

Pediatric Health on a Burning Planet Conference

Breakout Session Topics/Summaries

1. *Mapping the Firestorm: Pediatric Respiratory, Cardiac, and Neurodevelopmental Outcomes Through Research and Data Discovery*

Session Description

Wildfire smoke and ash pose complex, multisystem risks for children—from acute respiratory illness and cardiac stress to subtle but lasting neurodevelopmental effects. This breakout session explores how emerging research and innovative data approaches can illuminate these impacts and guide clinical and public health action.

Presenters will highlight current evidence on pediatric respiratory, cardiac, and neurodevelopmental outcomes linked to wildfire exposure, drawing on epidemiologic studies, environmental monitoring, and clinical data. Participants will learn strategies to identify key research gaps, develop data-collection frameworks, and integrate air-quality metrics, biomonitoring, and electronic health record data into collaborative investigations.

The session will equip clinicians, researchers, and community health leaders to translate findings into preventive care, early interventions, and policy advocacy—building a foundation for protecting children’s health amid a future of more frequent and intense wildfires.

2. *Asthma Care in the Wildfire Era: Wildfire Preparedness and Asthma Management: From Planning to Mitigation Strategies.* [MOC4 Project Charter]

Session Description

As wildfires grow more frequent and severe, children with asthma face heightened risks from smoke exposure and disrupted care. This interactive breakout session showcases a quality improvement (**MOC4**) project led by **Dr. Chris Landon (AAP Chapter 2)** that is designed to strengthen wildfire smoke preparedness by integrating wildfire smoke action planning into routine pediatric asthma care.

The project's 6-month goal is to raise the percentage of pediatric asthma patients with a documented **Wildfire Smoke Preparedness Action Plan** in the electronic health record from **0 % to 70 % by May 2026**.

Participants will explore current management and integration of mitigation strategies within a measurable framework:

- **Core Measures** - outcome, process, and balancing metrics that track preparedness (e.g., documentation rates, inhaler education, visit length).
- **Stepwise Interventions** - three PDSA cycles introducing EHR smart phrases, patient handouts, portal messages, staff training, and targeted outreach to high-risk patients.
- **Team-Based Implementation** - roles for physicians, nursing/MA staff, and administrative support to integrate wildfire readiness into routine asthma visits.
- **Sustainability & Scale** - strategies to embed wildfire planning into annual asthma action plans and extend to other chronic respiratory conditions such as BPD and CF.

Attendees will learn how outcome, process, and balancing measures guide progress; how to engage multidisciplinary staff in workflow changes; and how to sustain improvements by embedding wildfire readiness into annual asthma action plans.

This session equips clinicians with a replicable framework to safeguard vulnerable children and families in the wildfire era while earning ABP Part 4 credit.

3. *Building Resilient Communities: Education, Engagement, and Public Health Preparedness*

Session Description

Wildfires and other climate-driven disasters increasingly threaten children, families, and neighborhoods. This session highlights practical, community-based strategies to strengthen readiness and long-term resilience. Presenters will share evidence-based models for public education and risk communication, school- and clinic-based preparedness planning, and partnerships with local agencies, faith groups, and environmental organizations.

Topics include using real-time air quality and health data to guide protective actions; designing culturally responsive outreach for diverse and underserved populations; and engaging youth, parents, and community leaders to co-create emergency plans. Speakers will also discuss policy and public health frameworks that support equitable resource allocation and recovery efforts.

Participants will gain actionable tools to improve community preparedness, foster trust, and reduce the health impacts of wildfires and other environmental crises—transforming education and engagement into lasting resilience.

4. *Pediatric Post-Wildfire Care: Clinical, Laboratory, and Mental Health Monitoring*

Session Description

Children exposed to wildfire smoke, ash, and displacement face acute and long-term health risks that extend beyond the lungs. This session equips pediatric providers with practical, evidence-based approaches for comprehensive post-wildfire care. Experts will outline key clinical guidance—respiratory assessment, symptom management, and follow-up schedules—along with laboratory testing considerations such as CBC, inflammatory markers, and toxin or heavy-metal screening when indicated.

Recognizing the psychosocial toll of disasters, the session will also cover mental health monitoring, including screening for anxiety, depression, and post-traumatic stress, and strategies for timely referral and family support. Attendees will learn how to integrate these medical and mental health assessments into routine care, coordinate with schools and community resources, and document exposures for research and public-health reporting.

Participants will leave with a practical toolkit to identify, monitor, and manage the short- and long-term health impacts of wildfire exposure in children.

5. Policy, Advocacy, and Communication: *Advancing Equity and Access for Families in Wildland–Urban Interface (WUI) Zones*

Session Description

Families living in wildland–urban interface (WUI) zones face disproportionate barriers to wildfire preparedness, emergency response, and recovery. This session examines how policy, advocacy, and strategic communication can reduce those inequities and improve access to health and safety resources.

Speakers will review key policy levers—from zoning and housing regulations to funding for community health centers and air-quality shelters—and highlight examples of successful legislation and local ordinances. The session will explore advocacy strategies that elevate community voices, engage policymakers, and secure equitable resource allocation.

Communication experts will share approaches for delivering culturally and linguistically tailored messaging, leveraging social media and trusted community partners, and reaching families during high-risk events.

Participants will leave with practical tools and case studies to influence policy, strengthen advocacy networks, and implement effective, equity-focused communication plans that protect vulnerable children and families in WUI communities before, during, and after wildfires.

6. Through Our Eyes: *Community Voices on the Human Impact of Wildfire Smoke*

Session Description

Wildfire smoke is more than a public health statistic—it disrupts daily life, challenges mental well-being, and leaves lasting marks on families and neighborhoods. In this session, parents, children, and community leaders share first-hand experiences of living through smoke-filled seasons: sudden evacuations, school closures, asthma flares, mental health stress, and the struggle to secure clean air and medical care.

Moderators will weave these personal narratives with key public health insights, highlighting how lived experience informs clinical care, emergency planning, and policy. The discussion will explore practical protective measures such as indoor air filtration, N95 mask use, and creating community clean-air spaces, while also addressing emotional recovery and community resilience.

Attendees will leave with a deeper understanding of the human side of wildfire smoke exposure and actionable ideas to integrate community voices into healthcare guidance, advocacy, and preparedness planning.

7. One Life—One World: *Building Equitable Environmental and Planetary Policies to Protect All Life and Communities from Wildfire and Climate Change*

Session Description

Wildfire and climate change threaten the interconnected web of life—people, water, wildlife, and ecosystems—reminding us that human health is inseparable from the health of our planet. This session highlights how equitable environmental and planetary policies can protect communities and all living systems.

Speakers will explore cutting-edge strategies to reduce wildfire risk, preserve clean water, safeguard marine and terrestrial habitats, and limit greenhouse gas emissions. Emphasis will be placed on ensuring equity and access for vulnerable populations, including those living in fire-prone and underserved regions. Case studies will showcase successful international collaborations, community-led advocacy, and policy frameworks that unite environmental justice, public health, and biodiversity conservation.

Participants will leave with actionable insights and tools to integrate planetary health principles—**One Life—One World**—into policy, research, and community action, advancing resilience and safeguarding the future of all species on a warming planet.