Pesticide exposure of pregnant women linked to childhood cancer

A review report published today by CHEM Trust\(^1\) highlights that some research studies indicate that pesticide exposure either prior to conception, during pregnancy or during childhood appears to increase the risk of childhood cancer, with maternal pesticide exposure during pregnancy being most consistently associated with childhood cancer.

Furthermore, the report notes that several studies indicate that farmers are at greater risk of developing certain cancers than the general population. In particular, several studies strongly suggest that pesticide exposures are associated with some cases of non Hodgkin’s lymphoma (NHL), leukaemia, prostate cancer and other hormone related cancers.

The CHEM Trust report also highlights that certain cancers have increased dramatically in recent decades, showing that environmental factors must be partly to blame\(^2\) with pesticide exposures suspected to play a role in some cases. Cancer trend data are raising the alarm.

In Britain over the last 30 years (1975/6 – 2005/6):-
- Non-Hodgkin’s lymphoma has more than doubled.
- Testicular cancer has doubled.
- Breast cancer in women has increased by two thirds, and in men quadrupled.
- Prostate cancer has tripled.\(^3\)
- And in the 35 years up to 1998, childhood cancer in Britain increased by 35%.\(^3\)

With 1 in 3 Europeans being diagnosed with cancer during their lifetime the report concludes that EU governments should urgently focus more on cancer prevention.

CHEM Trust calls on the UK Government to give greater consideration to cancer prevention via better control of chemicals, and for specific measures to reduce pesticide exposures. These include:
➢ Strict implementation of the new EU legislation on pesticides so that pesticides that disrupt hormones, and those suspected to cause cancer are substituted with safer alternatives;⁴

➢ Giving people living in houses bordering agricultural land a legal right to be notified in advance of any pesticide spraying operations, if they so request. This would give those living in rural areas the option of reducing their families’ exposure by, for example, bringing their children in from the garden, not hanging clothes out to dry on that day, or shutting their windows.⁵

Gwynne Lyons, Director of CHEM Trust and co-author of the report commented:

“Pesticide exposures may interact with other chemical exposures and genetic factors, to cause cancer. Research suggests that pregnant women, in particular, should avoid direct exposure to pesticides, if possible.

“It is high time that the UK was more supportive of EU proposals to take a tougher approach to reducing exposure to potentially harmful chemicals. If the UK is to shed its image of being the laggard in the EU,⁴ then the UK Government must robustly implement the new EU pesticides legislation in order to try and reduce the burden of cancer in children, farmers and others exposed to pesticides.”

Andrew Watterson, Professor of Health at Stirling University and the other co-author of the report noted:

“Occupational and environmental cancers have been a neglected public health issue in the UK for decades. The report highlights the substantial nature of the threat from pesticide exposure. In the UK, oversight of pesticides has continued to err on the side of products rather than people and of course relies on data generated initially by the pesticide manufacturers. The regulatory response has usually been ‘if in doubt, do continue using pesticides’ when the scientific literature is littered with examples of products that have been cleared in the past emerging as known or suspect human carcinogens. There is a long-overdue and urgent need to mount a cancer prevention campaign on pesticides based on effective precautionary principles.”

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NOTES TO EDITORS

1. The report is entitled “A review of the role pesticides play in some cancers: Children, farmers and pesticide users at risk?”

CHEM (Chemicals, Health and Environment Monitoring) Trust is a charity which aims to protect humans and chemicals from harmful chemicals. www.chemtrust.org.uk

2. Environmental factors include lifestyle factors and/or exposure to chemicals. Rapid increase in the incidence of a disease means environmental factors are at play, because genes in a population do not change that quickly.

3. It should be noted that a significant proportion, but not all of this increase, is believed to be due to better diagnostic techniques.

4. During the 2008 negotiations of the new EU Pesticides Regulation (Regulation 1107/2009 of 21 October 2009 concerning the placing of plant protection products on the market), the UK Labour Government did not support the proposals for ‘cut-off criteria’ for pesticides with endocrine disrupting properties. The UK, Ireland and Romania were the only Member States not to support such proposals.

The new EU Pesticides Regulation applies from 14 June 2011. Despite the UK efforts, it does impose ‘cut-off criteria’ for endocrine disrupting pesticides and those that are carcinogenic, mutagenic or reproductive toxican. However, the final criteria for identifying which pesticides can be considered to have endocrine disrupting properties are yet to be decided, although there is a legal mandate requiring that by 14 December 2013, the Commission shall present a draft of the specific scientific criteria for the determination of endocrine disrupting properties.

5. New EU pesticide legislation enables Member States to bring in such legal duties on professional pesticide-users, requiring them to prior notify neighbours of their intent to spray, if requested. A UK Government Consultation on this and other aspects of the legislation closed on 4 May 2010. The UK Conservative Government’s response to this consultation, which will set out the UK’s intended way forward, is expected later this year. (For further information contact Chris Pidgeon, Policy Development Team, Chemicals Regulation Directorate, York. Tel.: 0 (+44) 1904 455740 Email: chris.pidgeon@hse.gsi.gov.uk)

6. CHEM Trust’s response to the UK Consultation on the new EU Pesticides Regulation can be downloaded from our website: http://www.chemtrust.org.uk/documents/DEFRAPesticidesLegConCHEMTrustResponseApr10.pdf