

The National Academies of
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**Thirteenth Meeting of the
Standing Committee on Medical and Epidemiological Aspects of Air Pollution on
U.S. Government Employees and their Families**

**May 6-7, 2021
Virtual Meeting**

AGENDA

Meeting Objective:

- To guide U.S. State Department (DOS) posts in planning for extreme air pollution events and inform future DOS guidance aimed at helping posts understand how to prepare for and respond to these events using the best available science.

Thursday, May 6, 2021

9:00 a.m. – 9:15 a.m. **Welcome and Overview of the Meeting Objectives and Format**
Jonathan Samet, Committee Chair
Larry Padget, Medical Director, U.S. Department of State

Session I —Extreme Air Pollution Events and the Importance of Advance Planning

9:15 a.m. – 9:25 a.m. **Experiences with Extreme Air Pollution Events at Posts**
Molini Patel, U.S. Department of State

Presentation topics:

- What is the range of potential extreme air pollution events that may be experienced at posts
- Why advance planning is important

9:25 a.m. – 9:40 a.m. **Impact of Extreme Air Pollution Events on Air Quality**
Philip Hopke, Committee Member

Presentation topics:

- How measurements (monitor and satellite) and modeling from past events show the impact different extreme air pollution events can have on air quality levels

9:40 a.m. – 9:55 a.m. **Health Impacts of Extreme Air Pollution Events**
Jason Sacks, U.S. Environmental Protection Agency

Presentation topics:

- What is known about health impacts of poor air quality (acute health risks)
- What is known about how health impacts might differ for extreme air pollution events

9:55 a.m. – 10:20 a.m. **Discussion with Audience**
Committee Moderator: Jonathan Samet

Session II — Response Planning for Extreme Air Pollution Events

10:20 a.m. – 10:30 a.m. **The Emergency Management Platform (EMP) for Extreme Air Pollution Event Response Planning**

Chris Woolverton, U.S. Department of State

Presentation topics:

- How the emergency management platform can serve as a framework for response planning for extreme air pollution events
- How triggers and processes for decision making have been developed during planning for other emergency events

10:30 a.m. – 11:00 a.m. **Critical Elements of Response Planning for Extreme Air Pollution Events**

Sarah Coefield, Missoula City-County Health Department

Presentation topics:

- Considerations for conducting operational response planning for an extreme air pollution event
- Potential triggers for action during extreme air pollution events
- Why is advance planning important and what goes into it?
- Considerations for special populations (children, people with certain medical conditions [e.g., asthma])

11:00 a.m. – 11:15 a.m. **Discussion with Audience**

Committee Moderator: Jonathan Samet

11:15 a.m. – 11:20 a.m. **Break**

Session III — Planning Ahead for Extreme Air Pollution Events

11:20 a.m. – 11:30 a.m. **Overview of Planning Resources**

Molini Patel, U.S. Department of State

Presentation topics:

- High level overview of what should be inventoried and readily available ahead of an extreme air pollution event

11:30 a.m. – 11:55 a.m. **Post Information Sources and Resources for Planning**

Joseph Heffington, U.S. Consulate General, Mumbai

Presentation topics:

- Post experiences identifying relevant event types and information/resources available for use in planning
- How/where information was located and challenges with information collection

11:55 a.m. – 12:05 p.m. **Support and Resources from the DOS Air Pollution Working Group**

Stephanie Christel, U.S. Department of State

Presentation topics:

- Sources of available information and resources/assistance that the U.S. State Department air pollution working group can offer posts to be used in planning

12:05 p.m. – 12:20 p.m.

Discussion with Audience

Committee Moderator: Jonathan Samet

12:20 p.m. – 12:45 p.m.

Engaging Key Partners and Stakeholders (Internal and External)

George Gray, Committee Member

Ellen Connorton, U.S. Department of State

Presentation topics:

- Effective communication strategies and best practices during times of uncertainty, handling rumors/misinformation.
- Applying stakeholder engagement and communication strategies at post and recommended interactions with specific stakeholders (e.g., international schools, local host government, private corporations, DOS in DC, broader U.S. citizens in local community, local authorities involved in response)

12:45 p.m. – 1:00 p.m.

