

Children's Health Protection Advisory Committee

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December 7, 2017

Administrator Scott Pruitt
United States Environmental Protection Agency
1200 Pennsylvania Ave, NW
Washington, DC 20460

RE: Children's Environmental Health and Disease Prevention Research Centers 2017 Impact Report

Dear Administrator Pruitt:

The Children's Health Protection Advisory Committee (CHPAC) commends the Environmental Protection Agency (EPA) for supporting essential and innovative research carried out by the Children's Environmental Health and Disease Prevention Research Centers (Children's Centers). These Children's Centers, jointly funded by the EPA and the National Institute of Environmental Health Sciences (NIEHS), are a successful and effective model of multidisciplinary, community-oriented investigations. The network of collaborating Children's Centers advances the field of children's environmental health more profoundly and significantly than what can be accomplished with individual studies.

CHPAC reviewed the Children's Environmental Health and Disease Prevention Research Centers Impact Report (Impact Report) published in October 2017 and considered the accomplishments of the Children's Centers overall. We found that the Impact Report is well presented and demonstrates how the Children's Centers have advanced our understanding of diseases that affect children in millions of American families, such as asthma, harm to neurodevelopment and various learning disabilities, changes in immune function, altered reproductive development and cancer. The Impact Report clearly articulates how the studies carried out by the Children's Centers brought greater certainty to the assessment of causes that contribute to the emergence and persistence of these diseases among children and adolescents. Finally, we found that successful translation and communication about Children's Center findings have helped health care providers, public health practitioners, and state and federal agencies take evidence-based action and better serve children and their families.

Here, we highlight the strengths of the Children's Centers and provide advice about how to advance the translation and dissemination of key findings made at the Children's Centers to the audiences who will most benefit. These audiences include health care providers; federal, state and local public health agencies; community organizations; and the public. More detailed advice about how to communicate information from the Impact Report and how to publicize important health findings from the Children's Centers in general is provided in Attachment A.

CHPAC members can attest to many examples in which the Children's Centers have served as a valuable resource for health care providers and communities. We especially emphasize:

- Breakthroughs in the medical understanding of environmental factors that contribute to low birth weight, childhood asthma, leukemia, obesity, and learning and behavioral problems. These discoveries inform health practitioners in primary prevention programs, such as the state and local health departments, about diseases and conditions affecting a growing number of American children.
- More than 2,500 peer-reviewed publications from the Children's Centers have helped maternal and pediatric health care providers deliver better, more effective medical care to their patients and take into account their environment.
- High-quality research carried out by the Children's Centers provides evidence needed to guide public health policies to protect children's health, such as policies developed by New York City and the California Department of Pesticide Regulation, as documented in the Impact Report.

To maximize the impact of Children's Center research into the future, CHPAC recommends that the EPA:

Continue the peer-reviewed grant model jointly operated by the EPA in partnership with the NIEHS. CHPAC sees great value in having both the EPA and NIEHS fund the Children's Centers. These two federal partners work with distinct stakeholder communities and have separate missions related to the protection of human health and especially the health of children. With the two-agency funding model, both the EPA and NIEHS can shape and guide the Children's Center program through the grant award process. As a result, research carried out by the Children's Centers is structured to help provide information that addresses each Agency's strategic needs. The mutual involvement of both the EPA and NIEHS also strengthens the community engagement and research translation components within the Children's Centers.

Foster collaboration between Pediatric Environmental Health Specialty Units and the Children's Centers. CHPAC especially commends the existing collaborations between the Children's Centers and the network of Pediatric Environmental Health Specialty Units (PEHSUs) across the nation. We recommend these collaborations be further strengthened and extended. PEHSUs are jointly supported by the EPA and the Centers for Disease Control and Prevention, and they play a key role in disseminating children's environmental health information. PEHSUs are particularly well suited for translating research from the Children's Centers into actionable information for the medical community and for the public.

Promote community engagement efforts at the Children's Centers. Since its inception, the Children's Centers program has emphasized research translation as essential work for the Children's Centers. CHPAC urges the EPA to support the Children's Centers in their community engagement efforts such as outreach to local and state public health departments, presentations to health practitioners through conferences and professional society meetings, incorporation of Children's Center research findings in continued medical education programs, and development of practical information materials helpful for families that face the challenges of having a child who suffers from environmentally related diseases. CHPAC notes that this outreach could be effectively done by early career fellows working on research and research translation and encourages the EPA and NIEHS to fund early career fellowships at the Children's Centers.

Distribute the Children's Center Impact Report to federal and state agencies. The Impact Report incorporates a well-organized summary of research findings tailored for use by several key audiences in a way that is more effective compared to individual research publications. Health care

providers and public health disease prevention programs will benefit from the information summarized by health outcome, whereas those charged with identifying and mitigating health risks of chemicals will appreciate the information summarized by chemical. The Impact Report will aid in the broad dissemination of important new information for children's health and increase the impact of Children's Center findings. CHPAC encourages the EPA to promote the Impact Report widely to sister federal agencies as well as to state and local agencies that work on issues related to public health and environmental health. Agencies that address agriculture, public education, housing, transportation and industry would also benefit from learning about Children's Center research because their programs and policies are likely to affect the environment where children live, play and learn.

