



## Global Dimensions of Lead

*Notes for a presentation by Elizabeth O'Brien, Saturday 1<sup>st</sup> June 2002, Washington DC, at the request of Janet Phoenix, the Director of Health Education for the Alliance to End Childhood Lead Poisoning (AECLP), a national US advocacy organization now known as the Alliance for Healthy Housing (AHH). This article is a result of the Lead Archives Digitization Project (LADP) – thanks Lily D'Adam.*



The LEAD Group Incorporated (Australia), with only a couple of volunteers and a lot of goodwill from our Committee and Technical Advisory Board, runs both a national information and referral service within Australia (mainly through a freecall phone number), known as Lead Advisory Service Australia (LASA), and a global service (mainly through



email), known as the Global Lead Advice and Support Service (GLASS) - both aimed at eliminating lead poisoning and protecting the environment from lead.

To give you some idea of our activity level, since custom-designing and setting up our fabulous

Access database in June 1995, we have interacted with 15,730 clients while handling 28,400 calls (many clients return for more information and referrals) on the management of lead from the cradle to the grave. By tracking the subjects of calls since October 1997, we have found that callers need information on a broad range of subjects - notably, only 22% of our calls are about paint, 21% about lead assessment and 16% about renovation. A specialty from Australia is that 15% of our calls are about ceiling dust - the dust above the ceiling and below the roof which can reach 2% lead content in Sydney and higher in mining and smelting areas. Because of these areas and leaded petrol only being phased out this year, 12% of calls are about lead in air and 6% about petrol. Leaded petrol is still available by special exemption in remote Aboriginal communities with petrol sniffing problems.

Other call subjects are lead workers (8%), waste (6%), policy (5%), hobbies (2%), pets (1.5%) and other subjects (30%) of calls. Lead poisoning prevention or case management is the subject of 41.5% of our calls and this major focus of our individualised response service has resulted, among other things, in the setting up of a variety of egroups at <https://lead.org.au/egroups.html> with our biggest group being an international network (Plumbism and Autism Network) for parents at <https://groups.yahoo.com/neo/groups/Autism-Lead/info> and another email discussion group for people with lodged bullets, pellets or shot at <https://groups.yahoo.com/neo/groups/LLSBS/info>

[2020 update: I just found the following sad message on all our Yahoo egroups pages:

**Announcement: End of Yahoo Groups** We're shutting down the Yahoo Groups website on December 15, 2020 and members will no longer be able to send or receive emails from Yahoo Groups. "]

### Mining, smelting and lead acid batteries

Janet Phoenix: It's our aim to ensure that lead is a piece of the puzzle that doesn't get forgotten and



that we deal with all sources of exposure and not just one at a time.

Elizabeth O'Brien: In 1994 at the time of the first global lead conference, the only two uses of lead that were increasing annually were ammunition and batteries so I would like to talk about ammunition as well as batteries, because it is an increasing use and therefore a cause of increasing smelting of lead.

- Lodged bullets from non-fatal small firearms injury
- Lodged bullets and pellets can cause poisoning and how many doctors would think to ask about them if a man complained of feeling aggressive or tired, suffering impotence, raised blood pressure, hearing loss, infertility or depression etc.
- We published a Lodged bullets factsheet on The LEAD Group website at [https://lead.org.au/fs/Lodged\\_Bullet\\_20110221.pdf](https://lead.org.au/fs/Lodged_Bullet_20110221.pdf) and asked people to join the email discussion LLSBS egroup centred around a woman whose husband has a lodged bullet in his neck from when he was 16.

Australian lead mining is driven by the need for zinc and to a lesser extent, copper, according to an ABARE government report funded by one of Australia's largest lead mining and smelting companies MRI.

