

Policy analysis of worker health and safety: best practices for public sector employees exposed to wildfire smoke during work



2020 Northwest Occupational Health Conference

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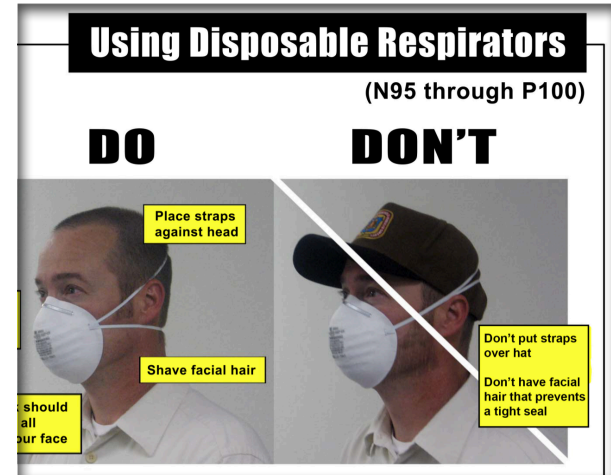
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BACKGROUND

- > As climate change progresses, wildfires will increase in frequency
- > Health implications during wildfires
- > Proper personal protective equipment must be used
- > Currently there are limited policies to protect outdoor worker health and safety during wildfire smoke events



From Cal OSHA: <https://www.dir.ca.gov/dosh/>

AIMS

- > Identify existing (or nonexistent) policies to protect outdoor worker safety at the federal, state, and county level**
- > Create a survey tool to gather policies from jurisdictions across WA**
- > Use survey results and key informant interviews to inform future policies**

METHODS

- > Literature review of existing state and federal policies pertaining to wildfire smoke workplace protection
- > 20% of jurisdictions in WA were chosen using a random generator (n=54)
- > Developed a survey tool in RedCAP
- > Qualitative data was collected via key informant interviews in one pilot county

Please provide the name of the jurisdiction you are representing:

* must provide value

Does your jurisdiction have policies in place to protect outdoor worker safety during wildfires/when wildfire smoke is present in the air? (e.g. landscapers, lifeguards, inspectors, etc.)

Yes
 No

* must provide value

reset

Did you use a template policy from another jurisdiction to create your wildfire smoke (WFS) event response policy? If yes, which one?

Expand

How did you communicate about your policy to workers during your jurisdiction's last WFS event?

If you created a policy and haven't had the opportunity to communicate it to workers yet, how would you do this during the next WFS event?

Expand

Do you have a specific position/person in charge of managing risk during a WFS event? Please list their name, title, and contact info if applicable.

Expand

LIT REVIEW FINDINGS

Title	State	Type	Description	Intended Audience
<p>Cal OSHA 5141.1</p> <p>https://www.dir.ca.gov/title8/5141_1.html</p>	<p>California</p>	<p>Regulation (emergency)</p>	<p>Regulation requires of employers:</p> <ul style="list-style-type: none">• Identification of harmful exposures• Communication• Training and instruction• Control of harmful exposures• Specific particulate sampling requirements if an employer opts to monitor employee exposure with a direct reading instrument	<p>Outdoor workers</p>

SURVEY FINDINGS

Wildfire smoke risk reduction interventions used in the past (2018)

WA jurisdictions through RedCAP survey (n=23)

- Only daily activities necessary to run a city,
- Local Volunteer Fire Department and Police Departments took an active part in keeping citizens safe and informed
- **Limited outside activities and exposure.** Modified work schedule to again reduce exposure.
- Published burn ban information.
- Initiated Wildfire Safety Training using Washington Air Quality Advisory information.
- **Suggestions to wear respiratory protection**

Key informant interviews (n=7)

- **Adjust tasks daily and change work schedule** to limit exposure
- **Provide optional respirators and masks**
- Provide training on respirators
- **Maximize indoor time**
- Allow employees to purchase PPE desired
- Take breaks
- Make it clear that employees can talk to supervisors at any time

SURVEY FINDINGS CONT.

Wildfire smoke risk reduction interventions desired for the future

WA jurisdictions through RedCAP survey (n=23)

- **Limiting outdoor work to only the critically necessary tasks**
- **Proper PPE**
- **Air quality index guidance**
- Specific guidance from leadership for work restrictions based on level of hazard
- Treating wildfire smoke similar to outdoor heat stress

Key informant interviews (n=7)

- **Clear line between guidelines and policies**
- Risk assessment based on where you are in King County as smoke conditions may change in different areas
- More access to masks
- Lots of agencies used for air quality index, need standard
- **Flexibility based on the employee and their specific needs**

SURVEY FINDINGS CONT.

Barriers to policy implementation

WA jurisdictions through RedCAP survey (n=23)

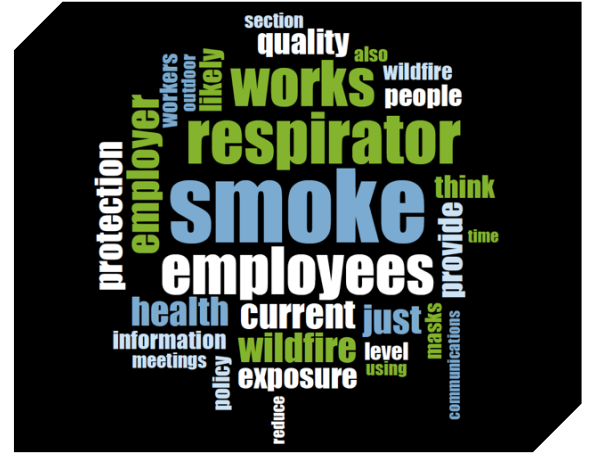
- **Depending on the policy, resources needed to implement would be a barrier.**
- None, city council would vote to implement policy within city limits.
- Time. There are lots of safety requirements that change frequently and policies have to be triaged for priority.

Key informant interviews (n=7)

- **Various types of work “one size fits all” is difficult**
- **Employee Buy-in**
- Prevent employees from making their own decisions about health
- **Available resources**
- HEPA filters available
- Issues working with improving facilities in buildings in King County

CONCLUSION

- > **Current risk reduction interventions**
 - Employers currently modifying worker tasks
- > **Desired risk reduction interventions**
 - Flexible state-wide policy
- > **Barriers to implementation**
 - Difficult to create a “one size fits all” policy
- > **Work modification from COVID-19**



Top 30 words used during key informant interviews - protection, provide, information, quality

LIMITATIONS AND FUTURE RESEARCH

- > **Timing and COVID-19**
- > **Representation of jurisdictions**
- > **Assumption HR contacts are best references**

REFERENCES/ACKNOWLEDGEMENTS

- Northwest Center for Occupational Health and Safety
- Cal OSHA
- WA State Department of Labor and Industry
- Tania Busch Isaksen
- Logan Dearborn
- Public Health Seattle King County

QUESTIONS?