In summary, the EPA-NIEHS funded Children's Centers have been instrumental in discovering the connections between a child's environment and their health. The 2017 Impact Report will help foster community engagement around these important issues. CHPAC is eager to see Children's Center work continue and we stand ready to continue advising the EPA on how this program can be supported and extended.

Sincerely,

A handwritten signature in blue ink that reads "Barbara Morrissey". The signature is written in a cursive style with a large initial 'B' and a long, sweeping tail.

Barbara Morrissey, M.S.
Chair

cc: Ruth Etzel, Office of Children's Health Protection
Angela Hackel, Office of Children's Health Protection
Jim Johnson, Office of Research Development
Nica Louie, Office of Research Development
Jennifer Orme-Zavaleta, Office of Research Development

Appendix A

Recommendations to the EPA for communicating about the Impact Report

The Impact Report presents a wealth of information, demonstrating the critical impact of environmental pollution on the development of childhood illnesses and highlighting the community relevance of research conducted at the Children's Centers.

CHPAC believes that national, tribal, state and local policy makers will be interested in understanding the public health implications of Children's Center findings. CHPAC recommends that the EPA disseminate the Impact Report to government agencies and state legislative committees relevant to children's health and the environment. A number of partners could be helpful to the EPA in disseminating the Impact Report and developing communication messages about its use. For example:

- The National Conference of State Legislatures' Environmental Health Project assists state legislatures in their efforts to address environmental health concerns.
- The American Public Health Association and the Association of State and Territorial Health Officials each have environmental health programs that communicate widely with state and local public health officials.
- CHPAC notes that many organizations and associations could join in the efforts to publicize the report, including the Pediatric Environmental Health Specialty Units, the American Academy of Pediatrics, the American Congress of Obstetricians and Gynecologists, and the National Environmental Education Foundation, to name a few.

We also encourage consultation with the EPA regional offices to identify especially relevant aspects of the report for their region's policy makers.

The Impact Report will also serve the scientific community, scholars and health professionals in training as an accessible, comprehensive reference for research done in the Children's Centers. We recommend that you highlight the Impact Report's potential use in medical education and in clinical practice when you disseminate the report to medical providers and their professional organizations.

Finally, the public, including individuals and families who want to know what the recent findings may indicate for the health of their children, have a key interest in Children's Center research. We urge the EPA to use its existing webpages and social media platforms to highlight the Impact Report and to engage news outlets, especially in areas of the country that do not host active Children's Centers. In all communications, the use of summary infographics and highlights should be employed to meet the needs and interests of diverse audiences.

Beyond the Impact Report: CHPAC advice for effective translation of Children's Center findings to diverse communities

While the Impact Report serves as a vehicle for wider dissemination of Children's Center findings, CHPAC is enthusiastic about new, novel and interactive methods to extend the impact of Children's Center research to benefit diverse communities and the medical professionals who serve them.

Children's Center research findings can help families and individuals make everyday decisions that protect their health. The Centers have a good track record for disseminating findings to the participants included in their study cohorts. To achieve a broader impact, the CHPAC recommends that the EPA encourage and support the Children's Centers in translating their research findings for

other relevant communities throughout the country. CHPAC suggests the following communication and outreach approaches:

- Promote public and community participation in the annual conference of all Children's Centers, hosted by the EPA or NIEHS.
- Encourage collaborations between the Children's Centers and their regional PEHSUs and existing university extension programs to develop and distribute environmental health messages to communities.
- Support the Children's Centers in their efforts to develop or contribute to Continuing Medical Education and Continuing Nursing Education courses related to children's environmental health. CHPAC advises the Children's Centers to reach out specifically to public health nurses and chief nursing officers in their regions with environmental health information.
- Direct the Children's Centers to develop a report in each funding cycle that highlights the health policy and/or health practice implications of their research. Ensure that these implications are communicated to health departments, health care providers and relevant specialty groups, particularly pediatricians.
- Support the Children's Centers in developing "family summaries" of their research findings, which translate findings into specific advice for parents, families, health practitioners and communities, where appropriate.
- Promote active training programs at all Children's Centers to mentor young career scientists who work in the children's environmental health field.
- Encourage collaborations between the Children's Centers and university schools of communications and journalism to produce short video clips for social media that effectively translate findings for relevant communities.
- Sponsor local science, writing, and art competitions related to children's environmental health using outreach resources at the EPA regional offices.
- Encourage the Children's Centers to involve and mentor cohorts of middle and high school students in their research efforts. For example, the Health and Environmental Research in Make-up of Salinas Adolescents (HERMOSA) study of teens' exposure to chemicals from personal care products has included a high school teen group in the research, thereby increasing community engagement and inspiring teenage participants to pursue college.