



Lead Poisoning of Our 3 Children

By Karen (not her real name – family and doctors and NSW Health Public Health Unit (PHU) staff names have been removed for this version for LEAD Action News)

On the 14th of October 2019 I took my youngest daughter, our middle child, then 2 years old, to see her Paediatrician, for a suspected food intolerance. Our middle child seemed to develop a rash / reddish cheeks and sometimes complained of a sore stomach, upon eating particular foods. This seemed to be getting worse and more common.

Our paediatrician requested blood tests. Heavy metals were tested amongst many other things. On 17th of October 2019 our middle child's blood was tested.

We got the results on 25 October 2019, showing that our 2 year old had a blood lead level of 10.6 ug/dL (micrograms per decilitre). The notifiable blood lead level in New South Wales is 5 ug/dL so the NSW Health Department was mandatorily notified of our daughter's blood lead result by the pathology laboratory.

The Public Health Unit called me on the 25 October 2019. I was completely shocked and devastated.

We had spent our whole time as parents focused on our children's health. This included a mainly whole food / organic diet. We were careful where we sourced our food, supplements (if any) and never used pharmaceutical drugs. The only supplements we have ever used for our children were high quality supplements recommended by specialist doctors. The children hardly ever got sick. Usually only one or two very mild colds per year if at all.

On the advice of our paediatrician the whole family was tested at this time. Myself and my husband were 2.1 ug/dL on 25 October 2019. My then 4 year old eldest daughter was 3.1 ug/dL, and my near 1 year old son was 3.3 ug/dL on 26 October 2019. The middle child was also X-rayed in case she had ingested anything. She hadn't.

We were so shocked and devastated by the news and wanted immediate action and it seemed as if the Public Health Unit was going to take a long time to come to our house and test the samples so I searched for private companies to do it. I spoke to a number of people.

I was highly recommended WSP Australia, Occupational Hygienists, and spoke on numerous occasions to Haysam Elhassan of WSP, who was very helpful and concerned. If we were going to stay at the Glenbrook house we would have enlisted their help at the end of 2019 but decided not to as the cost was going to be thousands.

We thought at the time the house was the problem so if we moved we would solve the problem. We planned on getting them or someone like them in after our move to ensure our new place was



healthy.

As we were living in Glenbrook in the Blue Mountains at the time, the Health Department Public Health Unit (PHU) Officer from Nepean Blue Mountains Local Health District came in and collected samples on 31/10/19 from our home for laboratory testing for lead.

While these staff were friendly, my husband and I were very concerned about their inexperience. One seemed inexperienced, and the other was new, and being trained by her.

We were desperate to find the source of the lead and did a huge amount of research in the days leading up to their visit. We made lists of possible sources and gave the PHU officers water bottles, toys, and all sorts of things to help them find the source. The officers didn't even know at the time of the visit that they were unable to test the food samples we gave them.

We were not at all satisfied with the sampling that was conducted by the PHU. They agreed on the day they collected them, through our desperation, to take more samples than they usually would.

We found out later that many of the extra samples were discarded, as they didn't take enough of a sample or the PHU didn't have a laboratory they were associated with that could test the sample (eg. the food samples). Discarded samples included the water from a water bottle our middle child used a lot and we asked that they take the bottle itself to be tested (as we had read that some stainless steel type bottles had tested high for lead) and a food item that she regularly ate at the time.

At the time of their visit we mentioned that we had recycled painted timber furniture (including our dining room table and pointed to it) but they said it would be fine if it was bought in a shop. They never examined any of these items carefully to ascertain the age. We told them we bought them from an antique / vintage / second hand shop. They didn't enquire any further. (We now know there are no regulations for recycled timber and this should have been checked. We had no idea about this at the time).

The furniture included a 2 metre long dining table (see photo) that was in full view in the centre of our open plan kitchen / dining / living area. They seemed to have a usual process of soil, water, house wall paint and dust of the home and didn't really seem to be interested in other sources.

Our own research helped us to show them many different possible sources. We identified the doll's house (see photos) ourselves and a painted timber doll's cot.

I doubt they would have picked up the doll's house themselves. They never tested the doll's cot, despite it having green and yellow paint and looking antique.

They commented at how much we knew about possible sources of lead and how much research we had done.



As mentioned, we were moving house to Avalon Beach, and had thought at the time that our children would be ok as we were leaving the house.

