

Create a Climate Kit

Time Requirement: 0.5 hours

Number of Instructors: 1 or more, consistent with ratio in Minimum Criteria

Materials

- Participant Guide
- White board or equivalent; markers
- Resources listed in Preparation Section
- Locally developed handout (to be prepared by the facilitator prior to the session) showing regional hazards/ trends and/or additional protective measures/ hot topics.

Objectives

- Recognize new workplace hazards due to an ever-changing climate
- Identify protective measures workers can use to reduce exposure to climate hazards

Suggested Facilitator Preparation

Review the following resources to increase your individual awareness of primary areas workers are impacted by climate change:

Adam-Poupart, et al. (2009). *Climate change and occupational health and safety in a temperate climate*. <http://www.ncbi.nlm.nih.gov/pubmed/23411758>

Paul A. Schulte & Hee Kyoung Chun (2009) Climate Change and Occupational Safety and Health: Establishing a Preliminary Framework, *Journal of Occupational and Environmental Hygiene*, 6:9, 542-554, DOI:10.1080/15459620903066008
<http://www.ncbi.nlm.nih.gov/pubmed/19551548>

Climate change vulnerability assessment 7-7-2014. Summary and full report here: <http://nca2014.globalchange.gov/>. This is a valuable resource that truly displays all workers, in some part of their job, are exposed. See sections on Midwest and Southeast for your region.

See various State assessments here:

For woodlands in IL, IN, OH, MN, MI, WI:

<https://www.forestadaptation.org/>

For most recent assessments on a specific topic, search on 'climate vulnerability assessment for YOURSTATE'.

Example for WI: <https://www.dhs.wisconsin.gov/climate/index.htm>

See government agency adaptation plans here:

http://www.globalchange.gov/sites/globalchange/files/ASIWG_Synthesis_4.28.15_final.pdf

Participants may not be familiar with the terms vector-borne (spread by mosquitos, ticks, fleas; the insect is the 'vector') or zoonoses (spread by animals). For an overall review, see <https://www.cdc.gov/niosh/topics/outdoor/default.html>.

- Vector-borne—See <http://www.cdc.gov/ncezid/dvbd/>

Tick resources from Participant Guide

- https://www.cdc.gov/ticks/life_cycle_and_hosts.html
- <https://www.cdc.gov/ticks/tickbornediseases/tickID.html>
- https://www.cdc.gov/ticks/geographic_distribution.html
- https://www.cdc.gov/ticks/removing_a_tick.html

Zika resource from Participant Guide

- <https://www.osha.gov/Publications/OSHA3855.pdf>

Bee, wasp, hornets, fire ants and scorpions resource from the Participant Guide

- <https://www.cdc.gov/niosh/topics/insects/default.html>

Poisonous plant resource from the participant Guide

- <https://www.cdc.gov/niosh/topics/plants/default.html>

Venomous snakes and spider resources from the Participant Guide

- <https://www.cdc.gov/niosh/topics/snakes/default.html>
- <https://www.cdc.gov/niosh/topics/spiders/types.html>

Zoonotic--Examples of detailed fact sheet here: <http://www.cfsph.iastate.edu/Zoonoses/>

Background regarding agricultural workers here:

- <http://umash.umn.edu/portfolio/surveillance-for-zoonotic-diseases-in-agricultural-workers-in-minnesota/>
- https://www.cdc.gov/rabies/location/usa/surveillance/wild_animals.html

Rabies resources from Participant Guide

- <https://www.cdc.gov/rabies/location/usa/index.html>
- <https://www.cdc.gov/rabies/exposure/index.html>

Be prepared to provide regional examples. The websites in the Participant Guide have pictures of each hazard and geographic distribution figures.

Successful Completion

Active participation in the activities. Identification of one or more Actions.

NOTE: If only Activity 5 is used (Habitat Change) due to interest of the participants, then more Actions should be identified.

Presentation of the Exercise

- Introduce the Participant Guide and have participants read the Background. The purpose is to create an awareness to the changing workplace environment.
- Discuss headings in Participant Guide
 - Ask: How do these five major categories of climate change impact you? Allow participants time to answer. The goal of this step is to perform the hazard identification of the risk assessment.
- Identification Work Sheet page of Participant Guide

- Once at least one hazard is listed for each of the five topic areas, discuss the potential physiological/ health problems that can come to the worker through these without the proper protection. Again, use the previously mentioned articles to draft a few responses in the event the participants is unable to identify. Have them list their responses on the work sheet.
 - Connect with participants by asking if they, or a friend/family member has been diagnosed with: skin cancer, Lyme disease, cataracts, heat-related illness or another medical problem that can be connected to climate. The purpose of this is to reinforce that these are real hazards with real consequences to which they are all exposed.
- Action Work Sheet page of Participant Guide
 - Ask: “What can we do to reduce our risk to these hazards”. This is listed in the action area of the Participant Guide. This step completes the risk assessment process by now identifying control measures through either engineering controls, work practices, personal protective equipment or other avenues. Again, review the articles and Participant Guide to assist with ideas.
 - Ask: What happens to identified risks if there is no action to remediate? Empower each of them to make changes in their PPE and work practices to reduce their exposure/risk to these new hazards.

Follow up

Have each individual read the background information, identify hazards, assess their risk to each hazard, and identify control measures they can implement to make their work environment safer.

Personalize these hazards through connecting with someone who has suffered through an environmentally created illness.

Empower each to make a climate kit that they have in their work vehicle to protect them when they are outside.

Make this exercise better:

Forward suggestions to your Program Director

Organize the list of ‘takeaways’ and forward to your Program Director. These are very important for future follow-back with the company and as possible impacts reported to NIEHS.