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Choose Safe Places for Early Care and Education: Building State Programs

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Editor's Note: As part of our continued effort to highlight innovative approaches to improve the health and environment of communities, the *Journal* is pleased to publish a bimonthly column from the Agency for Toxic Substances and Disease Registry (ATSDR) at the Centers for Disease Control and Prevention (CDC). ATSDR serves the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and diseases related to toxic substances. The purpose of this column is to inform readers of ATSDR's activities and initiatives to better understand the relationship between exposure to hazardous substances in the environment, its impact on human health, and how to protect public health.

The conclusions of this column are those of the author(s) and do not necessarily represent the official position of ATSDR or CDC.

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Introduction

What would you want to know before your children attend a day care opening in a former industrial building or adjacent to a nail salon? Are children at risk if their new preschool is located on former farmland where lead arsenate pesticide might have been used? What site-related environmental risks are most concerning for children attending early care and education (ECE) facilities?

States involved with the Agency for Toxic Substances and Disease Registry's (ATSDR) Choose Safe Places for Early Care and Education (CSPECE) effort are addressing site-related questions like these to help protect children from harmful environmental exposures.

Background

Young children are more susceptible to harmful effects from exposure to environmental contamination. In 2011, preschoolers spent an average of 33 hours per week in child care (Laughlin, 2013). The extended periods of time that children spend in ECE facilities make it important to reduce harmful exposures.

Newly licensed ECE programs might inadvertently open in places where children and staff could be exposed to environmental contamination, such as contaminated former industrial buildings. Screening proposed locations for indicators of site-related contamination could help prevent harmful exposures to children.

In 2016, ATSDR launched the CSPECE effort to help prevent harmful exposures (ATSDR, 2019a). Several states, including Connecticut, New Jersey, New York, and Pennsylvania, have already developed programs to address these concerns and their experience has helped inform ATSDR's CSPECE effort. ATSDR has already shared information on the early efforts of CSPECE, including the development of a Choose Safe Places manual (ATSDR, 2017; Somers & Ulirsch, 2018). ATSDR's website houses the manual and other resources for protecting children from environmental contaminants (ATSDR, 2019a).

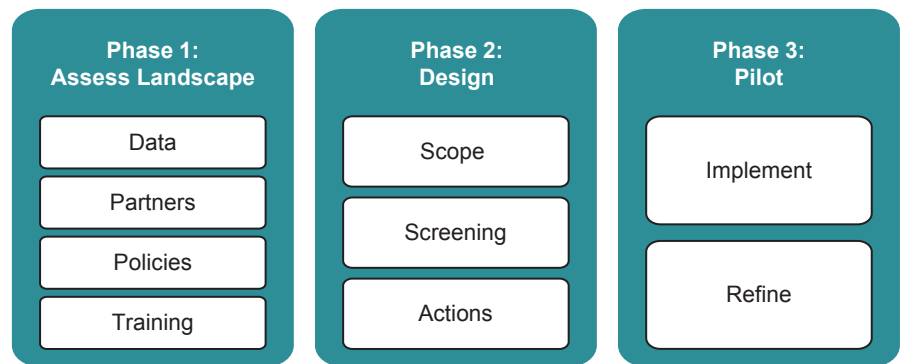
In spring 2017, ATSDR began a 3-year cooperative agreement with 25 states that supported the development of pilot programs for screening proposed ECE locations for site-related environmental contamination. The pilot programs could also provide recommendations for further assessment or mitigation to help prevent harmful exposures.

The state CSPECE work has three phases (Figure 1). The first phase involves a landscape assessment of the stakeholders and policies that could influence site-related contamination risk at ECEs. State staff also identified data for screening sites and trainings where CSPECE might be included. In the second phase, for those states without existing programs, state CSPECE staff and stakeholders develop a pilot plan that describes the scope, process for screening, and actions that could be taken. In the third phase, CSPECE staff implement, evaluate, and refine the pilot plan.