Discussion with Audience

Committee Moderator: LeeAnn Kahlor

1:00 p.m. – 1:30 p.m.

Break

1:30 p.m. – 1:45 p.m.

Management Actions at Post in Response to Extreme Pollution Events

Claire Huson, U.S. Department of State

Presentation topics:

- The range of different actions posts can take to manage/mitigate exposures and potential health effects from extreme air pollution events (e.g., shelter in place vs evacuation, distribution of room air cleaners)
- Considering potential secondary and tertiary effects of extreme air pollution events (e.g., school closures, unsafe roads) – implications for decisions on action

1:45 p.m. – 2:00 p.m.

Discussion with Audience

Committee Moderator: Jonathan Samet

2:00 p.m. – 2:45 p.m.

Moderated Discussion: Considerations for Air Pollution Triggers for a Response Plan

Molini Patel, U.S. Department of State

Committee Moderator: Jonathan Samet

Committee Panelists: Howard Kipen and Rob McConnell

U.S. Department of State Panelists: Jennifer Bonner, Christina Lim, and Ravi Srivastava

Format:

- The session will start with a brief presentation on considerations for potential air pollution-related triggers and then will transition into a moderated discussion with panelists on the science behind setting triggers and how they would be used in the response to extreme air pollution events. An opportunity will also be provided for posts to weigh in on what they need to make decisions.

Discussion topics:

- What are key considerations in air pollution-related triggers?
- What information can inform their development?
- How should triggers be developed?
- How can/are triggers used?
- What uncertainties are there in developing and using triggers?
- What tradeoffs do posts face?
- Can general triggers be provided to posts that can be fine-tuned by posts?

Session IV — Evaluating and Monitoring Extreme Air Pollution Events

2:45 p.m. – 3:15 p.m.

Moderated Discussion: Forecasting and Monitoring

Ranil Dhammapala, Washington State Department of Ecology
Committee Moderator: Michael Brauer

Presentation Topics:

- Potential use of forecasting for anticipated seasonal events (agricultural burning) or nearby events that have not yet impacted a post
- Use of modeling and monitoring to evaluate how an event evolves in real time (considering space and time dimensions, meteorological data)
- Sources of data

Discussion topics:

- Benefits/limitations/pitfalls of using forecasting and/or monitoring data to inform decisions on actions at posts
- Considerations for interpreting data from forecasting and monitoring

3:15 p.m. – 3:45 p.m.

Moderated Discussion: Evaluating Health Impacts to Post Communities

Chris Woolverton, U.S. Department of State
Committee Moderator: Elizabeth Matsui

Presentation Topics:

- Daily health unit surveillance data available to use for comparison during an extreme air pollution event

Discussion topics:

- Considerations for posts to help them determine if they might be seeing health impacts related to an extreme air pollution event
- What should be watched for in terms of changes in health symptoms (e.g., asthma symptom days) - increases from baseline? Duration of increase? Severe cases requiring hospitalization or medevac?
- Feasibility of setting cutpoints related to change from baseline (absolute cutoff or points at which local resources are being overwhelmed)? Potential for lag issues?
- How can DOS data systems support the identification of clusters of cases by clinical teams?

3:45 p.m. – 4:00 p.m.

Wrap Up and Review of Plans for Day 2

4:00 p.m.

Adjourn Day 1

Friday, May 7, 2021

9:00 a.m. – 9:10 a.m.

Welcome and Review of the Day's Objectives

Jonathan Samet, Committee Chair

Session V — Scenario-Specific Breakout Group Activity

9:10 a.m. – 9:15 a.m.

Introduction to Scenario-Specific Group Activity

Molini Patel, U.S. Department of State

9:15 a.m. – 10:00 a.m.

