CLIMATE CHANGE AND ITS IMPACT ON AGRICULTURAL WORKER HEALTH

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Farmworker Justice
Midwest Stream Forum for Agricultural Worker Health
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Farmworker Justice

**Farmworker Justice** is a nonprofit organization that seeks to empower farmworkers and their families to improve their living and working conditions, immigration status, health, occupational safety, and access to justice.

Using a multifaceted approach, FJ engages in litigation, policy advocacy, capacity-building, and education.

www.farmworkerjustice.org
Agenda

- Icebreaker
- Overview – climate change and farmworkers
- Environmental Impacts and Risks
- Small Group Discussion
- Strategies and Policy Recommendations (FJ’s Environmental Justice Symposium – May 2022)
- Questions
- Resources
Icebreaker
Impact of Climate Change on Human Health

Injuries, fatalities, mental health impacts
Asthma, cardiovascular disease

Heat-related illness and death, cardiovascular failure
Malaria, dengue, encephalitis, hantavirus, Rift Valley fever, Lyme disease, chikungunya, West Nile virus

Extreme Heat
Severe Weather
Air Pollution

Increasing Allergens
Respiratory allergies, asthma

Rising Temperatures
More Extreme Weather
Increasing Sea Levels

Forced migration, civil conflict, mental health impacts
Changes in Vector Ecology

Environmental Degradation

Extreme Heat
Severe Weather
Air Pollution

Global Warming

Rising Temperatures
More Extreme Weather
Increasing Sea Levels

Forced migration, civil conflict, mental health impacts
Changes in Vector Ecology

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Impacts of climate change on farmworker communities

- Displacement
- Increased exposure to air pollution, extreme heat, and pesticides
- Mental health impacts
- Physical injuries and fatalities
Vulnerabilities for farmworkers

- Occupational health risks
- Health disparities
- Migratory lifestyle
Farmworkers & Climate

- Environmental Stressors
- Systems
- Outcomes
Environmental impacts & risks
Heat Stress

- High rates among farmworkers (69% in one UFW survey)
- Health impacts:
  - Work injuries
  - Kidney injury & disease
  - Heat stroke, death
- Farmworkers are **1.4%** of all employed workers in the U.S.,¹ but represent about **15%** of occupational heat fatalities (2002 - 2020).²

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Increasing risk for farmworkers

Projections*

- 2°C warming scenario
  - By mid-century, the number of unsafe working days (with heat index ≥105) experienced by the average farmworker will increase from 21 to 39.

Heat stress: Worker protection

- There is no federal standard
- OSHA began a rulemaking process in 2021
- Few states have heat standards to protect outdoor workers
Wildfire Smoke

- Between 1984 and 2015, the number of large fires doubled across the western U.S.*

- Health impacts:
  - Risk of respiratory and heart disease
    - Exposure to hazardous air quality
    - Mixture of air pollution with pesticides and other contaminants

- Wildfire smoke inhalation has been attributed to 15,000 premature deaths in the U.S. and is projected to increase to 40,000 deaths as a result of climate change**

- Nearly 3 out of 4 workers in Mattawa (Eastern WA) reported that while working they were exposed to an unhealthy amount of wildfire smoke and 100% of respondents said they had little or no information regarding wildfire smoke protection***

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Wildfire Smoke: Worker protection

- There is no federal standard
- Only a few states have regulations in place

*WA is finalizing its permanent wildfire smoke rule
Pesticide exposure & climate change

- The range of many pests will increase, leading to increased pesticide use.
- Heat increases the rate of pesticide evaporation & their concentration in the air.
- May increase rate at which pesticides turn into more toxic compounds.
- May also affect the performance of PPE, and increase dermal absorption of pesticides.
Decreased access to clean water

- Water systems in low-income and rural communities are struggling to meeting drinking water standards.
- Floods and long droughts affect availability and quality of water

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Clean water access: Structural barriers

- Underinvestment in rural areas
- Self-funding model for water systems not sustainable in poor communities
- Government grant funding often for construction, not operations & maintenance
- Cost sharing requirements for government funding
- Unincorporated areas at a disadvantage

- Bipartisan infrastructure law (2021) includes $510 million over five years for drinking water grants for disadvantaged communities, but has a cost-share requirement (45%)
Small Group Discussion

- What has been the impact of climate change on farmworkers in your community?
- What adaptations have your clinics made to support farmworkers and address the issues related to climate change?
- What are the some best practices to address climate change?
- What are the gaps/needs for your health center/the farmworker community you serve?
FJ’s Environmental Justice Symposium

- Two-day virtual symposium held May 17-18, 2022
- Participants represented health centers, PCAs, legal services orgs, academic institutions, environmental justice orgs, and community-based orgs
- Featured presentations by: Dr. Marysel Pagan (MCN), Maritza Mendoza (Green Latinos), Joan Flocks (University of Florida), and Lihlani Nelson (Center for Agriculture and Food Systems, Vermont Law School)
- Topics:
  - Effects of extreme weather events on farmworker health
  - Water access
  - Heat stress
  - Pesticide exposure
Gaps/Needs to Address

- Lack of culturally appropriate emergency preparedness materials
  - Protections
  - Preparedness
  - Emergency warnings
  - Resources/support
- Lack of information about protections
- Lack of control over working & housing conditions
- Lack of recovery and response resources in farmworker/rural communities
Best practices

- Partnerships between diverse organizations
- Community-based participatory research
  - *e.g. Girasoles Project by Emory Univ. & Farmworker Assoc. of FL*
- Policy briefs
- Farmworker testimonies
- Radionovelas and PSAs
- Social media campaigns
- Community health workers (CHWs)
Role of Community Health Workers

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Policy recommendations: Addressing health impacts

- Ensure that all people, regardless of immigration status, feel comfortable accessing emergency shelter and other services
- Funding farmworker organizations and other community groups for emergency preparedness
- More response and recovery resources to underserved rural areas, farmworker communities.

- Increase health center funding
  - Emergency preparedness; disaster aid; mental health services
- Involve community organizations in all aspects of planning
  - Emergency preparedness, response, recovery
- Emergency information must be communicated in appropriate languages
  - Alerts, evacuation information
  - Media and organizations that reach the communities affected (including those in labor camps & other hard-to-reach locations)
Resources

- FJ Issue Brief: *The Climate Crisis and Its Impact on Farmworkers*
- FJ Symposium Report: *Farmworkers and the Climate Crisis*
- Vermont Law School & FJ: *Exposed and At Risk: Opportunities to Strengthen Enforcement of Pesticide Regulations for Farmworker Safety*
- FJ & Migrant Clinicians Network: *Heat-Related Illness Clinician’s Guide*
Thank you!!

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