

# Mount Isa Lead Health Management Committee

MLHMC Report 2013-2015

## Foreword

In 2012, the Minister for Health established the Mount Isa Lead Health Management Committee (MLHMC). The goal of the Committee is to provide a consultative decision making forum to address health risks to the residents of Mount Isa from lead in the environment. The Committee's main objective is to strengthen health management strategies for the protection of young children (0-4 years of age) in Mount Isa.

The Committee is comprised of elected state and commonwealth community representatives, senior government officials and industry representatives.

The Committee's 2013-2016 Strategic Plan (the Plan) highlights strategic priorities to address lead health challenges facing the Mount Isa community.

The Committee has made considerable progress during the past 2 years in meeting its strategic priorities, which are set out in this report. The future challenges faced by the Committee in safeguarding the Mount Isa community, requires the continuation of the partnership approach between government agencies, industry and the community.

## Strengthening existing strategies to mitigate health risks

Mount Isa's long history of lead mining and associated activities has resulted in elevated levels of lead within the environment. In 2006, Glencore Xstrata commissioned the independent Lead Pathways (Land, Water and Air) Study. The aim of this study was to investigate the natural and industrial pathways of lead and other heavy metals into the Mount Isa community and assess the potential risk to human and environmental health. The University of Queensland's Centre for Mined Land Rehabilitation in collaboration with the National Research Centre for Environmental Toxicology is conducting this study. The Land and Water pathway reports were released respectively in 2009 and 2012 and Glencore Xstrata are working through the relevant outcomes and recommendations identified within these studies. These studies are located at the following website:

<http://www.mountisamines.com.au/EN/community/Pages/LeadPathwaysStudy.aspx> .

The Committee is awaiting the release of the Glencore Xstrata's *Mount Isa Lead Pathway Study - Air Report* which is due in late 2015, once the peer review process is completed. The Committee will assess the recommendations of this report and will incorporate any appropriate 'lead health' management strategies into the community.

## Revised blood lead testing strategy

In 2013, the Commissioner for Children and Young People wrote to the MLHMC expressing concern about the small proportion of children less than 5 years of age presenting for blood lead testing and recommended a key priority for the Committee should be to increase the number of young children being tested.

In response to the Commissioner's concerns, the MLHMC took the following actions:

- Secured agreement that blood lead testing be incorporated as part of routine health checks of Mount Isa children who are under the care of the state
- Introduction of routine blood lead level testing of blood samples taken from children aged 1-4 years in Mount Isa Hospital. The Department of Health contributed \$90,000 to the North West Hospital and Health Service to support an additional blood lead testing program. The routine testing commenced in August 2014.

Appendix 1 outlines the results of the blood lead testing program incorporating the voluntary QML testing and the Mount Isa Hospital program, from 2012 to 1 October 2015.

The Committee's key priority in 2016 will be to continue the implementation of new measures which will increase participation of young children in blood lead testing programs, ensuring health risks are identified and addressed in a timely manner.

## Promoting safe lead health management practices

### Community education and promotion

The MLHMC supports the MLHMC Sub-Committee to ensure strategies are in place to support residents adopt 'lead safe' practises. The MLHMC Sub-Committee is chaired by Rob Katter, the State Representative (Member for Mount Isa) and comprises of:

- Mr Tony McGrady, Mayor, Mount Isa City Council
- Mr Paul Woodhouse, Chair, North West Hospital, and Health Board
- Mr Greg Ashe, Chief Operating Officer, Glencore Zinc Assets Australia

The primary function of the Sub-Committee is to provide oversight to the local operations of the Living with Lead Alliance (LWLA). The LWLA is a non-government organisation established to improve 'lead health' management practices within the Mount Isa community. The goal of the LWLA is to achieve a sustainable improvement in the health of the Mount Isa community by effectively managing programs to assist the community in working towards a safe and healthier lifestyle for Mount Isa children.

During 2012-2014, the LWLA continued to promote healthy living through a number of programs that educate the community on how to live safely with lead. These programs include:

- The Backyard Improvement Program: An incentive-based competition aimed at residents reducing bare soil areas where children play. In 2012-2013, 44 Mount Isa residents (all with children less than 5 years of age) joined the program and made a commitment to reducing bare soil areas in their gardens/yards.
- LEADSmart Education Program: All Mount Isa schools, kindergartens and day care centres are now part of the Alliance LEADSmart Education Program, which promotes lead safe educational messages.
- Healthy Eating Recipe Books: The Alliance developed three Healthy Eating Recipe Books over the past two years to deliver healthy eating recipes and information on foods that can assist in reducing the amount of lead the body ingests. Copies of these recipe books have been distributed throughout the Mount Isa community, with many provided to indigenous communities.
- Squeaky's (the LWLA mascot) Promotional Merchandise: The LWLA has distributed over 50,000 products (pencil cases, balloons, activity books etc) incorporating the '*Squeaky says be lead smart*' and wet wipe, wash and eat well messages.
- Indigenous Blood Lead Testing Program: In 2013-2015, the LWLA worked closely with the Indigenous Children and Parenting Program (ICaPP) to promote lead awareness within indigenous communities and to increase the number of indigenous children undertaking blood lead tests. The LWLA, with the

assistance of ICaPP, have taken over 25 indigenous children aged 5 years and under to have their blood lead levels tested at QML Pathology.

