MINISTRY OF HEALTH
MANATU HAUORA

Dioxin: Exposures, health effects and public policy

Public health responses

Dr Mark Jacobs

The Ministry of Health's role

- In 2001, MoH was tasked by joint Ministers with co-ordinating a WOG approach to organochlorines
- The populations affected are

- IWD workers, sawmill workers, 2,4,5-T applicators, PCB workers (DoL).
- New Zealand Vietnam Veterans (OVA)
- Paritutu residents (MoH)
- New Zealand public (90% of exposure through food chain) (MoH, MfE, NZFSA)

- Priority for MoH is non-occupational exposures.

Ministry of Health's role

- 2001, MoH established the Senior officials Group.
- The agencies involved are MAF, MfE, DoL, ACC, NZFSA, ERMA, OVA, MFAT, HNZ, DPMC, TPK, MORST, Treasury.
- MoH established OTAG – advisory group to the DDG - experts in epidemiology, toxicology, public health medicine, occupational health, organic chemistry and other expertise as required.
- In 2001, MoH contracted the Paritutu serum dioxins study

MINISTRY OF HEALTH
MANATU HAUORA

What we know about exposures

- MfE national serum dioxins study – NZ levels are low internationally
- Breast milk studies 1988, 1997 – levels have fallen by about two-thirds
- Paritutu residential soil study 2002 (MfE) – TCDD found at all sites, all but one within the most conservative international residential guidelines
- New Plymouth dumpsite study 2001 (TRC) - no evidence of environmental risk found at any of the 36 sites investigated
- Paritutu residents

MINISTRY OF HEALTH
MANATU HAUORA

What we know about health effects from TCDD

- In 1997 TCDD classified as probable human carcinogen by Institute of Medicine
- Cancer promoter rather than initiator
- It is possible that the TCDD levels found in a small group of long term Paritutu residents may have health consequences for some individuals, or cause increased risk of disease, in particular cancer, on a population basis
- Psychological effects

What we know about the health of the Paritutu community

- Cancer Mortality Atlas 1982, 2005 –higher rate of non-Hodgkin's lymphoma and Hodgkins disease in New Plymouth (1974-78 data)
- Brinkman 1986 – no substantiated evidence that 2,4,5-T production had any adverse effects on residents' health. It did discuss concerns of the community

MINISTRY OF HEALTH
MANATU HAUORA

What we know about the health of the Paritutu community – cont'd

- Health effects study 2001 – no difference in cancer registrations, a six percent higher cancer mortality, lower rate of birth defects.
- Birth defects study (neural tube) 2002 – slightly higher than national rate but not statistically significant.
- Cancer incidence and mortality study expected 2005
- Birth defects study underway

MINISTRY OF HEALTH
MANATU HAUORA

Paritutu Community concerns

- Health effects of exposure
- Uninformed and deceived
- Attitude – was the issue taken seriously enough
- Environmental contamination

MINISTRY OF HEALTH
MANATU HAUORA

What the community has asked for

- Recognition and apology
- Compensation
- Medical treatment
- Education and information

Options under consideration for exposed current and former Paritutu residents

- An exposure register for surveillance and research
- A healthcare management model – discussions with TDHB
- Training for GPs, medical staff
- Counselling – access to MOsH

MINISTRY OF HEALTH
MANATU HAUORA

Challenges for policy development

- Identification of small historical population
- Any health effect would be difficult to detect across such small numbers
- Cancer – dioxin promoter not initiator– effect on latency unknown
- Health effects still not well understood

Options under consideration for the general population

- Apart from a small group of current or former Paritutu residents other non-occupationally exposed New Zealanders have low levels of dioxin
- The levels are decreasing
- Public health significance of dioxin is relatively low compared to smoking, obesity,
- Priority for this group is on health promotion