

## **Pesticides, Disinfectants and Our Kids, OH My!**

### **A Fellowship Project**

**Pesticides, Disinfectants and Our Kids, OH My!** That is the name of a **fellowship project being conducted by Amy Meese**, a parent in our community and a Center for Disease Control Environmental Health Leadership Fellow.

The issue at hand is **chemical exposure to preschool-aged children** and the potential health impacts of those exposures. Children are a priceless resources. Their developing bodies grow quickly and are highly susceptible to toxins.

In Sarasota County, Florida alone 125 day care facilities serve up to 8808 children while 101 family home care settings serve up to 1010 more children. **Safeguarding children in these settings** through sanitation and disinfection practices is an essential function of providers and the regulatory community. It is a critical concern for many providers and parents alike, as is promoting their emotional and intellectual development and care.

In today's society, preschoolers spend a substantial part of their developmental lives in child care settings where they may become **exposed to common chemicals** used to protect them from other risks like germs and pests. Often such chemicals are being applied to comply with regulatory standards to achieve a certain degree of disinfection or risk mitigation.

By virtue of their size and the pace of their development a **child is at greater risk of negative impacts** from chemical exposures. A child's surface area to weight ratio, their accelerated developmental and breathing rates, and sensitivity of their growing systems, coupled with the time spent on the floor and placing objects in the mouths makes environmental exposures a critical concern.

There is increasing awareness of the potential for environmental pollutants to affect child health. **80,000 chemicals are in distribution** and little is known about their toxicological properties. Known causes exist for fewer than 25% of neuro-developmental disabilities affecting 3-8% of babies born yearly. Links between chemical exposure and disabilities have been made. The environmentally attributable fraction cost 54.9 billion annually to address.

If we look to **child care centers as the front line** of the effort to protect and foster highly capable children, the potential to make the difference in these settings goes beyond the care, nurturing and teaching that already occurs there. A clear paradox exists in the effort to provide good care to preschoolers, since the chemical used to achieve one set of objectives has the potential unintended consequence of other health impacts.

The focusing question of Ms. Meese's project is **"Why do we continue to use toxic chemicals and consumptive practices in child care settings when there are effective, lower-impact alternatives?"** She is hoping that you, as providers and invested stakeholders will help answer this question.

The project includes a phased program to **reduce exposure through increased use of more sustainable practices** and is in its early stages of development. To get to the end result first Ms. Meese hopes to:

- assess attitudes toward and awareness of alternative products,
- then create education tools and conduct outreach regarding alternatives;
- provide guidance and training for providers and applicators;
- work with the regulatory community; and
- ultimately develop a grants program to retrofit facilities with more sustainable technologies.

The project is envisioned to be a **partnership** between child care providers, the regulatory community, parents and those with expertise in achieving the objectives in more sustainable ways.

As the project develops further you can expect to see an invitation to participate in **discussions, surveys and focus groups** aimed at assessing current attitudes and awareness toward green housekeeping and pest control techniques, as well as engage in dialog to establish the barriers that exist and strategies to navigate those hurdles.

The hope is that providers, parents and the regulatory community will all **fully participate** to develop a comprehensive picture of the issue and also an action plan that will put in place to increase the use of green strategies and thereby reduce the chemical exposure to this susceptible and sensitive group, our young children.

If you would like to discuss the project further please contact **Amy Meese** at [ameese@scgov.net](mailto:ameese@scgov.net) or 941-809-7489.

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