We thought there must have been something wrong with our house in Glenbrook so we immediately moved to my parent's home in Leonay for 4 weeks, from the 1st of November, 2019, before our planned move to Avalon Beach on the 27th of November 2019. We didn't want to risk continued exposure to the source of the lead.

Our middle child started detoxification treatment in Leonay, which was rigorous, and very stressful for her and myself.

We regularly contacted the PHU asking if the results had come in, as they said it would take 2 weeks. We asked for the samples to be tested as a matter of urgency due to the ages of our 3 young children. We were terrified of doing them any more harm.

The results were delayed and in the mean time I had a conversation with the Manager of Environmental Health, who lectured me on what I was feeding our children. He said the collagen we were putting in the family's smoothie was unsafe and we were putting our children at risk. He said any food at Woolworths was safe.



My husband and I were very concerned about this conversation. We had spent around double what other families we knew had spent on food over the years - sourcing free range, grain fed, organic whole foods that were pesticide-free.

My understanding is that the food at Woolworths is not all safe - non-organic farmers use pesticides. Despite the Environmental Health Manager criticising the collagen, it was never tested at the laboratory to deem it unsafe, even though we gave them a sample on the day the other samples were collected.

The results from the PHU came back around the 18th of December 2019, after a long wait. We were originally told two weeks. They found high lead 1.3% or 13000 mg/kg in the red paint on the roof of the doll's house that was made in the 1970's.

We had already immediately discarded the doll's house and anything else we considered suspect - the painted dolls cot that looked wooden vintage style that was second hand. The PHU didn't test this. No other samples - soil and water, showed concern according to the PHU.

We had also asked them to collect dust on the 31st of October 2019, as we had recently painted our ceiling and the man hole had been open. They forgot to collect a sample from the area while at our house so I rang and I emailed the PHU on the 31st of October saying our 2 year old middle child slept near the man hole. Her bedroom was the closest room to it. I told them that the manhole was open during painting and I had wanted them to check it to ensure it wasn't the ceiling cavity dust that led to her high lead levels.

The PHU said they would come back to our house if nothing came back from the laboratory showing a lead source. Assuming that every child with an elevated blood lead level only has one lead source!

I don't think they had any dust wipes to assess for lead when they came to our house and they didn't check the dust in the home at all from memory.

I let them know we were going to have the house fully cleaned - walls, ceilings - everything just after they had been there to collect samples to ensure that if there was anything toxic in the house that it was removed. We were about to rent the house out and wanted to ensure the property was safe.

We also washed and wiped down all the kids toys and chucked out anything that had been near the doll's house.

When I requested the results from the PHU, the emailed attachment received on 18th of December 2019 showed the results in simple form and the only explanation or "interpretation" provided in the report from NSW Pathology was one remark, that said:

"The maximum permissible concentration of lead in paint is 0.1% according to the Third Schedule, Uniform Paint Standard, " Standard for the Uniform Scheduling of drugs and Poisons" No22,2007."



Glenbrook Bath Tub Water: <0.002 mg/L lead
Glenbrook Shower Head Water: <0.002 mg/L lead
Glenbrook Backyard Soil: 0.00% or 44 mg/kg lead
Glenbrook Soil Red Pot Plant: 0.01% or 72 mg/kg lead
Glenbrook Cream Pot Plant Soil: 0.01% or 80 mg/kg lead
Glenbrook Dolls House Paint: 1.3% or 13000 mg/kg lead
Glenbrook Front Bedroom Paint: 0.01% or 76 mg/kg lead
Glenbrook Water Bottle: not processed – 0.00% lead

Liz O'Brien from The LEAD Group later advised me that the "Remark" is irrelevant to paint scraped off a surface as the Poisons Standard only applies to new paint sold (since 1997). The "Remark", in order to be applicable, should state something like:

Australian/New Zealand Standard "AS/NZS 4361.2:2017 Guide to hazardous paint management Part 2: Lead paint in residential, public and commercial buildings" defines Lead paint as: A paint film that contains greater than 0.1% or 1,000 mg/kg lead by mass in the dry film.

She also said that despite it being useful for the paint lead results to be reported in both % and mg/kg, the only time soil lead results should ever be reported in % is when a lead mining exploration company wants to figure out whether it would be economically feasible to mine the soil for lead (greater than 1.5%).

