

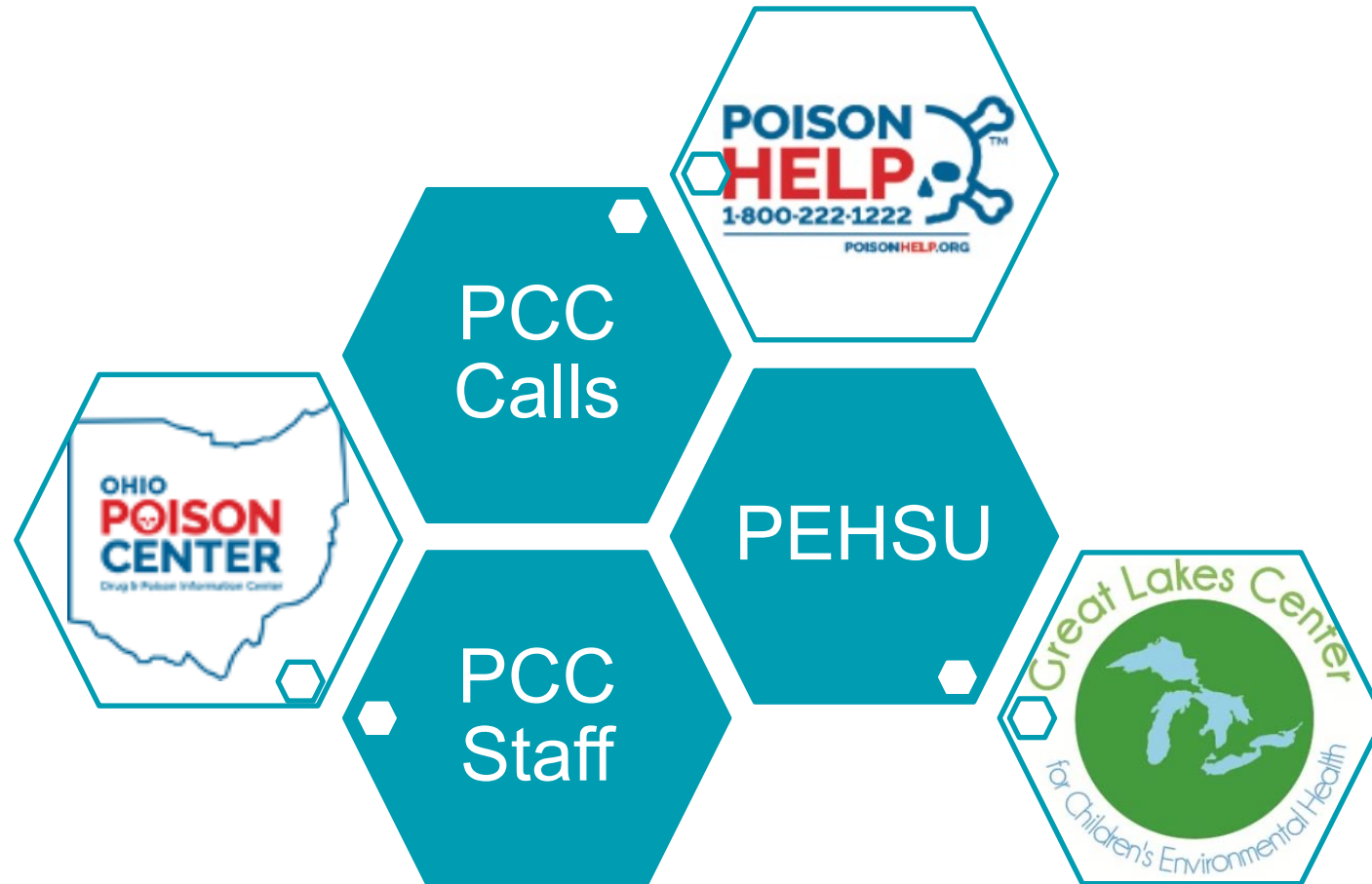
Brief Summary of Poison Control and Pediatric Environmental Health Specialty Unit Response

- Nicholas Newman, DO, MS, FAAP
- NASEM East Palestine Train Derailment Workshop
- November 6, 2023

