UCLA

Aliso Canyon Disaster
Health Research Study

Community Meeting #1

Welcome

Agenda

- Welcome
- Agenda
- Introduction to the UCLA Team
- Health Study Overview
- Air Monitoring
- Community Engagement Plan
- Additional Q&A (Time Permitting)

Q&A

- **Click the Q&A icon on the bottom of your screen to:**
  - Enter your questions or comments
  - View questions asked by others
  - View written answers to some questions
- **Upvote questions by clicking the thumbs up icon under each question**

Meeting Guidelines

- **Treat all meeting participants, comments, and questions with respect.**
- **Use common conversational courtesy. Inappropriate language will not be permitted.**
- **Stay focused on today's agenda.**
- **Honor time.**

UCLA Team Partners

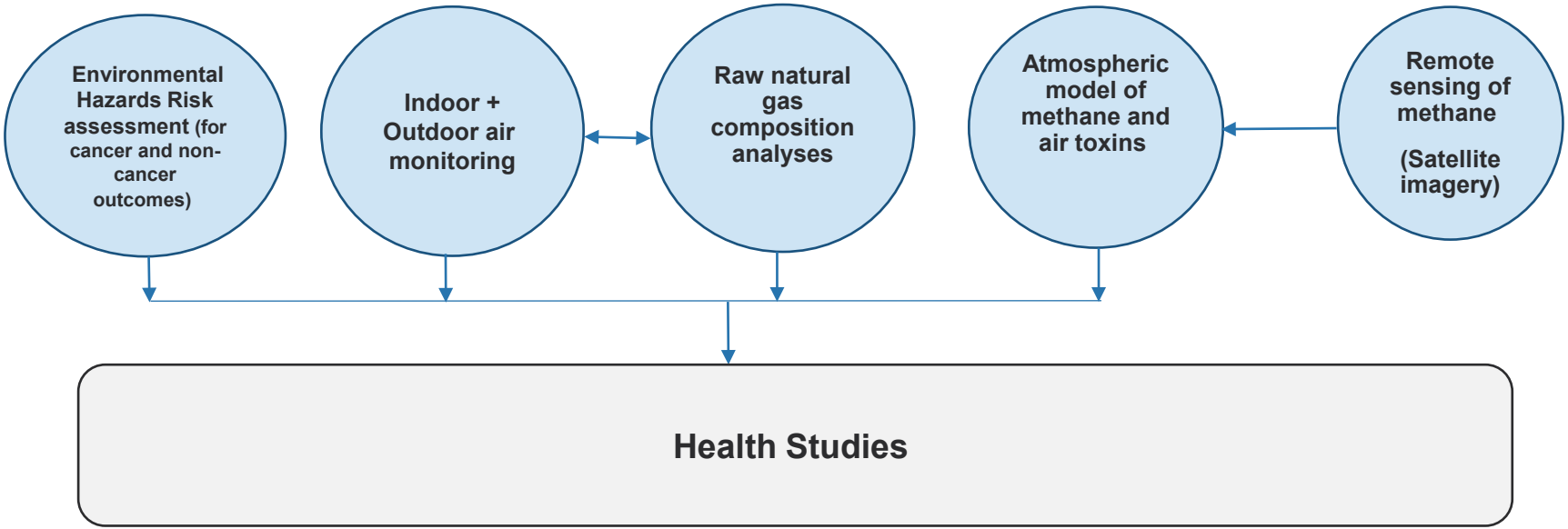
- University of California, Berkeley
- University of California, Davis
- California State University, Sacramento
- University of Arizona
- New York University
- Oregon State University
- Emory University
- McGill University
- Scientific Telephone Samples (STS)
- Carbon Mapper
- PSE Healthy Energy (PSE)

Totaling more than fifty (50) investigators and staff.

Environmental Exposures

- Assess the composition and amount of emissions released from the facility
- Examine how emissions traveled through the air
- Understand where emissions landed and who may have been exposed

