



AIR QUALITY, WILDFIRES, AND RESPIRATORY HEALTH

GEOHEALTH COP WORKING GROUP UPDATE

TUESDAY, DECEMBER 14, 2021

2021 – New Co-Chair Leadership

Pawan Gupta, PhD, Senior Scientist, Earth Sciences
Eric Klos, CEO, DailyBreath, LLC

Meetings held:

July 30, 2021

October 22, 2021

Purpose

- To collectively advance the science of modeling satellite and sensor measurement data for monitoring, forecasting, and assessment of air quality, wildfire-related pollutants, and aeroallergens to quantify the levels of exposure associated with health risk for various population groups and the public at large.

Ideas for Goals (3) – 2021 - 2022

- 1) Map / Document Existing Air Quality-related networks, and major initiatives and explore the methodologies for Air Quality Indices. Begin to connect with networks and initiatives to form a network of networks.
- 2) Map/Document Existing satellite data and air quality sensor measurement associated with wildfire smoke emissions.
- 3) Developing a satellite data user guide specifically designed for the health and health IT community to implement solutions that deliver environmental health awareness on air quality and wildfires.

Coalesced around Goal 1 - Air Quality Monitoring and Indices for Health Risk

- Administered a Survey with the three goals and limited consensus formed around Goal #1.
- Discussion on October 22, 2021, centered on research/literature review of air quality monitoring for health purposes;
 - **Inventory** Satellite-based Air Quality Measurement and Ground-Level Air Quality Measurement Sensors and Networks
 - Understand their **methodologies** and standards for granularity and accuracy, and whether there is a consensus approach.
 - Document the **various air quality indices**.
 - **Assess the interpolation for health purposes** of the risk indices and information.

What's Next

- Should and, if so, what international governing body should ultimately determine how we standardize, validate, and endorse an air quality index related to health risk; World Health Organization, World Meteorological Organization, etc.
- Polling our members for volunteer research support.
- Next meeting will be in late January 2022 to kick off project.
- We welcome additional members.