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Response from Dr Garth Alperstein, Central Sydney Area Health Service

Dr Bell makes two points:

- that lead-based paint as a source of lead exposure requires further attention
- that he believes, as does Dr Donovan, that alleviating social disadvantage may in the long term be more beneficial than action directed specifically at exposure to lead.

I do not believe anyone would disagree on either issue. Alleviating social disadvantage is a complex and difficult long-term issue and will positively affect more than just those problems associated with lead exposure. In the meantime, there are simple measures that can be implemented to reduce children's exposure to lead. How much effort, money and human resources are put into dealing with all health issues, including lead, are what governments and the community are constantly negotiating.

UPDATE ON LEAD-RELATED ACTIVITIES, FROM THE PUBLIC HEALTH UNITS

CENTRAL SYDNEY AREA PUBLIC HEALTH UNIT

Central Sydney Public Health Unit convenes quarterly meetings of the multidisciplinary Lead Advisory Committee. The committee has representation from the Central Sydney Public Health and Health Promotion Units, local Divisions of General Practice, the Lead Reference Centre, the Lead Advisory Service (NSW), the Department of Housing, and the paint industry, as well as the Central Sydney community paediatrician and a local council environmental health officer. The committee aims to reduce the effects on health of lead and the risks from lead within the Central Sydney Health Area by promoting and coordinating responses to lead within the Area, and liaising and collaborating with organisations outside the health sector. The committee also functions as a forum for information sharing about lead issues generally. In July 1997, a subcommittee was established to look at research issues. The Lead Research Sub-Committee aims to advise the Lead Advisory Committee and others about needs for research about lead, and to formulate research questions about lead issues.

A public health officer placed in the Central Sydney Public Health Unit undertook a literature review to examine evidence of the effectiveness of behavioural interventions aimed at health professionals, families and others to address lead issues.

The Central Sydney Area Public Health Unit developed a local protocol for the follow-up of notifications of people with elevated blood lead levels. This protocol was used to investigate cases of elevated blood lead levels in the Central Sydney Area before the NSW Health guideline for Environmental Health Officers became available. The protocol's public health unit operational summary, the letter to general practitioners about adult notifications, and the notification action checklist were used as examples in the NSW Health Department guideline.

HUNTER AREA PUBLIC HEALTH UNIT

In the North Lake Macquarie area, the Hunter Area Public Health Unit has been undertaking programs and research on lead issues:

- analysis of blood lead levels of children in the suburbs of North Lake Macquarie, and relevant comparisons
- ongoing evaluation of children's blood lead levels after household remediation
- a knowledge, attitudes and practices survey of parents whose homes have been remediated.

The North Lake Macquarie Remediation Centre was established at the end of 1995 with funding of $300,000 from the NSW Government Environmental Trust, the NSW Health Department, Pasminco Metals–Sulphide and Lake Macquarie City Council. In 1996, the Centre started remediation of houses around the Pasminco Cockle Creek smelter, where children had high blood lead levels.

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Lead in dust and soil from day-care centres

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EDITORIAL NOTE

Lead is a ubiquitous contaminant of the urban environment. Children are at greatest risk of exposure and harm from absorption of environmental lead by virtue of their behaviour, their metabolism and the sensitivity of the developing nervous system to the toxic effects of lead. Lead in paint and lead additives in fuel are two sources of lead exposure in urban areas. This study confirms that lead is readily detected in the home and play environment of many children in NSW. A recent study showed that average blood lead levels in NSW preschool children were 5 to 7 µg/dL, with less than 25 per cent of inner-city children being above the goal for blood lead of 10 µg/dL[1]. This is an improvement since 1992[2]. Reductions in the proportion of cars using leaded fuel and in the the lead added to that fuel have reduced exposure. A study in Sydney showed that traffic flow near a child's home was a more important determinant of blood lead level than the traffic flow at the child's child-care centre[3]. These results do not detract from the need for efforts to reduce exposure to environmental lead, such as those now being coordinated by the Lead Reference Centre.

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Measuring the amount of lead in indoor dust

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Thus, the petri dish method can be used as a measure of recontamination, allowing individuals and health authorities to assess the effectiveness of abatement strategies.

Although no single method has yet been established as a standard for measuring indoor lead exposure, the long-term dust-fall accumulation method has advantages: it has low cost, does not require a power source, causes minimal inconvenience to the householder, does not involve noise, can be measured over a specific period, and cannot be biased by the householder cleaning the house before a sample visit[4].

The disadvantages of the method are the potential for disturbance or contamination and the time delay to obtain a measurement. In our study only one dish was lost and there were no overt signs of contamination.

Further evaluation of the technique to quantify the direct relationship between lead loading and blood lead levels is under way in North Lake Macquarie and Broken Hill. Our pilot study has shown that the method provides a valuable indicator of comparative trends in lead exposure over time and between areas.

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Update on lead-related activities

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In June 1997, $4.6 million was received from the NSW Health Department, the NSW Environment Protection Authority and Pasminco Metals–Sulphide for ongoing remediation.

NORTHERN SYDNEY AREA PUBLIC HEALTH UNIT

Local Government Environmental Health Officers were invited to a regional workshop on roles and responsibilities for lead hazard management conducted by the Lead Reference Centre and the Northern Sydney Area Public Health Unit on 9 December 1997 at Macquarie Hospital, North Ryde. Representatives from local authorities within the area, NSW Environment Protection Authority, WorkCover and Environmental Health Officers from the NSAHS Public Health Unit attended.

Documents distributed included *Local Government Lead Management and Guidelines for Environmental Health Officers in managing cases of Elevated Blood Lead Levels*. The aim of of the workshop was to provide information about lead hazards and the powers available to deal with lead problems. The outcomes of the day were an awareness of the responsibility of local government in the approval of building applications, procedures to be recommended for building renovations and case investigation protocol.