

The Power of Innovation

A health care system to meet our needs

NSW Health Symposium Oct 2012

Childhood Lead levels in Broken Hill – is the data representative of the population? Improving primary health care in the community



Introduction

Natural deposition and lead mining has resulted in widespread lead contamination throughout the community of Broken Hill.

The National Health and Medical Research Council recommends that all children's exposure to lead should be minimised.

Blood testing is the only way to identify children with high levels so that preventive measures can be taken to reduce the detrimental effects of lead.

Results

The Lead program database is collated and analysed annually. A data report is produced and findings are made publicly available on Health Statistics NSW web page.

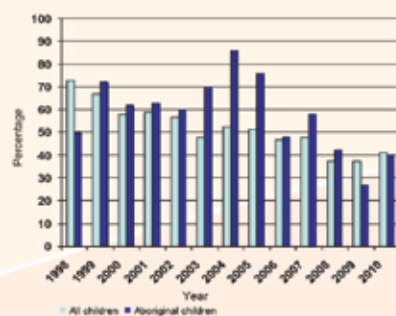
In 2011, 63% of all children 0 – 4 years participated in the Lead screening program based on 2011 child population census data. Participation rate for Aboriginal children was 70%.

The geometric blood lead concentration was 4.5 ug/dL, a slight decrease from 4.7 ug/dL in 2010. For Aboriginal children the geometric blood lead concentration was 6.5 ug/dL, a decrease from 7.7 ug/dL in 2010.

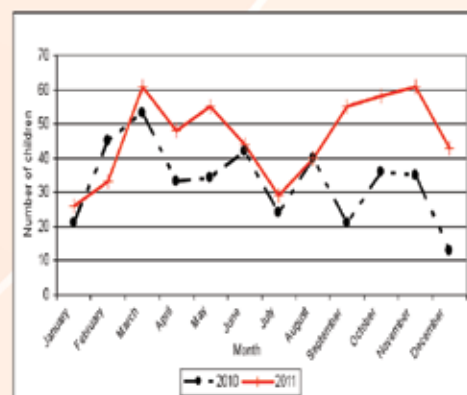
Aim

The annual screening rate has decreased from a high of 73 % of all children under the age of 5 years in 1998 to 41.3 % in 2010.

The project aimed to increase the participation rate of 0 – 4 year old children in the lead screening program to 60 % within 12 months.



Percentage of children 0-4 years having a lead test 1998 – 2010.



Run Chart illustrating a significant increase in participation for 2011.

Method

The Child & Family Health Centre is a major provider of childhood immunisations.

The Lead testing schedule was modified to align with immunisations.

Lead testing was offered at the same appointment that a child received their immunisations and development checks.

Recruitment for Lead tests at ages 2 and 3 years continued to be via annual recall letters or offered if parents made appointments for 2 and 3 year old development checks with the child and family health nurse.



Broken Hill Lead testing schedule.

Conclusion

Alignment with the NSW Childhood Immunisation schedule has improved access to lead testing for young children.

Identification of children with high lead levels has enabled strategies to be implemented to reduce the child's exposure to lead.

The intervention has been well accepted by families. Very few parents elect not to have their child's lead test at the time of immunisation and child development check.



Child washing hands in preparation for a lead test.

Acknowledgements

The Lead Program acknowledges the support of Broken Hill Lead Steering Committee and the Child & Family Health Team .