The backyard soil sample result of 0.00% could easily be misinterpreted by parents and PHU Officers alike as meaning "there's no lead in the backyard" whereas The LEAD Group recommends that soil should be less than 30 mg/kg lead if a child has pica or you keep poultry in the yard and eat their eggs. It certainly was by us - misinterpreted.

We were unaware at the time that this soil was also cause for concern with young toddlers exploring. I want to ensure my children are safe so I want the lead to be lower than 30mg/kg. I was never given adequate information from PHU to help protect my children. I only heard this information from Liz O'Brien of the LEAD Group when I sought her help as I had completely lost faith in PHU helping us save our children from lead exposure.

We had specifically told PHU when they came to our house that I had caught our children playing in the cream and red pot plants (that were tested by PHU) and had wondered if this soil was contaminated. This is why this soil was tested.

In the email sent on 18th of December 2019 with the results the PHU also noted:

"Please be advised that there are no results for the organic collagen powder, clay samples, fishing weights and water bottle as our laboratory was unable to process the samples. I'm not too sure what's involved in the analysis as the laboratory work is out of my scope, however from my understanding the methods and facilities they have at the labs to test for lead were not able to be used on those samples."



My impression is that the PHU took a lot more samples from our house than usual. They did because we pushed them.

We had and have water filters on our bath, shower, and drinking water to ensure we bathed, showered, and drank the purest water possible. We wanted everything tested, as we had been focusing on keeping our children safe and we could not understand how they could have been poisoned.

PHU also didn't test our drinking water. We requested that they did. They didn't plan ahead like our Building Biologist later did and ask us, as advised in The LEAD Group Kit sampling instructions, to not use the kitchen tap overnight in order to collect a first flush sample.

We had a reverse osmosis water filter but wanted to cover all bases. Our house was built in the 1960's so we wanted to make sure the house drinking water was not the problem.

We were disappointed that the other samples we gave were not tested. As noted, we had read that some water bottles had been found to have high lead in them and we wanted our middle child's water bottle tested. As I said, we had done a huge amount of research on possible sources and we wanted to cover all bases.

The PHU Officer determined that the case was solved in December 2019 because the red paint on the roof of the doll's house had 1.3% lead. We were convinced that the doll's house was not the source. We told them.

We cannot understand why, if they believed the collagen was a problem, they never tested it. Nor why they never tested our drinking water, or the dust outside the manhole.

We never used the organic collagen again - even though the company says that it tests for lead. I showed Jo Lia, our Building Biologist, from NoToxRox, in September 2020, the Great Lakes Collagen Powder we had stopped taking on the Environmental Health Manager's advice when Jo came to investigate our home for the source of lead poisoning. She knew this product, and checked with the Great Lakes Company. Jo sent me an independent study by a functional medicine practitioner, at https://gallery.mailchimp.com/36f67b141008ab16392748797/files/76dd7b45-a07a-4c41-bc8d-fd4a497e1710/2019_Bone_Broth_Report_2_.pdf?mc_cid=d7e7a163d7&mc_eid=71c0e7c4b9 which reports that the Great Lakes Collagen Powder contains 0.001 parts per million (ppm) lead or 0.001 mg/kg (an almost undetectable tiny amount).