Breakout Session I – Scenario-Specific Planning and Responses to Extreme Air Pollution Events: Initial situational assessment and determination if triggers for action have been met.

Breakout Moderators:

Molini Patel, Claire Huson, and Stephanie Christel, U.S. Department of State

Format:

- Meeting participants will be assigned to a breakout group, each of which will be focused on a scenario for a different type of extreme air pollution event. The breakouts will be divided into three different parts, each focused on different stages of the response to an extreme air pollution event; the same people will continue to be in a group together for the 3 parts of the exercise. The groups will be moderated by a member of the DOS air pollution working group and a National Academies staff member will join each group to take notes in real time.
- In the first breakout session, based on their specific scenarios, the groups will consider the likelihood/potential severity of impacts at post and determine whether triggers for action have been met.

10:00 a.m. – 10:30 a.m.

Read Out from Breakout Session and Discussion

- Participant from post to report out on discussions/decisions
- During the post-exercise read out and discussion, questions will be posed to prompt participants from posts to 1) discuss what they needed or would have wanted from central DOS, and 2) lessons learned for incorporating air pollution considerations into the planning process

10:30 a.m. – 11:15 a.m.

Breakout Session II – Scenario-Specific Planning and Responses to Extreme Air Pollution Events: Decisions on initial actions in response to an extreme air pollution event

Format: Based on specific scenarios (containing air quality information and health information), the group will discuss:

- Initial response to forecasting or monitoring data at the start of event (Is the event likely to affect post location? Is action necessary? If so, what actions/mitigation measures?)
- Communications for different target audiences, including DOS in DC, stakeholders at post, Americans living in the country (bullets on what should be covered in communications and effective strategies, considering how to deal with rumors and misinformation)

11:15 a.m. – 11:45 a.m.

Read Out from Breakout Session and Discussion

- Participant from post to report out on discussions/decisions

- During the post-exercise read out and discussion, questions will be posed to prompt participants from posts to 1) discuss what they needed or would have wanted from central DOS, and 2) lessons learned for incorporating air pollution considerations into the planning process

11:45 a.m. – 12:15 p.m.

Break

12:15 p.m. – 1:00 p.m.

Breakout Session III – Scenario-Specific Planning and Responses to Extreme Air Pollution Events: Decisions in response to changing conditions/information during an extreme air pollution event

Format: Based on specific scenarios, the group will discuss:

- Change in actions (if necessary) as the event evolves and new data become available (scenarios will include “new information” not available to participants at start of event)
- Communications for different target audiences, including DOS in DC, stakeholders at post, and Americans living in the country (what should be covered in communications and effective strategies, including how to deal with rumors and misinformation).

1:00 p.m. – 1:30 p.m.

Read Out from Breakout Session and Discussion

- Participant from post to report out on discussions/decisions
- During the post-exercise read out and discussion, questions will be posed to prompt participants from posts to 1) discuss what they needed or would have wanted from central DOS, and 2) lessons learned for incorporating air pollution considerations into the planning process

1:30 p.m. – 1:35 p.m.

Break

Session VI — Health Services

1:35 p.m. – 1:45 p.m.

Treating Acute Conditions and Managing Chronic Conditions

Wayne Quillin, U.S. Department of State

Presentation Topic:

- Guidance for DOS health unit staff on managing acute (e.g., asthma) and chronic (e.g., cardiovascular) conditions during extreme air pollution events.

1:45 p.m. – 2:00 p.m.

Mental Health, Coping and Anxiety

Deric Kenne, Kent State University

Presentation Topics:

- Tools to reduce stress and anxiety in people at post impacted by the event
- Roles for staff and family members at post

2:00 p.m. – 2:15 p.m.

Discussion with Audience

Committee Moderator: Jonathan Samet

2:15 p.m. – 3:00 p.m.

Wrap Up and Next Steps for DOS on Response Plans for Extreme Air Pollution Events

*Molini Patel, U.S. Department of State
Jonathan Samet, Committee Chair*

3:00 p.m.

Adjourn