

Letter from leading researchers, health professionals and organisations to child advocates and research institutions

Wednesday 31 October, 2012

We write to you to urge you and your institution to include climate change as an urgent priority area for child advocacy, research, policy and practice.

Climate change poses a significant threat to the development, health and mental health of our children and future generations. Indeed, leading public health organisations and prestigious peer reviewed journals have recognised that "Climate change is the biggest global health threat of the 21st century."

A recently released report, commissioned by 20 of the most vulnerable countries, highlights the size of the threat. The Climate Vulnerability Monitor: A Guide to the Cold Calculus of a Hot Planet report reveals that climate change is already responsible for 400,000 deaths annually, mostly from hunger and communicable disease. Our carbon-intensive energy system causes another 4.5 million deaths annually largely due to air pollution.

Unfortunately, even if current international carbon reduction commitments are honoured the global temperature rise is predicted to be more than double the internationally agreed target of 2 degrees. Humanity continues to pour record amounts of CO₂ into the atmosphere and it has been argued that, if this continues, within 16 years we will have missed the chance to avoid dangerous climate change. As concerned scientists and child advocates we cannot sit idly by and allow this to happen.

Along with the old and disadvantaged, children are particularly vulnerable to the negative effects of climate change. Children suffer most of the disease burden from climate change.

It has been estimated that climate change will mean that Australians will face a 30-100% increase across selected health risks by 2050. Indeed, if we fail to act some health risks may increase by more than ten-fold by 2100.

We are only beginning to understand the impacts that climate change will have on children's development, health and mental health. In addition to a greater emphasis on mitigation, more research at the regional and local levels is desperately needed so that we can adequately understand, prepare for and adapt to the impacts of climate change.

Because climate change poses such a significant threat to our children and future generations we believe that child advocate and research institutions have a responsibility to have it as a priority area for advocacy, research, policy and practice. We have attached a list of ideas for inclusion in a research, policy and practice agenda.

We also believe that, in order to reduce harm to children and future generations, child advocate and research institutions should have a policy to reduce their organisation's carbon footprint (e.g., by switching to Green power, purchasing carbon offsets for air travel, and monitoring the carbon footprint of suppliers).

As concerned scientists and child advocates we should also publicly call for effective climate change mitigation strategies at the local, national and international levels to help limit the threat to the development, health and mental health of our children and future generations. Strategies to reduce emissions would have the added public health benefit of decreasing the incidence and severity of many chronic and avoidable diseases associated with our high-carbon lifestyle.

We urge you to join us in making climate change an urgent priority area for child advocacy, research, policy and practice. We owe it to our children and future generations to act now.

Yours sincerely,

Signed by the following leading researchers, health professionals and organisations

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Fiona Armstrong, Convenor, Climate and Health Alliance

Dr Susie Burke, Senior Psychologist, Public Interest, Environment and Disaster Response, Australian Psychological Society

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Australian Institute of Family Studies

Australian Research Alliance for Children and Youth

Centre for Community Child Health

Child Health Promotion Research Centre

Child Safety Commissioner (Vic)

Children and Young People Commissioner (ACT)

Children's Medical Research Institute

Commission for Children and Young People and Child Guardian (QLD)

Commission for Children and Young People (NSW)

Commissioner for Children (Tas)

Commissioner for Children and Young People (WA)

Families Australia

Injury Control Council of Western Australia

Menzies School of Health Research

Mother & Child Health Research

Murdoch Childrens Research Institute

Parenting Research Centre

Queensland Children's Medical Research Institute

The Centre for Child Development and Education

The Children's Commissioner (NT)

The Guardian for Children and Young People (SA)

Telethon Institute for Child Health Research

WA Ambassadors for Children and Young People

Women's and Children's Health Research Institute

Climate change, child development, health and mental health research, policy and practice agenda