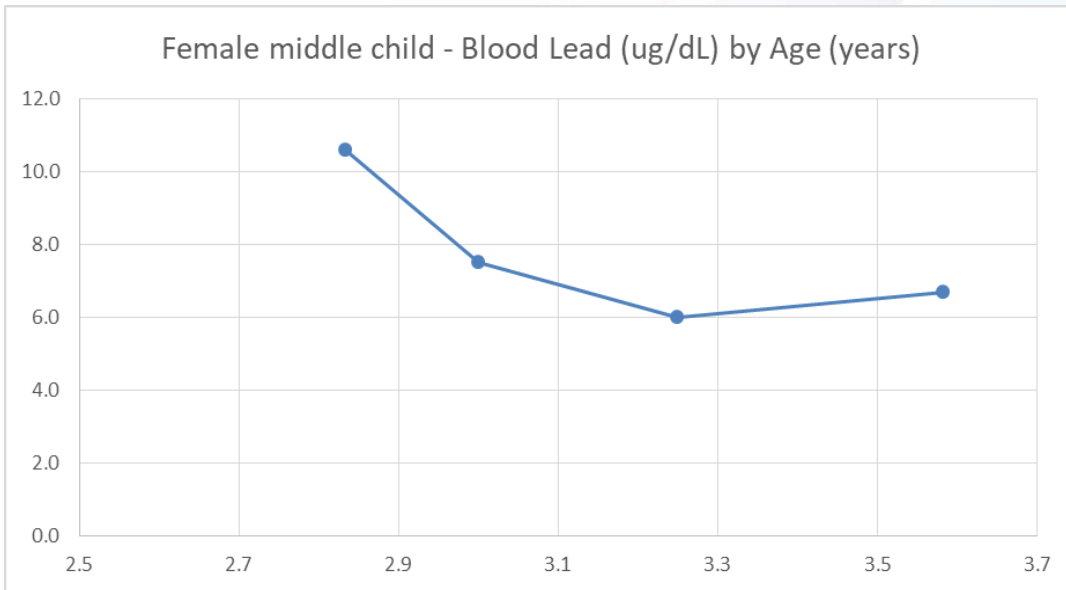
We did not consider the case closed. Our middle child did not suck on the doll's house and the children rarely used the doll's house. The side with the paint on it was facing the window so they would not have touched the roof enough to gain the readings they had. My 11 month old son was also affected by lead at the time and he never went near the doll's house. He had only just begun walking.

Our middle child had blood lead testing on the following dates, these are her results (all results



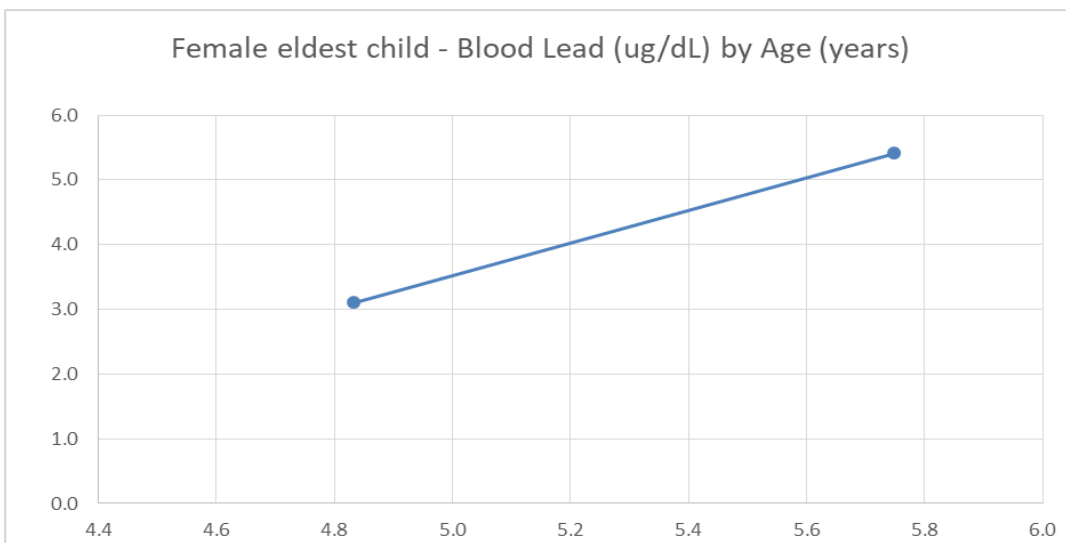
graphed by The LEAD Group):

17/10/19 - 10.6 ug/dL (aged 2 years, 22 months)
10/12/19 - 7.5 ug/dL (aged 2 years, 23.5 months)
09/03/20 - 6 ug/dL (aged 3 years, 2 months)
27/7/20 - 6.7 ug/dL (aged 3 years, 7 months)



Our eldest daughter's blood lead results were:

26/10/19 - 3.1 ug/dL (aged 4 years, 23 months)
7/9/20 - 5.4 ug/dL (aged 5 years, 8 months)