- Case study (Les) was tested only once for PbB (blood lead) and PbU (blood urine), no further PbB testing.  
Assistance – forwarding the case with an explanatory letter to a solicitor we had previously met with in order to work out the cases that might be successful.
- Case study (Andrew) = David Pb 12.6 umol/L = 250 ug/dL – one of the highest ever recorded in Western Australia – gold assayer.  
The LEAD Group's assistance was to put him in touch with Australian and US lead specialists and provide journal articles to support his claims about the ongoing effects of lead poisoning, the effects which are clearly not related to the current blood lead level. I asked him if he would talk to other lead poisoned adults undergoing chelation long after the lead poisoning occurred – he has appreciated this assistance but we also have gained an excellent referral and Andrew recently spoke to Les on how, from opposite ends of the country, they could work together to their mutual benefit.

From the feedback we receive from our callers, there is no doubt that the work of just a few dedicated people has contributed in a major way to the management of lead in Australia, especially in paint and petrol, the two uses for which it is most difficult to claim lead is ecologically sustainable (as is claimed for its use in lead acid batteries).

- Case study (Denise) and her third youngest child (Adrian) with PbB of 33 ug/dl in 1997 and thereafter due to the Tasmanian government ignoring its own public health regulations, the child's PbB remained around that average for 3 years, and his siblings became lead poisoned.  
Assistance – collation of the case into 16 pages of events in chronological order and media coverage on ABC TV, Tasmanian TV, radio and newspaper inspired the state government to bag up the family house and find them a house that was not built on copper mining slag contaminated land. Continuous counselling via over 260 phone calls enabled Denise to seek



legal assistance, chelation treatment, placement for her son in a special school, specialist medical assessment from an interstate (TAB member) paediatrician and a lowering of all the family's PbBs plus family pets have stopped dying mysteriously.

PAN, which is not to say the family does not suffer a huge legacy of lead poisoning.

- Case study (Jenny) mother of 3 lead poisoned boys from Broken Hill – Australia's largest lead mining town, in NSW. Jenny tells me that apart from some remediation of the house carried out several years ago, no child over 5 or adult with a notifiable PbB (>15 ug/dl) has been followed up by the NSW Health Department who's Environmental Lead Centre has a clientele restricted to families of children under 5. Heavy metals ADD, Ritalin is taken by 60% of the children in the town, street crime and domestic violence rates are high  
Assistance – Ann Winner article for teachers dealing with lead poisoned students, scribing, contact with other mothers in smelting and mining communities, PAN (Plumbism and Autism Network), information including journal articles in which her children were research subjects, loan of the book "Turning Lead into Gold", phone calls to health department supporting her requests for info and following up on Jenny's disturbing reports of life in Broken Hill.

Of the 20,000+ items in the world's largest publicly-accessible lead library we run, we have entered in a fully searchable fashion 6,580 information items on lead (including many government factsheets and booklets), of which 1,200 items are emailable and a similar number are web-published. Since adding a facility for generating cover letters from the database in October 1997, we have distributed 281,234 information items.

We have also entered details of over 3,550 referrals (to lead abatement and assessment services and products and a range of experts in every field related to lead) into the database and have referred our clients to 12,475 referrals since October 1997. Our website has had over 70,000 visitors since we put a visitor-counter on it in May 2000.

- Case study OH&S and EH consultant PbB surveillance. Australia boasts the world's largest lead smelter at Pt Pine, SA, as well as lead or lead zinc smelters at Mt Isa, QLD, Boolaroo, NSW, Hobart, TAS and a new one at Townsville, QLD. We produce a lot of lead and are the world's largest exporter of lead concentrates as long as the world's car population continues to increase at a faster rate than the human population increases, all the ore that is dug up to supply the world's silver, copper and zinc markets will be smelted for lead and lead producers will aim to sell all the lead they produce, at a profit.
- Case study (Kate) is a young newly married mother who moved into a house 1km from a lead smelter without realising that the smelter emissions might put toxins into the air inside her house. While pregnant she fully renovated the wooden cottage including replacing ceilings. She miscarried at 23 weeks pregnancy but continued to renovate and soon enough carried a baby daughter to term. At 10 months of age, Kate's daughter was PbB tested for the first time and has a PbB of 22 ug/dL – the paediatrician Prof Graham Vimpani (TAB) said it was the



highest PbB found in a child so young in the area, the daughter Jessica had not even started to crawl. Kate the mother contacted LASA.

