Climate Change and Health: A Framework for Action

Healthy Communities Strategies
- Bike lanes, parks, community gardens, healthy housing
- Social Inequities
  - Race/ethnicity, class, immigration status, gender, sexual orientation
- Policy, Systems, and Environmental Change
  - Land use, transportation, energy, water, agriculture/food, economic, health care
- Systems
  - Institutional Power
    - Government, schools, corporations, businesses, NGOs, faith organizations

Health Processes and Strategies
- Living Conditions
  - Physical: Transportation, housing, residential segregation, air/water, soil, work, greenspace
  - Social: Experience of inequities, social capital, support, isolation
  - Economic: Income, wealth, support
  - Services: Health care, education, retail

Health Education
- Nutrition, smoking cessation, physical activity

Risk Reduction
- Indirect and transformed: water filtration and provision

Safety Net
- Food assistance, social safety, health care access

Health Behaviors
- Nutrition, physical activity, violence, smoking, stress management, substance use

Health Co-Benefits or Adverse Health Consequences
- Intersection of resources (including social connection), coping mechanisms, exposures, and susceptibility

Individual and Community Climate Change Vulnerability or Resilience

Disability and Death

Health & Inequities Impacts
- Chronic disease: Cardiovascular disease, asthma, diabetes
- Injury
- Infectious disease: HIV, flu
- Reproductive outcomes: Stress/mental health

Climate Change Processes and Strategies
- Greenhouse Gas Emissions
  - CO2, methane, black carbon, other short-lived greenhouse gases
- Other Environmental Impacts
  - Fisheries collapse, biodiversity loss, resource depletion

Global Climate Impacts
- Ocean acidification, sea level rise, climate variability, glacier and snow pack loss

Local Climate Impacts
- Extreme weather events, heat, precipitation, drought, flooding, saline incursion, wildfires

Intermediate Factors
- Environmental: Ozone, water pollution, pollen production, microbial contamination, vector distribution, crop yield
- Socioeconomic: Food and water prices, job loss, conflict over water, land, or food

Public Health Preparedness
- Surveillance, laboratory testing, emergency warning, outbreak containment planning

Mitigation
- Clean energy, conservation, and efficiency, bike, walk, transit, land use, forest preservation, agricultural practices, carbon capture

Climate Education
- Promote biking to work, plant-based diet, energy conservation, climate awareness

Climate Engineering
- Ocean iron fertilization, space mirrors, sulfur dioxide release, cloud manipulation

Adaptation
- Sea walls, managed retreat, vaccination, energy retrofits, urban heat island mitigation, sustainable food systems, vulnerability assessment, water conservation

Climate Preparedness
- Cooling zones, weather warnings, hospital generators

Health Risks and Exposures
- Particulate matter, soot, mold, secondhand smoke, violence, traffic, noise, food insecurity

Medical Care / Case Management
- Asthma management, case care, medications, rehabilitation and support services

Preparedness
- Cooling zones, weather warnings, hospital generators

Potential Health Impacts
- Stress/mental health, illness, displacement, heat illness, water pollution, pollen, food shortage, conflict over water, land, or food

Health Processes and Strategies

Disability and Death

Disaster Recovery
- Clean up, relocation, rebuilding

Community Engagement

Partnerships

Advocacy

Communications

Surveillance and Monitoring

Community Capacity Building

Institutional Power
- Government, schools, corporations, businesses, NGOs, faith organizations

Intervention strategies

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