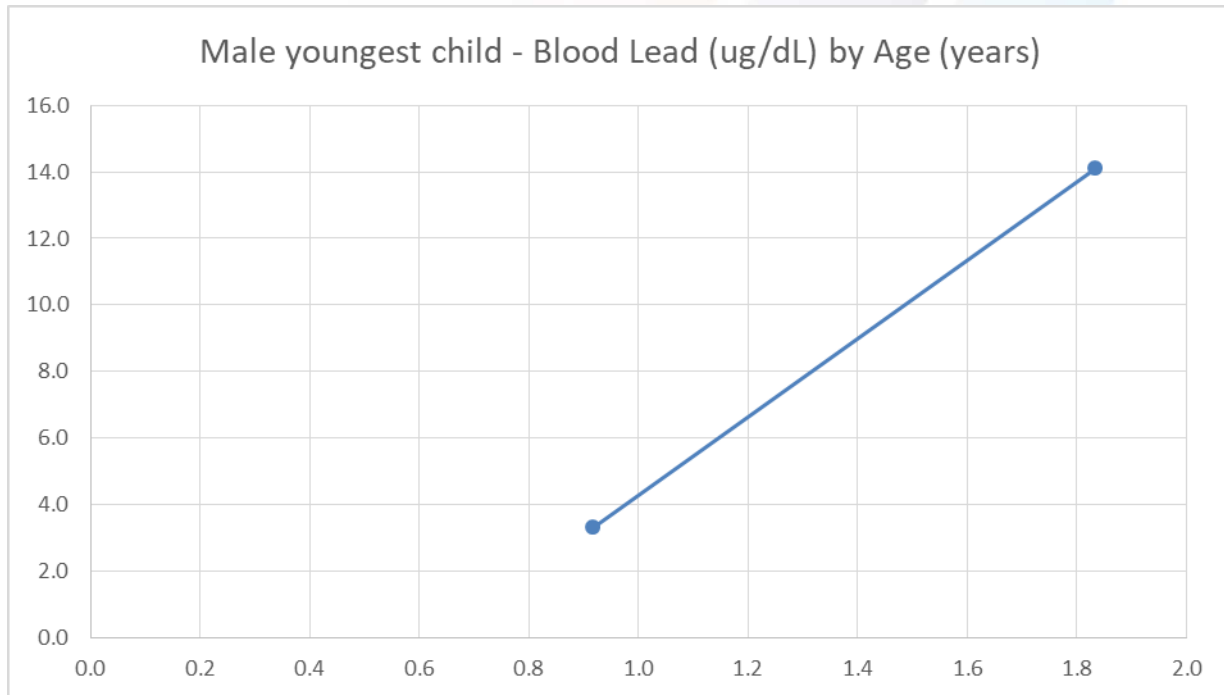




Our son's (the youngest child's) blood lead results were:

26/10/19 - 3.3 ug/dL (aged 11 months)

1/9/20 - 14.1 ug/dL (aged 22 months)

