CHILD DEVELOPMENT, RESILIENCE, AND THE ENVIRONMENT
Resources for Childhood Resilience

The Pediatric Environmental Health Specialty Units (PEHSUs)

- The Pediatric Environmental Health Specialty Units (PEHSUs) are a source of medical information and advice on environmental conditions that influence reproductive and children’s health. Educational materials, fact sheets, online CE programs, webinars on children’s environmental health issues are found on their website at [http://www.pehsu.net](http://www.pehsu.net)
- The Western States PEHSU (WSPEHSU) has a wide variety of resources for both clinicians and families on environmental health issues that affect children, including those listed below. [https://wspehsu.ucsf.edu](https://wspehsu.ucsf.edu)
  - The Pediatric Environmental Health Toolkit (PEHT) Application is a web-based resource and reference guide for mobile devices or desktop that puts at health provider fingertips easy-to-use environmental health education materials on preventing exposures to toxic chemicals and substances that affect infant and child health. Briefs on environmental hazards, key concepts and anticipatory guidance keyed to ages are all included in this user-friendly tool. [https://peht.ucsf.edu/index.php](https://peht.ucsf.edu/index.php)
  - Online PEHT course: [https://www.atsdr.cdc.gov/emes/health_professionals/pediatrics.html](https://www.atsdr.cdc.gov/emes/health_professionals/pediatrics.html)
  - A Story of Health (SOH) e-book and Continuing Education course is hosted by the Agency for Toxic Substances and Disease Registry (ATSDR) with CEs offered by the Centers for Disease Control and Prevention (CDC). Using the setting of a family reunion as a backdrop, SOH explores in chapters on asthma, childhood leukemia, developmental disabilities, reproductive health and cognitive decline how various environments influence our health across the lifespan. Over 14,000 physicians, nurses, health educators and other health professionals have registered to receive CE credits. [https://wspehsu.ucsf.edu/for-clinicalprofessionals/training/a-story-of-health-a-multi-media-ebook/](https://wspehsu.ucsf.edu/for-clinicalprofessionals/training/a-story-of-health-a-multi-media-ebook/)

Other Resources

- Agency for Toxic Substances and Disease Registry (ATSDR) is a federal agency of the U.S. Department of Health and Human Services that provides trusted health information to prevent harmful exposures and diseases related to toxic substances. Their web based “Case Studies in Environmental Medicine” including “Taking a Pediatric Exposure History” and “Principles of Pediatric Environmental Health” are self-instructional, continuing-education (CE) primers designed to increase primary care providers’ knowledge of hazardous substances and aid in the evaluation of patients potentially exposed to hazardous substances. [https://www.atsdr.cdc.gov/environmentaleducation.html](https://www.atsdr.cdc.gov/environmentaleducation.html) They also have a Toxic Substances Portal that leads to a wealth of information on toxic chemicals, and other valuable resources. [https://www.atsdr.cdc.gov/substances/index.asp](https://www.atsdr.cdc.gov/substances/index.asp)

- The American Academy of Pediatrics (AAP) Council on Environmental Health (COEH) advises the Board of Directors, supports legislative initiatives, authors’ policy documents, and leads educational initiatives pertaining to environmental health and toxic exposures. Publishes “Pediatric Environmental Health,” otherwise known as the “Green Book.”
  - 1 in 5 US children lives in poverty, and poverty is an important determinant of child health. The AAP provides resources to help pediatricians with caring for children in poverty, including practice tips, communications materials, and advocacy resources. [https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/poverty/Pages/home.aspx](https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/poverty/Pages/home.aspx)
• Other AAP initiatives include “A Public Health Approach to Toxic Stress” and “The Resilience Project.” Recent advances in developmental science have implications for pediatric practice and public policy that demand a public health approach to providing optimal care. The AAP provides education and resources for clinicians to identify, treat, and refer children at risk. https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/resilience/Pages/Resilience-Project.aspx

• American College of Obstetrics and Gynecology (ACOG) “Exposure to Environmental Agents” Committee Opinion. https://www.acog.org/Clinical/Clinical%20Guidance/Committee%20Opinion/Articles/2013/10/Exposure%20to%20Toxic%20Environmental%20Agents

• Centers for Disease Control and Prevention (CDC) Adverse Childhood Experiences (ACES) - Preventing Early Trauma to Improve Adult Health. ACES are potentially traumatic events that occur in childhood. ACEs can include violence, abuse, and growing up in a family with mental health or substance use problems. This CDC web site provides a range of resources on preventing ACES. https://www.cdc.gov/vitalsigns/aces/index.html

• Environmental Health Perspectives (EHP) is a monthly journal of peer-reviewed research and news with sections devoted to research on children’s environmental health. It is published with support from the National Institute of Environmental Health Sciences, National Institutes of Health, and U.S. Department of Health and Human Services. https://ehp.niehs.nih.gov

• Harvard Center on the Developing Child http://developingchild.harvard.edu is focused on developing science-based strategies to achieve breakthrough outcomes for children facing adversity.

• National Medical Legal Partnership
Medical-legal partnerships embed lawyers and paralegals alongside health care teams in clinics to:
  • TREAT individual patients’ existing health-harming social conditions with assistance ranging from triage and consultations to legal representation;
  • PREVENT health-harming social conditions broadly by detecting patterns and improving policies and regulations that have an impact on population health. http://medical-legalpartnership.org

• Prevention Institute publication “Beyond Screening: Achieving California’s Bold Goal of Reducing Exposure to Childhood Trauma | Prevention Institute” explores prevention and healing approaches that strengthen mental health and wellbeing, support communities to heal from trauma, and build community resilience. https://preventioninstitute.org/publications/beyond-screening-achieving-californias-bold-goal-reducing-exposure-childhood-trauma

• Project TENDR, a collaboration of leading scientists, health professionals and advocates, produced a “Scientific Consensus Statement” providing a roadmap to significantly reduce exposures to chemicals and pollutants that are contributing to neurodevelopmental disorders. http://projecttendr.com