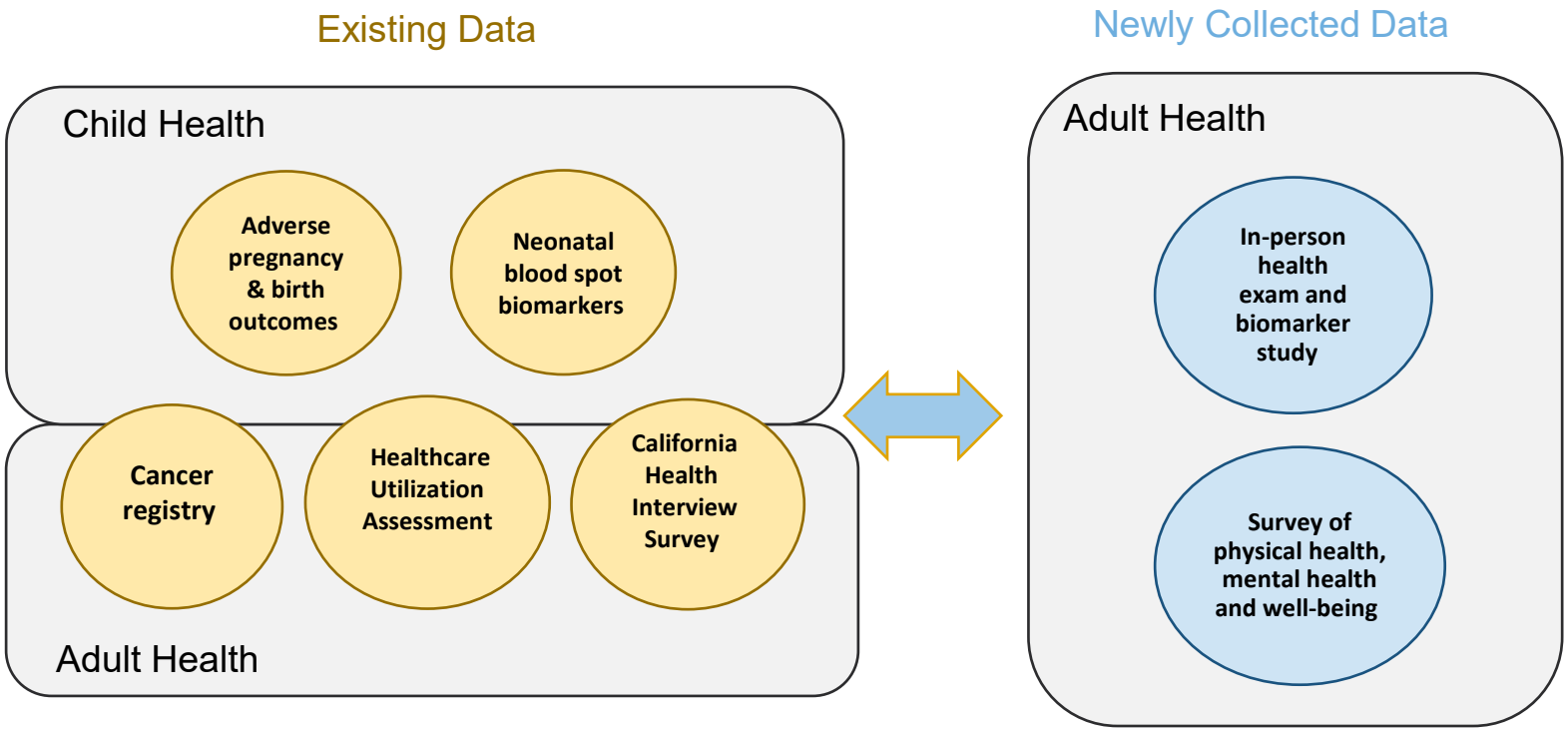
Exposure Assessment Components



Health and Well-Being

- Search for evidence of emissions exposure in blood samples
- Ask residents about their physical and mental health experiences and well-being
- Conduct clinical examination of residents
- Examine changes in health and mental health status over time
- Examine changes in patterns of health care use over time
- Study prevalence and incidence of cancer

We will compare health in the affected community to other similar places



Health Study Overview: Timeline

Detailed Timeline

Year 1 — 2023

- Set up needed data and research infrastructure.
- Gather and begin analyzing existing survey and environmental data.
- Begin engaging the community.
- Collect new environmental data.
- Recruit households for community air quality monitoring.
- Begin assessment of birth outcomes.
- Solicit technical expertise and guidance from the SOC during regular meetings.

Health Study Overview: Timeline

Year 2 — 2024

- Recruit residents and conduct clinical exams.
- Begin survey of residents on health and well-being.
- Continue analysis of existing health and environmental data.
- Solicit technical expertise and guidance from the SOC during regular meetings.

Year 3 — 2025

- Continue survey of health and well-being.
- Analyze new health and environmental data.
- Prepare available results for publication.
- Share available findings with community stakeholders.
- Solicit technical expertise and guidance from the SOC during regular meetings.
- At the end of the year, the SOC will evaluate whether the study is on track to meeting its goals and determine if it should continue.