Disclaimer/Acknowledgement

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- Additional funding comes from the University of Cincinnati – Center for Environmental Genetics NIEHS P30 ES006096

Presentation Overview



PCC: Poison Control Center

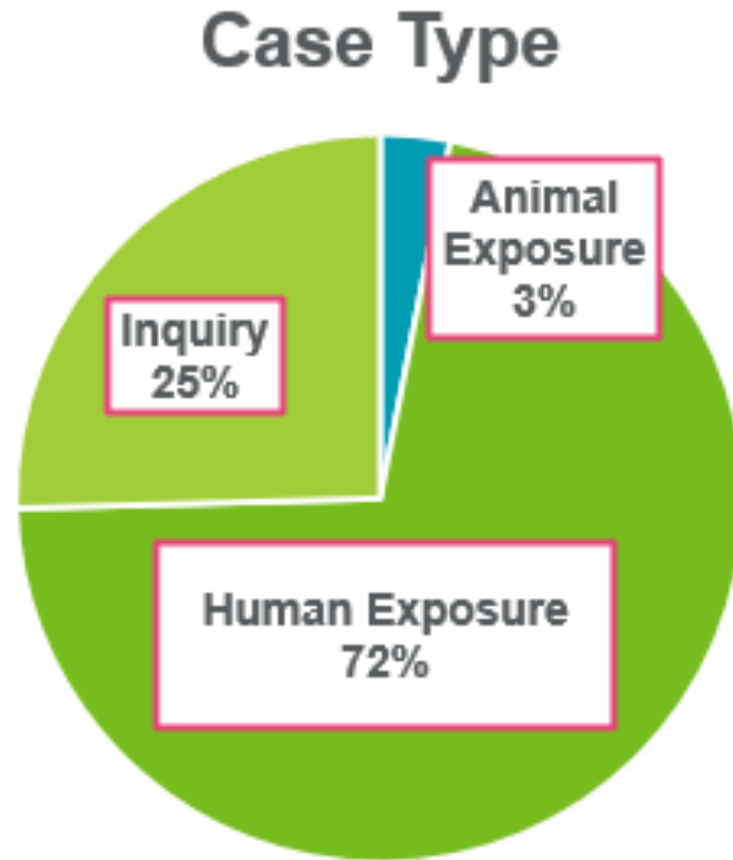
PEHSU: Pediatric Environmental Health Specialty Unit

Regional Poison Centers

- 55 centers serve the entire population within all states and territories
 - Mission: to reduce harm tied to poisoning and toxin-related injury
 - >2M suspected poisoning incidents managed at no cost to caller via national hotline
- Hub for medical toxicology expertise & training within any given locale
- Integration within local & state disaster response plans varies



Calls to regional poison centers (calls coded to ID East Palestine as exposure source)

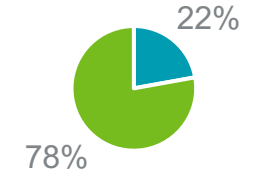


- Feb 4th through May 28th
 - 13 centers documented 291 cases
 - Callers from 16 states and Canada
 - 208 cases involved human exposures
 - 20% were reported by healthcare professionals and first responders
 - Routes of exposure inhalation (87%), ingestion (19%) and dermal (14%)