CSPECE complements other efforts to improve children's health. Caring for Our Children Basics, supported by the Administration for Children and Families, rep-

FIGURE 1

Choose Safe Places for Early Care and Education Phases of State Pilot Development



resents the minimum health and safety standards that experts believe should be in place at ECE facilities (Administration for Children and Families, 2015). Caring for Our Children Basics includes the standard to conduct an environmental audit of a proposed site location. Caring for Our Children Basics is founded on *Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs*, a collection of over 600 national standards that represent the best practices for health and safety policies and practices for ECE settings (American Academy of Pediatrics, American Public Health Association, & National Resource Center for Health and Safety in Child Care and Early Education, 2019).

Results

In the first year of the 3-year CSPECE pilot effort, states identified partners and data needed to build a program (ATSDR, 2019b). Almost all 25 states engaged in the program had child care and licensing partners; most states also had environmental partners. In total, 146 partnerships were formed. To help assess contamination risk, almost all 25 states had locations of contaminated sites and most states found additional data such as water, property history, or soil contamination information. About 6,400 new ECE facilities open yearly in the 25 cooperative agreement states. While the pilot CSPECE effort will only address a portion of new ECE facilities,

an expanded program could protect a large number of children.

Opportunities for linking CSPECE with zoning and training exist. Among the 25 states, 79 existing city or county zoning rules were identified that could help reduce environmental risks at ECEs. State CSPECE staff identified trainings for inspectors or ECE staff that could be leveraged to help inform them about CSPECE.

By the end of the second year, states had conducted outreach, developed pilot program plans, and some states had begun implementation. State CSPECE staff provided technical assistance to address ECE environmental concerns on 58 occasions. State CSPECE staff created 66 screening or educational tools and they educated over 1,100 people, including licensing staff and ECE providers. Approximately half of all state CSPECE programs proposed or were already implementing a policy, systems, or environmental change (e.g., providing recommendations to regulatory organizations).

Next Steps

By spring 2020, all CSPECE states will implement pilot programs to assess proposed ECE facility locations. States will determine the scope of the pilot effort, including whether the pilot effort is limited to a geographic area or types of contaminants. States can elect to conduct partner outreach and training. States can also determine what constitutes a potential risk and what action to take if a potential risk is identified.

States draw upon published literature, environmental data, and experience with environmental assessment to conduct screening. Epidemiologic studies have linked proximity to gas stations, major roads, and contaminated sites to adverse health outcomes (Brender, Maantay, & Chakraborty, 2011; Fazzo et al., 2017). Occupational epidemiologic studies identifying links between exposures and health outcomes could also help. State CSPECE staff are using inventories of hazardous sites or emissions data for screening proposed locations. Environmental specialists skilled in environmental site assessments (Wisconsin Department of Natural Resources, 2014) might have experience that could help with refining CSPECE screening methodologies in states. If property owners have access to completed environmental site assessments, the information could expedite a CSPECE screening.

States determine how to communicate findings and appropriate actions if a potential problem is identified. As with screening for other health-related issues, screening implies that acceptable diagnostic and treatment strategies exist. If screening is done for a specific concern, some state CSPECE programs can help identify viable strategies for confirmatory testing and mitigation. The ECE operator might also decide that selecting a different site is preferable. CSPECE state staff are working with stakeholders to design pilot plans that can rapidly identify risks and communicate the potential risks at a proposed ECE location.

Conclusion

The introduction posed questions about how to identify and address site-related environmental concerns for children. These questions are challenging; individuals can have different perspectives. The professionals involved with the CSPECE effort are working to build the programs, partnerships, resources, and knowledge to prevent ECE facilities from being located in areas that could lead to harmful exposures in children.

State and local environmental health professionals can get involved with CSPECE by learning more on ATSDR's CSPECE website (ATSDR, 2019a). They might consider taking CSPECE trainings that their states offer. Some state CSPECE programs might also seek assistance in designing and implement-

ing the program; environmental health professionals could consider getting involved.

CSPECE strives to help prevent site-related contamination from harming children. The CSPECE work conducted in 25 states might take varied approaches but all are finding ways to identify environmental risks and prevent exposures at potential ECE locations. ATSDR's CSPECE work seeks to help build the systems and resources to facilitate strategies to prevent site-related exposures. 🐼

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