Assistance – we were able to put her in touch with the local smelter community activist group and link her with mothers in other point source communities, write letters to the health minister and Environmental minister, meet with Kate with the chief health officer and EPA Air Quality research head. Kate had a sharp mind and keen sense of ethics and during her > 350 contacts with LASA she became so highly trained in lead poisoning prevention that she undertook on her own a doctor education program in her area – despite it theoretically already having been covered by the health department-funded environmental health centre in the smelter town, Kate spoke to hundreds of doctors and childcare centre directors who knew nothing about Pb and were grateful for the booklets and factsheets she delivered to them, of which they were mostly unaware. She also was assisted by us to obtain the promise of an air monitoring study to determine the source of the exceptionally high dust lead levels in her house. Unfortunately, the EPA never published the study or did not complete it but a study by another TAB member Mike van Alphen had already shown at the Pt Pine smelter that the casual story put around by industry and unquestioned by government – that most lead in the area was historical contamination – was not true. Current emissions actually accounted for around 70% of dust fall-out on the smelter community.

- Case study – Edit Pop from Baia Mare, Romania. When a member of the Australian Mining NGO Minerals Policy went to Romania to expose to the world one of the largest cyanide spills at an Australian-owned gold mine there, he discovered a wonderful woman Edit Pop who had been battling to find help in dealing with the environmental health problems of living in what is arguably Romania's most polluted town. Baia More has been a lead mining area since the year 1200 and contains 3 smelters – one for lead, one for copper and one for precious metals. Working at a voluntary social justice NGO, Edit had come across a lot of very sick people and when her own son was found to have an elevated blood lead level when he had a lead blood test in a study, Edit started to seek funding to set up a Heavy Metal Information and Referral Service.

Assistance – GLASS was able to provide enormous amounts of info by post (due to Edit's severely restricted budget and web access) which inspired Edit to create a local lead factsheet which was printed for free for her by a local printer. In August last year (2001), due to a specific purpose donation from a computer program company in Australia, Ensilage, (the same company as paid for my airfare here) I was able to visit Edit in Romania and speak to her local supportive Rotary group about lead and visit all 3 smelters and the gold mine with Edit and a local journalist. I also addressed the local council at a meeting attended by 7 environmental NGO reps from the area re: funding.

When we started entering the calls in our database 7 years ago, of 3,895 calls handled in the first year of operation only 17 calls (0.44%) were from outside Australia. In the sixth year of operation, of 4,421 calls, 321 (7.26%) were from overseas and because of the Global Lead Advice and Support Service (GLASS) email enquiry form on our website, this increase in the percentage of calls handled from



overseas is very likely to accelerate. We know of no similar email information and referral service on lead anywhere else in the world.

If we were given more than A\$15,000 per year in government or corporate funding, we could afford to pay staff and run pro-active media campaigns as well as web-publish sections of our database.

I have recently become involved in the consultation group for a new lead acid battery LCA (Life Cycle Analysis) as part of a PSP (Product Stewardship Protocol). The first points I will be helping the proponents to clarify are about nomenclature. The program is called Green Lead and the batteries are leaded and therefore toxic and not green at all, so, to me, a better name would be Lead Battery Stewardship. Otherwise people might think that all lead mining and products are ecologically sustainable when I believe the proponents will have a hard-enough time showing even that batteries are used. If the Stewardship Protocol is successful for batteries and then another leaded product has a protocol developed that has a chance of being successful, the program could be renamed Recyclable Lead Product Stewardship. The name of the framework for the CCA is "Mother Earth to Rebirth". Frankly I think "Paying the Real Price" would be more appropriate.



2020 Volcano Art Prize (VAP) Entry.

Artist: Elizabeth O'Brien

Title: First 3 Steps to a Lead Safe World,  
Lead-Safety Message: Step 1. Ban leaded fuel. Step 2. Ban leaded paint. Step 3. Ban leaded batteries & collect & safely recycle every used lead acid battery.

Description of Work: Iphone photo  
URL:

<https://volcanoartprize.com/portfolio-item/first-3-steps-to-a-lead-safe-world/>