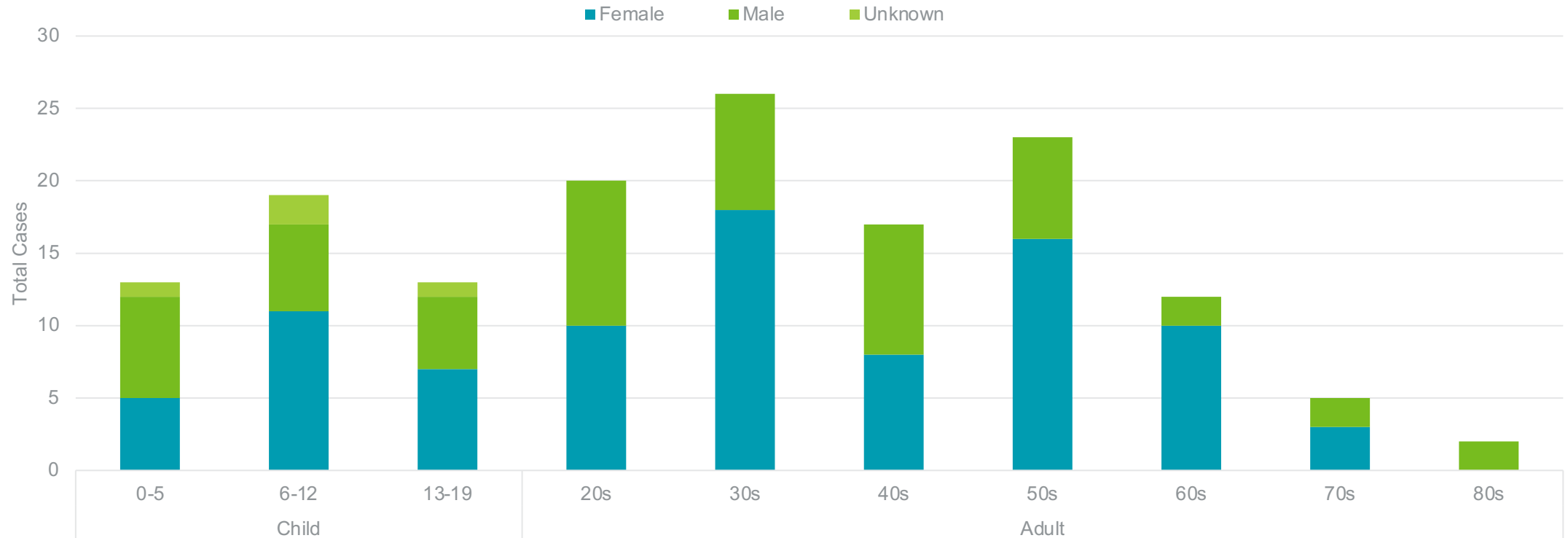
Calls to PCC distribution by age

Children & Adults

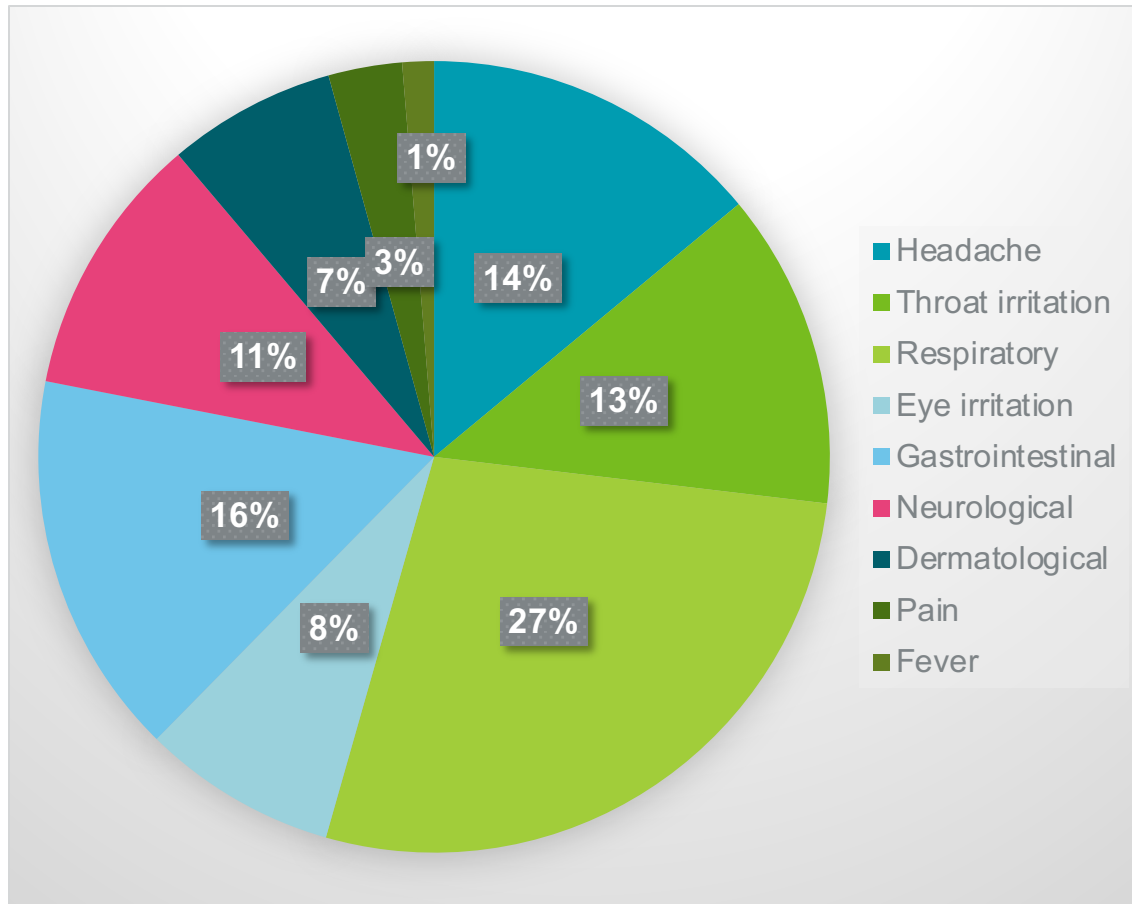
■ Children ■ Adults



Age & Sex Distribution
(human exposures, known age in years)



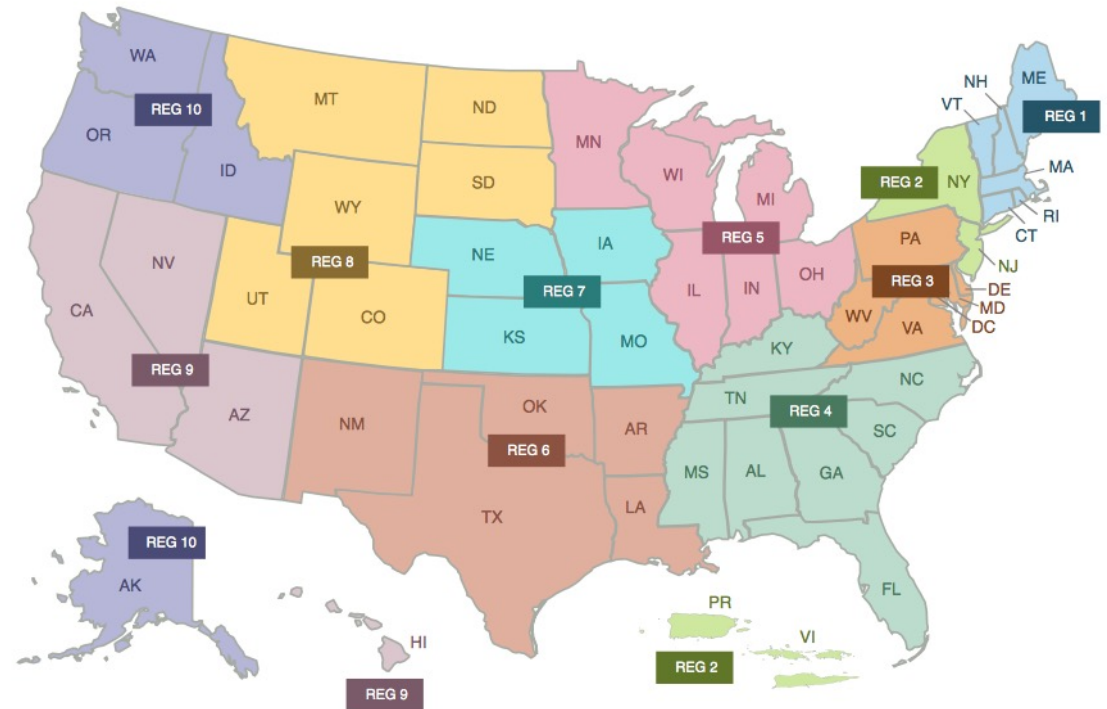
Summary of common symptoms



- Respiratory symptoms were most common
- Neurological symptoms were next most common
 - Headache was most common symptom overall
- Multiple symptoms per caller

Pediatric Environmental Health Specialty Units (PEHSU)

