To Start or Not to Start? That Is the Question

National Institute of Statistical Sciences: Ingram Olkin Statistics Serving Society Forum

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National Center for Environmental Health Agency for Toxic Substances and Disease Registry





• CDC

• ATSDR

Associate Director for Science

Per- and Polyfluoroalkyl Substances (PFAS)

Large class of man-made chemicals.

- Most common:
 - perfluorooctanoic acid (PFOA).
 - perfluorooctane sulfonic acid (PFOS).

Most people in the U.S. have PFAS in their blood.

PFAS (continued)

Exposure to high levels of certain PFAS may lead to:

- Increased cholesterol levels.
- Increased risk of high blood pressure/pre-eclampsia in pregnant women.
- Increased risk of kidney, testicular cancers.
- Decreased vaccine response in children.
- Small decreases in infant birth weight.
- Changes in liver enzymes.

PFAS Exposure Assessment (EA)

• Test blood, urine for determining exposure.

Test environmental samples (indoor dust, tap water).

Implement questionnaire to identify sources.

May inform future studies.

PFAS EA (continued)

 Site selection based on factors, including exposure via drinking water and location near current/former military base.

• Collected data at 5 sites by March 11, 2020.

Paused field work March 12.

PFAS EA Interlude

Discussions in May with principal investigator, program on restart.

• No precedent, no CDC guidelines.

• Engagement with CDC Office of Director.

Key Issues, Considerations for Restart

- Safety
- Prioritizing COVID-19
- Human subjects risks/benefits
- Scientific urgency
- Scientific integrity
- Burden on state, local partners
- Jurisdiction COVID-19 policies
- Impact on public health for communities and individuals

PFAS EA Restart Process

- Coordinate with CDC's:
 - Office of Safety, Security, and Asset Management
 - National Institute for Occupational Safety and Health
 - Science and Surveillance Subgroup
 - Office of Director

Perform clearance through:

- environmental health Office of Science
- Emergency Operations Center

Synchronize with development of CDC guidelines

Implementation of PFAS EA Restart

- Coordinate with ATSDR Regional Offices, and state and local offices.
- Ensure laboratory readiness.
- Develop, implement communication plan.
- Schedule community meetings, blood and urine collection, environmental sampling, implementation of questionnaire.
- Resume contract.
- Identify, mobilize field staff.

Impact of COVID-19 on PFAS EA

- Levels of exposure
- Expectations
- Participation
- Sample design
- Data analysis
- Inferences

Lessons Learned

Need for increased preparedness.

• Need for higher level of flexibility.

Successful use of virtual options.

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For more information, contact NCEH/ATSDR 1-800-CDC-INFO (232-4636) TTY: 1-888-232-6348 www.atsdr.cdc.gov www.cdc.gov Follow us on Twitter @CDCEnvironment

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