Health Study Overview: Timeline

Year 4 — 2026

Pending approval from the SOC in the prior year, the following activities will continue:

- Continue survey of health and well-being.
- Integrate and analyze data.
- Prepare available results for publication.
- Share available findings with community stakeholders.
- Solicit technical expertise and guidance from the SOC during regular meetings.

Year 5 — 2027

- Complete data analysis.
- Prepare results for publication.
- Share findings with community stakeholders.
- Solicit technical expertise and guidance from the SOC during regular meetings.

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Air Monitoring

- **Purpose: To characterize local & residential air quality at various distances from the Aliso Canyon Storage Field.**
- **Methods:**
  - Air quality measurement devices placed inside and directly outside homes and, for qualified homes, measurements taken directly from gas cooking stoves.
  - Residents complete a survey about their homes.
- **Timeframe:**
  - Air Sampling:
    - Two weeks in Fall/Winter 2023
    - Two weeks in Spring/Summer 2024
  - Stove Sampling: Every other month in between for indoor home gas sampling.
- **Pollutants Measured:**
  - Air samples: $PM_{2.5}$, metals, and other air pollutants.
  - Indoor natural gas samples (from stove): Benzene, hexane, methane, sulfur odorants, volatile organic compounds, and other hazardous air pollutants.
- **Recruitment: Mid-September until 40 residences sampled.**

Sign up for our email list on our Contact Us page to learn more: https://alisostudy.ucla.edu/

Indoor and Outdoor Air Monitoring

Instruments	UPAS	PurpleAir sensor	Passive air sampler
Collection Media	37 mm Teflon filter	Real-time $PM_{2.5}$ – PM_{10}	Polyurethane foam disk
Laboratory Analysis	$PM_{2.5}$, metals, oxidative potential	NA	PAHs

UPAS

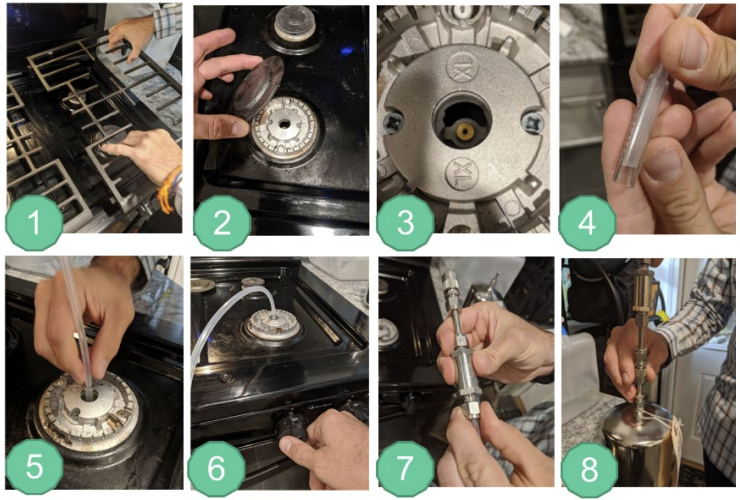
PurpleAir sensor

Passive air sampler (indoor)

Passive air sampler (outdoor)

Home Gas Sampling

Collect 200 samples of unburned gas directly from gas stove



TESTING FOR:

- Gas quality
- BTEX and other pollutants in gas
- Gas markers ($\delta^{13}C$)
- Sulfur odorants

TESTING DETAILS:

- 22 Participants
- 6 samples/year
- Gas leak survey
- Compensation!

Environmental Science & Technology
pubs.acs.org/est
Article

Home is Where the Pipeline Ends: Characterization of Volatile Organic Compounds Present in Natural Gas at the Point of the Residential End User

Environmental Science & Technology
pubs.acs.org/est
Article

Composition, Emissions, and Air Quality Impacts of Hazardous Air Pollutants in Unburned Natural Gas from Residential Stoves in California

Community Engagement

OUR JOB IS TO PROVIDE FREQUENT, REGULAR, EASY, AND TRANSPARENT COMMUNICATION BETWEEN THE STUDY AND YOUR COMMUNITY

- Community Engagement Support and Advice Network
- Facebook, Emails, Website
- Community Meetings

Community Engagement

- Website: https://alisostudy.ucla.edu/
- Facebook: https://www.facebook.com/profile.php?id=61550564015502
- Emails sign-up: https://lp.constantcontactpages.com/su/cewB1xE/alisostudy
- Feedback link here: https://bit.ly/46pWnJx

Thank You