

Engaging Youth in Prenatal Environmental Health Education

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Children's Environmental Health

- Environmental factors responsible for 13% of Canada's disease burden – 25,000 deaths and \$9 B costs (2008) (WHO, 2009; Boyd & Genius, 2008)
- Lead, mercury, pesticides, phthalates, bisphenol A, flame retardants
- Developing fetuses and children are particularly susceptible (Canada, 2013).
- Evidence that prenatal exposures even at low dosages alter brain development affecting IQ and contributing to ADHD (Chen et al. 2014)
- Evidence linking prenatal exposures to obesity, diabetes, allergy, asthma, and various cancers (Wigle et al, 2008; Cooper et al, 2011; Sutton et al. 2012; Jedrychowski et al, 2011).

Need for environmental health education

- Exposure reduction – e.g. non-toxic cleaning products or cosmetics, behavior changes, avoiding plastics, wet mopping,...
- Barriers?
 - Lack of awareness of risks
 - Lack of knowledge of practical ways to reduce exposures
- Evidence from prospective parents (Crighton et al, 2013; Laferriere et al, 2014)

Calls for environmental health education

*‘Evidence shows that efforts to reduce or mitigate negative influences on health made at the **earliest stages** in life – prenatally and in early childhood – provide the **greatest returns**.’*

*‘**prenatal risks**’ identified as one of the 6 issues that warrant further examination*

*‘efforts that encourage support from partners and close family members, and those involving **early education and awareness** (preferably prior to pregnancy), can also lessen prenatal risks’.*

‘the evidence that links exposure to toxic environmental agents and adverse reproductive and developmental health outcomes is sufficiently robust for timely action to identify and reduce exposure to toxic environmental agents while addressing the consequences of such exposure’ [13, p.931].

Prenatal Environmental Health Education forum (PEHE)

- ‘Share knowledge around priority environmental health issues, education practices, opportunities and barriers, and existing educational resources;
- Create a dialogue, identify common interests and goals, and build partnerships associated with environmental health education at the prenatal care level.’



Recommendations

- Focus on PEHE should include young adults to raise awareness of environmental health issues
- Engage healthcare providers in playing a role in PEHE
- Improve communication of prenatal environmental health messages:
 - Clear, consistent messages
 - Work with trusted sources
 - Focus on practical solutions
 - Be opportunistic of venue
 - Engage audience using appealing and interactive media
 - Connect locally

Leading project

Goal: educate young adults about environmental health risks

- Engage social media to 'turn up the volume' on prenatal environmental health risks
- National video competition - Online contest with approx. 200-500 submissions; 2-3 minutes
- Target – youth (high school or university students)
- Reach mainstream audience by broadcasting winning submissions
- Provide menu of themes e.g. pesticides, food packaging, Focus on 'Why should we care?', 'What can we do?'

Developing the 'How'

- Narrow the scope – uncover youth priorities with respect to toxic substances
- Effectively frame the issue
- Explore effective ways to motivate youth participation
- Choose appropriate medium(s)
- Identify steps that can make it happen
- Design a project action plan for implementation
- Partner engagement and collaborations

Thank-you!

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