- Need an agreed methodology for policy analyses that consider future health and recognise the importance of children's interests and health (Strazdins, Friel, McMichael, Butler, & Hanna, 2011).
- We need to develop Australian climate change policies that have a child and/or intergenerational focus on health equity (Strazdins, et al., 2011).
- Need someone in the federal department of health who is clearly responsible for developing policy to protect health from climate change as well as someone in the federal department of climate change who has a clear mandate for policy development that acknowledges and reflects the risks to health (CAHA, 2012).
- Ideally we would build an intergenerational health framework with age-specific and child-focussed health risk estimates including the effects of climate change (Strazdins, et al., 2011).
- Public health messages must convey the urgency of reducing greenhouse gas emissions (Macpherson, 2011).
- While many leading institutions are members of the Climate and Health Alliance we need these and the rest of the institutions to take a more public stand and demand adequate action to protect the health of future generations. Recently Doctors for the Environment Australia used the words: "A price on carbon is a public health measure. This is not a party political statement; rather, it is based on the fact that, in a market economy, pricing carbon is one key component in driving decarbonisation, and that climate change is an established public health problem."
- Adaptation measures focusing on child development, health and mental health also need to be developed and applied.
- Climate change adaptation and mitigation strategies should be framed as health interventions as well as environmental (Strazdins, et al., 2011).
- We need more public health and health services research, particularly research that engages with the wider determinants of health (Bell, 2011).
- The lack of regional level climate change and health impact assessments should also be addressed (Bell, 2011).
- It has been predicted that the effects of climate change on agricultural productivity will have a negative effect on child nutrition and health with 25 million additional children malnourished by 2050 (IFPRI, 2009). To what extent will that result in increased disorders of growth and development? What effect will increased exposure to food riots, political instability and uprisings, conflict and war have on child development, health and mental health?
- What effect will the estimated additional 200 million "environmental refugees" by 2050 (Myers, 2002) have on child development, health and mental health?
- We also need research investigating the interactions between the health risks posed by climate change, child age or developmental status, Indigenous status, family structure and resources, and geographical location (Strazdins, et al., 2011).
- We need more research into the immediate and long-term health and mental health impacts of natural disasters (Lau & Weinstein, 2011).
- To what extent will climate change increase the morbidity/mortality of extreme heat events?
- We need research into how and where the increased incidence and severity of floods will increase morbidity and mortality from diarrhoea and other water born diseases.
- Better preventative, response and control measures for diseases associated with flooding should be developed (Lau & Weinstein, 2011).
- Will the increased incidence and severity of natural disasters lead to an increase in zoonotic diseases including Leptospirosis (Lau & Weinstein, 2011)?
- To what extent will climate change affect disease transmission, human infection and geographical spread of parasitic diseases including Malaria, Schistosomiasis and Fascioliasis (Baschieri & Kovats, 2011; Mas-Coma, Valero, & Bargues, 2011)?

- More weeds, pollen, invasive species, mosquitoes and other disease vectors are likely to lead to increased incidence of asthma, allergies, disease and other adverse health outcomes that disproportionately affect children so we need increased aeroallergen monitoring and forecasting and tighter management of aeroallergen plant species (MacCracken, 2011).
- To what extent will climate change change/increase the level of airborne particulates, and their effect on asthma/allergies?
- To what extent will higher levels of ground-level ozone increase cardio-respiratory morbidity and mortality?
- Research is required into whether changing climate conditions will influence children's susceptibility to disease and whether climate change has the potential to stimulate the emergence of new diseases.
- Children's immature neurobiology means that exposure to elevated levels of trauma and stress in utero and during childhood leads to marked changes in brain development and longer term cognitive and mental health impacts. To what extent will climate change result in increased exposure to trauma and stress and how much will this affect child development?
- Stressed parents are more likely to have family conflict and engage in maladaptive parenting. To what extent will climate change put children at greater risk for the adverse physical, psychological and behavioural outcomes associated with maladaptive parenting?
- More research is required into how anxiety about future climate change is already affecting children's development and mental health.
- We need more research into the adverse mental, physical and social health impacts caused by climate change related forced migration.
- More research is required into the future health and mental health impacts of climate change in general (Lau & Weinstein, 2011).
- We need more research into the knowledge, attitudes, and practices of health care professionals in the health impacts of climate change and/or health co-benefits of mitigation/adaptation strategies.
- Unfortunately, many of the future health and mental health impacts related to climate change are yet to be estimated. What we do know is that children from disadvantaged backgrounds and those living in remote areas will suffer the largest impacts from climate change (Strazdins, et al., 2011).
- We should also examine how Indigenous cultures and connection with the land can be a vehicle for integrating climate, health and social change information to promote child wellbeing (Morrison & Waltner-Toews, 2011; Parkes, de Leeuw, & Greenwood, 2011).

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