- 10 Regional centers funded through ATSDR & US EPA
 - Created 25 years ago
 - “...experts in the prevention, diagnosis, management, and treatment of health issues that arise from environmental exposures from preconception through adolescence.”
- Education/Consultation
- Disaster response (indirect – assist others)



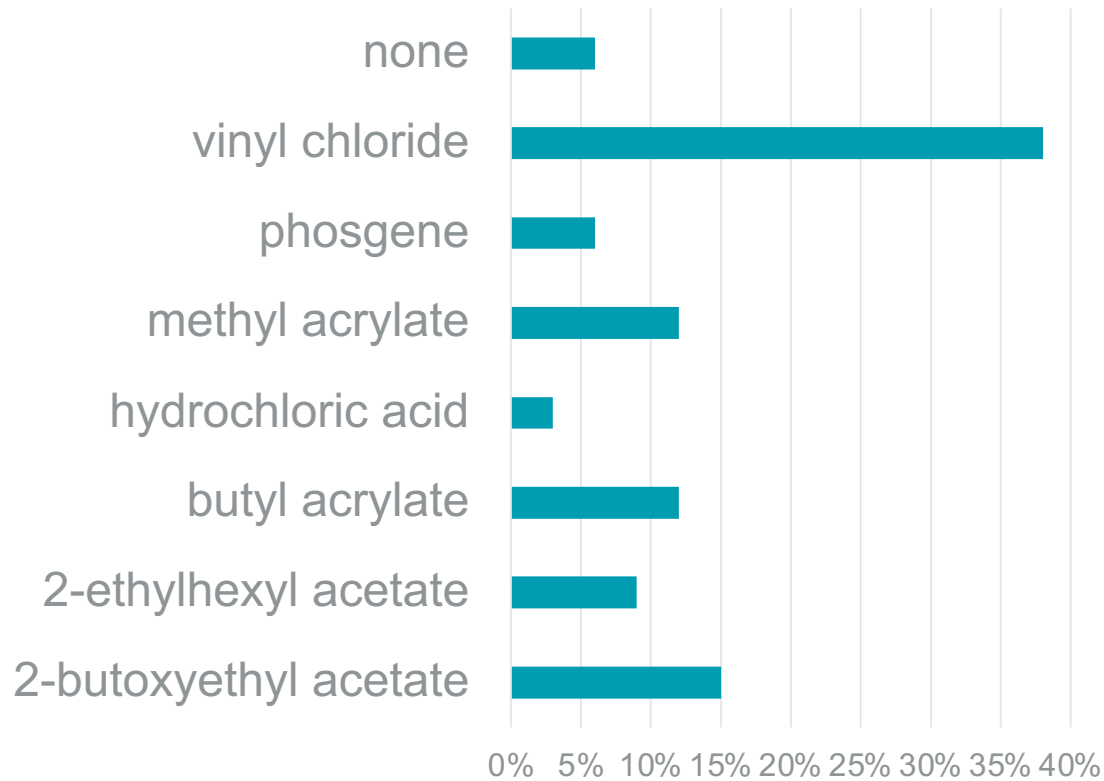
<https://www.pehsu.net/>

Need for concise health factsheets

- Many clinical/public health recommendations for East Palestine chemicals very old
- Current documents are encyclopedic in scope
- Studies in children, pregnant women limited
- Difficulties in translating occupational exposure parameters to community exposures
- Overall lack of training of health care providers in environmental health
- Concerns were directed to regional poison centers

Factsheets created & used by poison control

Use of factsheets, N=16 (80%)



- Feedback

- Helpful overall
- More clinical guidance
- Documents for more chemicals
- Provide links to more information
- Timing (needed them sooner)
 - Took about 2 weeks to create the factsheets

Limitations

- PCC dataset only includes
 - Calls that could be identified as related to East Palestine
 - People who had enough concern to call poison control center
- Feedback questionnaire
 - Only directed to one PCC

Thank you & acknowledgements

- Cincinnati Drug and Poison Information Center
- University of Cincinnati Occupational/Environmental Medicine Residents
- Members of the NIEHS P30 EHSCC's
 - University of Cincinnati
 - University of Kentucky
 - University of Pennsylvania