment, use of remote care technologies) 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Health Alert Network	This network is CDC's primary method of sharing cleared information about urgent public health incidents with public information officers; federal, state, territorial, and local public health practitioners; clinicians; and public health laboratories. Read More	<ul style="list-style-type: none"> Emergency public health and medical, including mental health services (e.g., availability, certification, mobile assets, emergency triage and pre-hospital treatment, use of remote care technologies) 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Puget Sound Regional Catastrophic Disaster Coordination Plan (March 2013)	This coordination plan provides an all-hazards framework for coordination among local, State, Tribal, and Federal entities prior to, during, and following a catastrophic incident in the Puget Sound Area.	<ul style="list-style-type: none"> Situational awareness for organizations, jurisdictions, regions 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Puget Sound Region Resource Management and Logistics Toolkit	The Puget Sound Regional Resource Management and Logistics Toolkit (RMLT) provides a comprehensive framework and guidance for managing resources and logistics. It presents a strategy that encourages resource sharing and optimizes resource acquisition. Read More	<ul style="list-style-type: none"> Situational awareness for organizations, jurisdictions, regions 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Situational Awareness - Enhancing Regional Information Sharing	This assessment document identifies options for reducing or eliminating the gap in situational awareness for emergency managers.	<ul style="list-style-type: none"> Situational awareness for organizations, jurisdictions, regions 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Missouri Department of Mental Health: Office of Disaster Readiness All-Hazards Facility Planning Guide	Developed to provide a useful planning resource for utilization by DMH facilities and contracted providers. Each section of the guide includes a brief description of its purpose and includes examples where practical. Reference appendices have been in. Read More	<ul style="list-style-type: none"> Screening, search, and detection for all-hazards health threats, including chemical, biological, radiological, nuclear, and explosives 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues Human Factors, (Physical and Mental Health and related Community, Family, and Individual Issues)
Creating Resilient Communities: The Work of SERRI and CARRI	The document can assist communities, leaders, and policy makers at all levels in understanding and implementing policies and procedures that protect citizens, communities, and regions against severe disruptions. Read More	<ul style="list-style-type: none"> Continuous and sustainable process and strategy for community, organizational, and individual health resilience improvement Decontamination of structures, assets, soil, and water Interoperable and resilient communications systems 	<ul style="list-style-type: none"> Continuity of Business and Operations, and Supply Chain Management Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Waste Management for Homeland Security Incidents	This site provides waste management information that can be used by emergency planners, managers, and responders in planning before a homeland security incident occurs, and in decision-making during and after an incident.	<ul style="list-style-type: none"> Assurance of lifelines and essential disaster supply chains (e.g., food, water, fuel) and services (e.g., wastewater and solid waste disposal, power generators, transportation) Environmental health management Medical waste management 	<ul style="list-style-type: none"> Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Comprehensive Community Bio-Event Resilience Action Plan for the Puget Sound Region	Covers the need to have an effective regional organizational structure for recovery and long-term restoration after a major bio-event or disaster with a well-defined decision-making process that involves the range of key stakeholder organizations nec. Read More	<ul style="list-style-type: none"> Debris removal and disposal Effective multi-jurisdiction/cross-sector integrated command structure for response and initial recovery Emergency mutual assistance agreements Health, Emergency Services workforce recruitment, availability, maintenance, occupational health and safety, and certification 	<ul style="list-style-type: none"> Communications, Critical IT Systems, Information Sharing, and Health Data Issues Continuity of Business and Operations, and Supply Chain Management Education, Training, and Exercises Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Environmental Health Emergency Response Guide	"This document addresses 15 environmental health-related topics and is intended to provide quick access to information needed in the event of an illness outbreak emergency, a natural disaster, a deliberate act of terrorism, or an industrial- or tra. Read More	<ul style="list-style-type: none"> Medical waste management Organizational structure for coordinated decisionmaking on restoration priorities for infrastructures, housing, etc. 	<ul style="list-style-type: none"> Education, Training, and Exercises Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Alabama Healthcare Disaster Planning Guide	(none)	<ul style="list-style-type: none"> Management of non-governmental support and volunteers Pharmaceutical caches Training and regional and targeted exercises and drills (for range of stakeholder groups—including health and human service organizations and media) 	<ul style="list-style-type: none"> Education, Training, and Exercises Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues
Oregon Public Health Preparedness: Building Resilient Communities	The Plan takes into account the evolving understanding of public health emergency preparedness in terms of capabilities; the important role preparedness programs play in public health infrastructure development and accreditation processes; the Integrat. Read More	<ul style="list-style-type: none"> Crisis standards of care Identification of needs and assistance for at-risk populations (economically-stressed, homeless, elderly, disabled, pregnant women and children) and ethnic groups Indicators for proactive alerts and warning; triggers for response, and on-going monitoring 	<ul style="list-style-type: none"> Coordination and Collaboration across Jurisdictions, Sectors, and Disciplines Education, Training, and Exercises Healthcare and Related Public Health and Emergency Preparedness Plans and Resource Issues



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QUESTIONS?





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