The current risk assessment process for pesticides does not protect children's health

Did you know that the combined, or "cocktail", effects of pesticide use are not tested? Although pesticides are mostly used in combinations that may produce additive or synergistic effects, they are only tested individually.

Did you know that current pesticide regulation does not require testing for neurotoxic effects on children? One in every six children has a developmental disability affecting the nervous system.

Did you know that the approval process for a pesticide does not require a proper review of the scientific literature or consideration of new scientific findings?

The embryo, foetus, infant and child is more vulnerable to toxics than the adult because the young body is still growing and developing

Did you know that childhood patterns of behaviour such as 'hands-to-mouth' action or eating habits often lead to increased pesticide exposure compared with adults? Infants and children spend more time at home, often crawling or playing at ground level, where pesticide residues are often higher.

Did you know that children consume up to six times as much fruit, twice as much in vegetables and three to five times more in cereals in proportion to their size compared with adults? They also breathe more air per kilogram of body height compared with adults.

The adverse health effects of pesticides on children are well documented

Did you know that acute leukaemia in children is associated with the home use of various types of insecticides during pregnancy and childhood?

Did you know that an elevated risk of cancer of the kidney is associated with paternal exposure to pesticides through agriculture?

Exposure starts in the womb

Did you know that contact with pesticides during the embryonic and foetal stage of human development can increase the likelihood of cancer occurring later in life?

Did you know that children may be affected by their grandmother's exposure to pesticides?

The level of contamination is "serious and growing"

Did you know that almost half of all fruits and vegetable samples tested in the EU are contaminated with pesticide residues, and that a significant percentage is contaminated at levels above the maximum permitted by law?

Did you know that, for example in France 96% of surface water and 61% of groundwater samples contain residues of pesticides?

We recommend effective application of the precautionary principle for pesticides policy, which demands:

1. Exclusion of unacceptable active ingredients (cut-off criteria) in Article 4 and Annex II of Pesticides Regulation

No pesticide should be approved if it causes irreversible effects – even for use by trained users. One critical step in ensuring hazardous substances do not gain authorisation is to incorporate strict maximum "cut-off" criteria for specific properties related to their biological effects in risk assessment procedures. All substances with, or suspected to be, carcinogenic, mutagenic, reprotoxic, immunotoxic, neurotoxic or endocrine disrupting, and substances that are persistent, bio accumulative or toxic, should not be approved. Substances on a priority list established under relevant international treaties ratified by the European Union, or on the list of priority substances for water policy annexed to the Water Framework Directive 2000/60/EEC, should not be approved for use.

2. Comparative assessment and substitution by less hazardous substances or nonchemical alternatives in Article 48 and Annex II of Pesticides Regulation All chemical substances should be candidates for substitution by less hazardous substances or non-chemical alternatives. If priority should be given, a list of candidates for substitution should be set on the basis of clear criteria. This list should go beyond substances already classified as dangerous by existing legislation. A database containing non-chemical alternatives should be set up at the European level to assist this process. Independent experts must carry out the assessment of the alternatives.

3. Protection of vulnerable groups and against combination effects of pesticides in Article 4 and Annex II of Pesticides Regulation

Regulation should be established on the basis of protecting the most vulnerable groups affected by pesticides. In setting ADI and ARfD values, an increase in the safety level by a factor of 10 should be considered. In addition, assessment of the combination, or "cocktail", toxicity of pesticides should be carried out, and safety values should be further lowered if the toxic effects of two or more substances in use together are likely to produce a more toxic effect than when either is used alone.

4. Regular evaluation and monitoring of pesticides in Article 14 of the Pesticides Regulation

A regular evaluation of the authorisation programme should be implemented, allowing for new scientific and monitoring information to be taken into consideration in the evaluation of active substances.

5. Inclusion of newly identified effects and review of scientific literature in Article 4 and Annex II of Pesticides Regulation

Data requirements for a substance should include a two-generation study to identify any effects passed on to the next generation. Tests to identify toxicity (such as neurotoxicity, immunotoxicity, induced carcinogenicity) to developing organisms and the foetus should be foreseen and an extensive survey of the available literature should also be integral part of the data requirements.

For more information read the Pesticide Action Network and Health and Environment Alliance briefing *Cut back on pesticides for healthier lives*, available at http://www.env-health.org or http://www.pan-europe.info



