

Pediatric Environmental Health



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Children's Vulnerability

Porous blood-brain barrier until 4 years old; Sensitive forming brain tissue

Immature detox: liver, kidneys, lungs

Breast feeding

Nutritional differences

Immature immune system

Smaller size and wt; Longer life spans

Immature, thin skin

Poor cognitive discrimination

Immature lungs until 8 years old

Oral exploratory habits

Breathing zone closer to ground

Pica

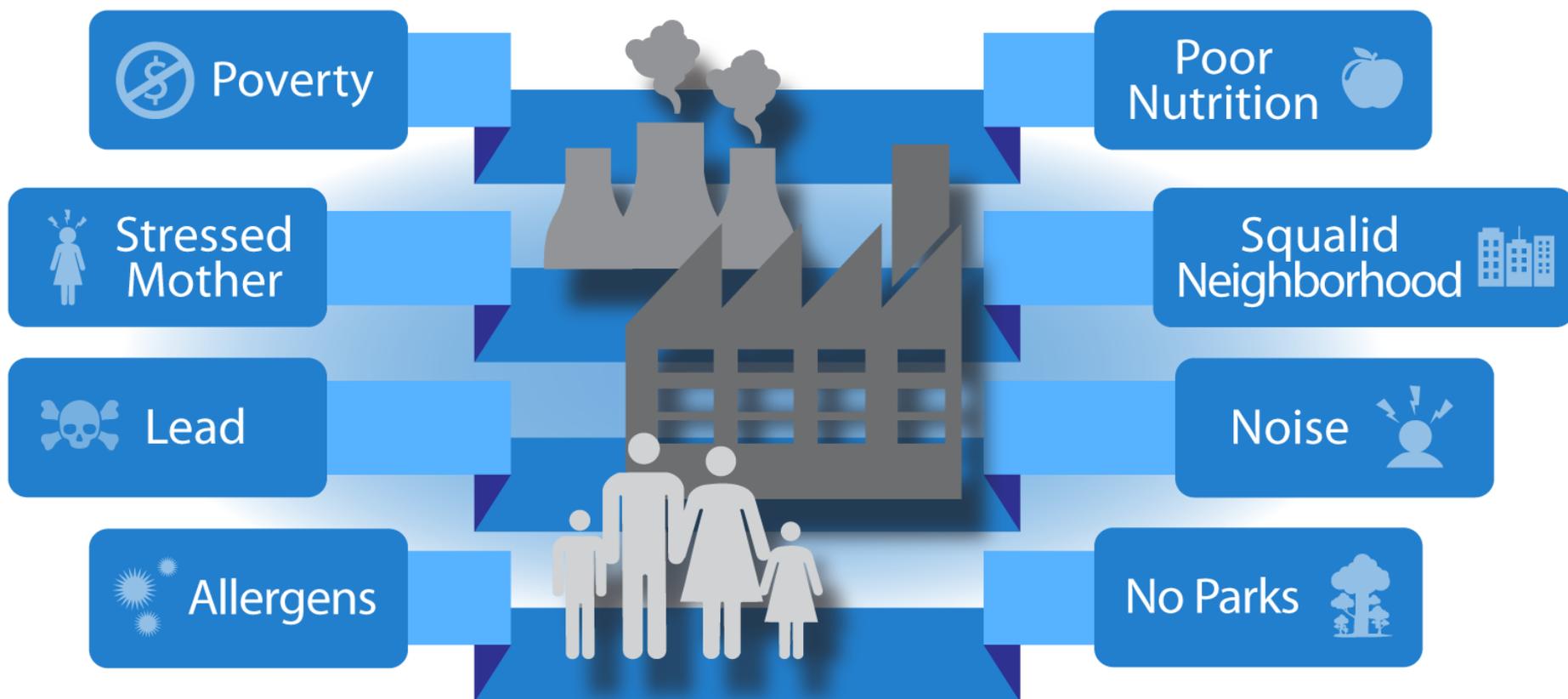
Mimicry

Rely on others for safety, protection or escape

Mobility: crawling, cruising, toddler gait

Curiosity

Children's Cumulative Risks & Disparities



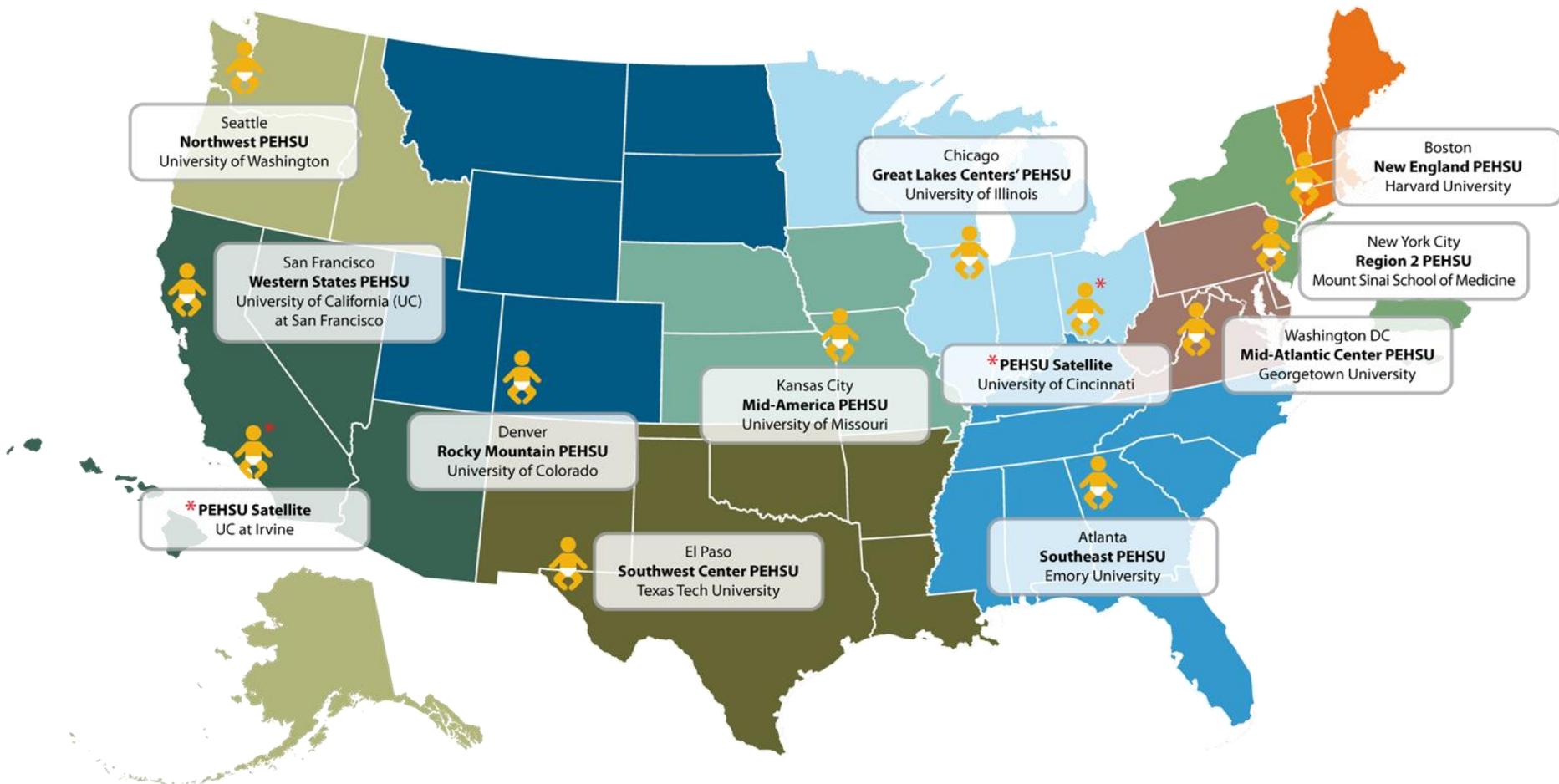
Pediatric Environmental Health Specialty Units (PEHSU)

PEHSU's Mission

PEHSUs have a vision of a healthier world for children and pregnant women through the provision of expanded educational outreach, consultative, and referral services, using their expertise in pediatric environmental health, to the public, public health personnel, and primary care practitioners.



Pediatric Environmental Health Specialty Units (PESHU) Academic Affiliations



PEHSUs Academic Affiliations