- Educational Seminars: The LWLA coordinates annual lead education seminars that are focussed towards local general practitioners, allied health workers, teachers, nurses, doctors and residents of Mount Isa. The seminars are carried out by Emergency Physician and leading toxicologist Dr Mark Little. These seminars keep the community informed on the 'living safely with lead' messages including topics such as; how lead enters the body, toxic effects of lead and how to reduce the possible risk of high blood lead levels.

The LWLA provides annual reports, which further outlines their activities. These are available at:

- 2012 – 2013: <http://www.livingwithlead.com.au/wp-content/uploads/2013/04/LWLA-2012-2013-Report.pdf>
- 2012 – 2014: [http://www.livingwithlead.com.au/wp-content/uploads/2013/04/LWLA-EYR-2013\\_14.pdf](http://www.livingwithlead.com.au/wp-content/uploads/2013/04/LWLA-EYR-2013_14.pdf)

## Government and non-government agencies

The MLHMC has sought to raise awareness of state government agencies in Mount Isa to incorporate or strengthen existing 'lead safe' procedures in their department's policies and guidelines to support their operations in Mount Isa. The Committee wrote to the departments that have a presence in Mount Isa highlighting the importance of distributing information from the LWLA to ensure consistent messages. The Technical Working Group of the Committee was made available to assist departments in reviewing information and ensuring that it is adequate and appropriate.

## Emerging issues

In 2015, the National Health and Medical Research Council (NHMRC) finalised its review on the evidence of the health effects and management of lead exposure in the general population. In May 2015, the NHMRC updated its public *Statement: Evidence on the Effects of Lead on Human Health* recommending for various reasons that the blood lead notification level should be reduced from 10 micrograms per decilitre ( $\mu\text{g}/\text{dL}$ ) to 5  $\mu\text{g}/\text{dL}$ . The Department of Health is currently proposing to change the blood lead notification levels within the *Public Health Act 2005* from 10  $\mu\text{g}/\text{dL}$  to 5  $\mu\text{g}/\text{dL}$ .

Similarly, Safe Work Australia commissioned a report/discussion paper to examine the health effects of exposure to lead and based on the analysis, advice on appropriate blood lead removal levels and a workplace exposure standard for lead. This review suggested the Work Place Exposure Standard be reduced from 0.15  $\text{mg}/\text{m}^3$  to 0.05  $\text{mg}/\text{m}^3$ . Safe Work Australia however has made no decision in relation to the implementation of the review's recommendations. Safe Work Australia will be formally consulting with each state and territory health departments in relation to any proposed actions or outcomes of this process.

## Appendix 1

### Testing Mount Isa blood lead levels in children less than 5 years of age

Year	Total under five years children tested	All under five years geometric mean (GM)	Indigenous under five years geometric mean	% BLL ≥ 5 µg/dL overall (total number in brackets)	% BLL ≥ 10 µg/dL overall (total number in brackets)
QML lab 2012	43	3.2 µg/dL		21% (9)	-
QML lab 2013	83	3.2 µg/dL		23% (19)	2.4% (2)
QML lab 2014	98	2.6 µg/dL	3.0 µg/dL <sup>1</sup>	11% (11)	0% (0)
QML and other private labs 2015	49	3.0 µg /dL	3.9 µg /dL <sup>1</sup>	14% (7)	6% (3)
Mount Isa Hospital 2014 ( <i>Aug-Dec</i> )	57	3.2 µg/dL	3.5 µg/dL	16% (9 <sup>2</sup> )	2% (1)
Mount Isa Hospital <sup>3</sup> 2015	101	3.2 µg /dL	3.7 µg /dL <sup>1</sup>	16% (16)	2% (2)

Note - the analysis data are truncated at 2.1 µg/dL as the lowest level for laboratory reporting. This means that the geometric mean cannot be lower than 2.1 µg/dL.

### Simplified data of number of children under five years of age tested

Year	QML	Routine Hospital	Total Tested
2012	43	-	43
2013	83	-	83
2014	98	57	155
2015	49	101	150

**Note : 1925 total number of children in Mount Isa (under 5 years of age) based on 2011 Census Data**

Information was provided by North West Hospital and Health Service – Townsville Public Health Unit on 16 February 2016

<sup>1</sup> Indigenous status is not always available

<sup>2</sup> Includes any ≥ 10 µg/dL

<sup>3</sup> Opportunistic testing at Mount Isa hospital