

Chemical-biological terrorism: AAP details pediatricians' role in supporting children

January 27, 2020

Sarita Chung, M.D., FAAP; Carl R. Baum, M.D., FACMT, FAAP; Ann-Christine Nyquist, M.D., M.S.P.H., FAAP

Article type: [AAP Policy](#)

Topics: [Terrorism](#)

You get a call from a parent whose child rode on a school bus with other children who are exhibiting specific symptoms: difficulty breathing with copious secretions. The media reports that children on the bus have been taken to emergency departments with seizures. The parent says her child got off the bus at the first stop and is coughing. She asks if they should come to the office so her child can be evaluated.

What do you tell her? Who would you contact for more information?

These questions and more are answered in the updated AAP policy statement and new technical report *Chemical-Biological Terrorism and Its Impact on Children* from the former AAP Disaster Preparedness Advisory Council (now the Council on Disaster Preparedness and Recovery), Council on Environmental Health and Committee on Infectious Diseases. The documents provide clinical information for pediatricians regarding chemical and biological terrorism as well as recommendations for the health care sector and the government to improve pediatric preparedness and response.

The policy and technical report are available at <https://doi.org/10.1542/peds.2019-3749> and <https://doi.org/10.1542/peds.2019-3750> and will be published in the February issue of *Pediatrics*.

After a chemical or biological attack, children are at the greatest risk of exposure and harm as well as long-term medical and mental health sequelae. Pediatricians have a role in the medical home and supporting the community before, during and after a chemical or biological attack. Pediatricians also can provide expertise to public health and emergency management agencies to minimize morbidity and mortality in children from such attacks.

Recommendations for pediatricians

- Be aware of agents of concern and the response systems (e.g., poison control centers and local and state agencies) that evaluate and manage children.
- Become and remain aware of principles of preparation and response for similar public health emergencies (e.g., hazardous materials incidents or emerging infectious diseases).
- Understand pediatric decontamination strategies and the appropriate use of personal protective equipment by health care staff.
- Participate in local public health and community exercises, drills and activities (such as with first responders, hospitals and in the medical home) in chemical and biological terrorism preparedness, response and recovery.
- Collaborate with local early care and education programs and school systems to develop plans for rapid evacuation, relocation, family reunification, triage and treatment protocols (including vaccination) if an act of chemical or biological terrorism occurs.

- Recognize your role in syndromic surveillance/detection of health indicators and familiarize yourself with the related medical sequelae and potential behavioral and mental health effects.

Recommendations for the health care sector

- Local preparation efforts should have adequate resources to provide appropriate medical countermeasures, facility transfer protocols and pediatric training for staff (especially appropriate use of personal protective equipment and decontamination protocols).
- Health care systems/hospitals should prepare for the unique needs of children, including those with special health care needs, and their families in all phases of disaster preparedness, response and recovery.
- Disaster exercises and drills involving the whole health care community should be conducted and include pediatric victims.

Recommendations for government

- Public health and emergency management agencies should work with pediatric health care providers to continue to provide assistance and resources to hospitals, pediatric offices, AAP chapters, community health centers and other health care facilities to ensure that workers in these facilities are prepared to respond to chemical or biological terrorist incidents that involve children.
- The needs of children should always be included among the required deliverables and performance benchmarks in funding programs for emergency preparedness, response and recovery.
- The federal government must ensure, through funding, research and study trials, that all vaccines and medical countermeasures can be used in children, e.g., rapidly dissolvable formulations or appropriately dosed auto-injectors.
- State and federal governments should support funding and accreditation of continuing education on chemical and biological terrorism and ensure that mechanisms to address children's needs are included.

Drs. Chung, Baum and Nyquist are lead authors of the policy statement and technical report. Dr. Chung is a past member of the former AAP Disaster Preparedness Advisory Council and a member of the Council on Disaster Preparedness and Recovery (CODPR) Executive Committee. Dr. Baum is a former member of the Council on Environmental Health Executive Committee and a member of the CODPR Executive Committee. Dr. Nyquist is a member of the Committee on Infectious Diseases.

Resources

- [Tables in the technical report list chemical and biological weapons of concern, clinical syndromes associated with chemical and biological agents, and decontamination principles.](#)
- [National Library of Medicine website for health care professionals on responding to mass casualties involving chemicals](#)
- [For additional information, visit \[www.aap.org/disasters\]\(http://www.aap.org/disasters\) or email \[DisasterReady@aap.org\]\(mailto:DisasterReady@aap.org\).](#)