Health Professionals	Health Professions Trainees	Public	Federal, State, Local Govt Staffs	Totals
298,936	61,947	323,817	17,806	702,506

PEHSUs Academic Affiliations

Substance of Concern	TOTALS
Lead Poisoning	2576
Fungus/Mold	762
Phthalates/Bisphenol A	399
Pesticides	389
Mercury	367

Woolf AD, Sibrizzi C, Kirkland K: Academic Pediatrics 2015

PEHSU Impacts

Support need for *specific* clinical information on environmental toxins

Facilitate *early* response to public health issues



Engage in public educational outreach activities

Participate in clinical assessments and referrals as needed

Partner with local and state health departments and regional poison control centers



Give *advice* to residents and community leaders



Provide health care provider *education* and training opportunities

PEHSU Community-Level Involvement

July 2014 Pease Tradeport Perfluoroalkyl Substances Water Contamination Investigation Portsmouth, NH

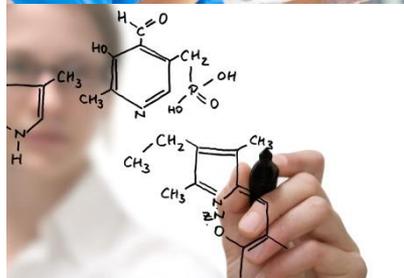


ATSDR Resources: Where To Go For More Information



Environmental Medicine

www.atsdr.cdc.gov/csem



Toxicological profiles—Tox FAQs

www.atsdr.cdc.gov/toxprofiles



Pediatric Environmental Health Specialty Units

www.pehsu.net