Children and chemical safety: framework for action to protect children from harmful exposures

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80,000 chemical substances synthesized since 1950

15,000 substances: approximately 5 tons/year are produced

2,800 substances: approximately 1,000 tons/year (HPV) released into air, water, food, crops, homes, waste...

only 50%: are tested for human toxicity

less than 10%: tested for toxicity on development

US EPA, 1998
every day children may be exposed to a variety of potentially hazardous chemicals in the air they breathe, in the food and water they consume, in their homes and school, at work and in play areas .... and they are specially vulnerable
Three pillars of sustainable development are: society, economy and environment.
The "heart" of sustainable development are the future generations – **CHILDREN**

*They represent the future of our societies.*
*Should be allowed to reach their full potential.*
Chemical risks to children's health can be reduced through …..

- Actions to reduce children's exposures …
- Greater awareness .. on the part of government officials, health care providers, parents & others .. of children's special vulnerabilities
- Better availability of information & guidelines for preventive actions
- The resolve to create & implement preventive laws & policies governing chemicals in children's environment.
Forum IV – Chemical Safety in a Vulnerable World
Bangkok November 2003

Children & chemical safety
a special focus of discussion at Forum IV

Forum called on governments and stakeholders to:
“take action on children's health and chemical safety”
and adopted recommendations to guide the work:
a framework for action by all stakeholders
Partnerships to develop innovative solutions

Governments and stakeholders have a responsibility “to take action” to reduce the sources of chemical risks and prevent childhood exposure.
When assessing the protection of children, consideration should be given to chemical exposures that can occur

* during Preconception ▼
* throughout Gestation ▼
  * Infancy ▼
  * Childhood ▼
  * Adolescence

IFCS Recommendation:

Consider chemical exposures at all stages of development
IFCS Recommendation:

Prepare national assessments and actions plans

Governments should prepare through multi-stakeholder consultation

National assessments should:

• identify priority concerns
  .. most serious and urgent problems for action

• provide basis for developing action plans to address priorities
IFCS Recommendation:

Take actions to prevent and reduce exposure

Education & training

4 different kinds of training would help identify & reduce risks

1. Training health care providers and local health officials to understand, diagnose, and prevent harm from chemicals;

2. Training teachers, child care professionals, and others with responsibility for the welfare of children to practice and teach strategies to prevent and reduce exposures;

3. Raising awareness of politicians and lawmakers and training government regulators to design and implement effective laws and regulations to protect children; and

4. Educating and training parents and children about common chemical risks and ways to protect themselves and their families.
IFCS Recommendation:

Take actions to prevent and reduce exposure

Legislation and regulations

...aimed at reducing & preventing children's harmful exposures to chemicals

Many countries have already implemented such laws and regulations..

Sharing of best approaches and innovative actions that can be replicated will serve to build on successful national experiences
IFCS Recommendation:

Take actions to prevent and reduce exposure

Data collection & research

Efforts more effective if based on solid information – Types of research

- Further research on the links between chemical exposure and health outcomes in different age groups, developmental stages, and settings;

- Development of new risk assessment approaches geared specifically to children, and toxicity testing data that further explore the impact of early life exposure;

- Research to determine how to incorporate new scientific information (i.e. genomics, proteomics) toward understanding the mechanisms of toxic action which are associated with early life exposure and their risks; and

- Innovative research incorporating children and chemicals into development assistance programmes.
IFCS Recommendation:

Take actions to prevent and reduce exposure

Indicators of children’s environmental health

- Bridge the gap between information about environmental quality and information about health status
- Guide policy and actions
- Begin by defining priorities & collecting data on basic indicators
- Maximize the use of existing data
IFCS Recommendation:

Take actions to prevent and reduce exposure

Indicators of children’s environmental health

Over the long term, both basic and more subtle indicators can assist in:

• Identifying potential sources of childhood chemical exposures of concern;

• Identifying health and developmental outcomes that may be related to children’s exposures;

• Tracking trends in exposures and health outcomes; and

• Measuring progress in preventing exposures and reducing illness.
IFCS Recommendation:

Coordinate research

Coordination and cooperation

Research needs are better targeted

Mechanisms to achieve coordinated research efforts might include:

• An information-sharing platform to inform on ongoing and planned research;

• A vehicle for sharing data and technology.
Uncertainty about chemical hazards & exposures ..
  • Difficult to determine best course of action to protect children
  • important to clearly articulate the nature of uncertainty

Many governments, organizations & institutions have considerable experience taking effective action to protect children

Practical course to reduce uncertainties share data, information, ideas and experiences so the best and most recent information is widely available
Everyone has responsibility for protecting children …

The time to take action is NOW!