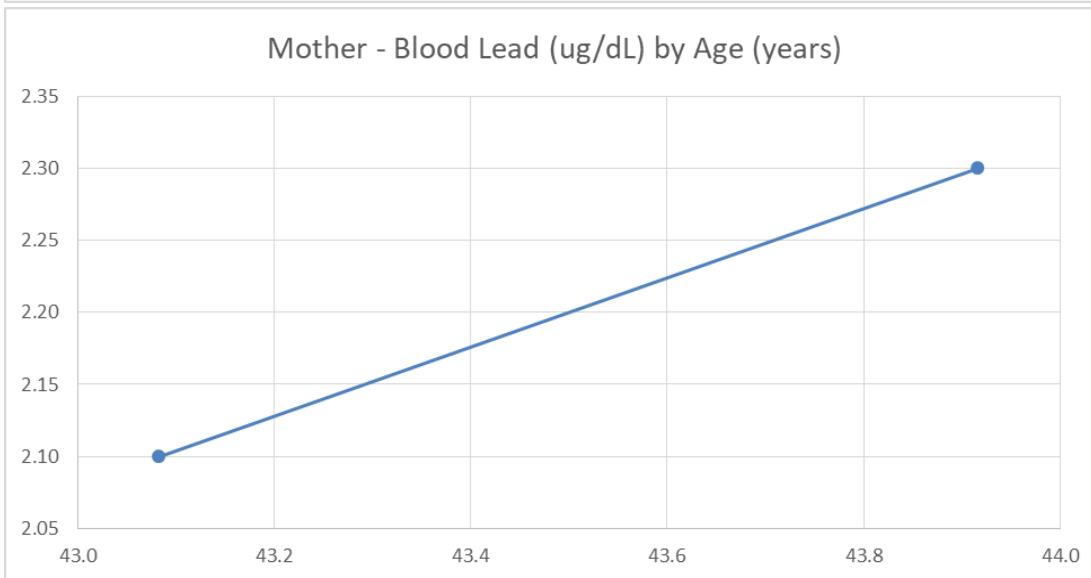
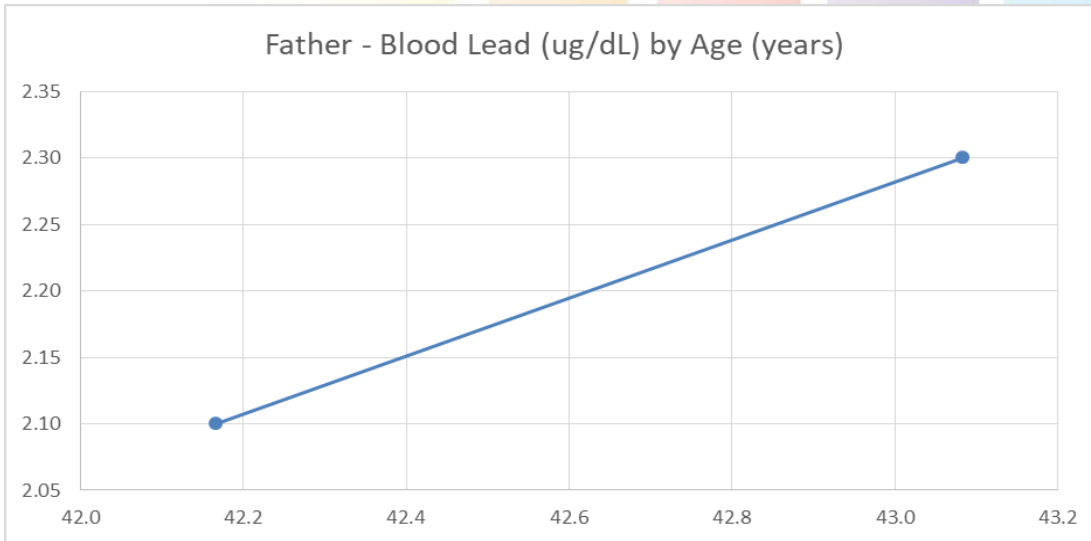


My husband's and my blood lead results were:

25/10/19 – 2.1 ug/dL (I was aged 43 years and he was aged 42)

15/8/20 – me - 2.3 ug/dL (I was aged 43 years)

8/9/20 – my husband - 2.3 ug/dL (my husband was aged 43)



Our middle child underwent Chelation and supplementation therapy from November 2019. She remains on this treatment. The treatment continued throughout the time indicated on her graph.

Our paediatrician requested twice that the PHU for the Northern Beaches visit our new home in Avalon to ensure our children were safe but they refused to come. We never heard from them.

Our middle child's blood lead level was tested in December 2019 to ensure the treatment was working. Her blood lead level was tested again in March 2020.

The paediatrician was concerned that our youngest daughter's blood lead level was not going down as fast as she thought it would.

Our middle child had a traumatic experience giving blood in March 2020. While we asked for senior collectors (as we always had with our children) to take the sample I don't believe the man who took



the blood was experienced enough. He tried numerous times to find a vein, sticking the needle in to 3 different sites.

We were then told to try another centre 5 minutes away, where a trainer was. She found a vein the first time. I was extremely distressed watching my three year old go through this, particularly given I knew she had many blood tests ahead of her to check for lead poisoning.

As a result, we didn't re-test for lead until the end of July 2020, hoping the lead levels would have gone down substantially by then, and that she would have forgotten the traumatic experience.

We were very distressed to find that in fact our middle child's lead levels had increased between March and July 2020.

Her blood lead level rose to 6.7 ug/dL in July 2020. This was her fourth notifiable level, and PHU was informed by the lab as usual.

Our paediatrician suggested testing the whole family once more.

We had now moved back to Leonay, and so we were in the Nepean / Blue Mountains PHU area again. The Public Health Officer from PHU, who had worked on our case in 2019, called me shortly after our middle child's fourth notifiable blood lead result.

She seemed more focused on finding out our new address so she could send me a letter once again, than she was in coming to our house to determine the source of the lead. We were beside ourselves, and requested the PHU test our food. We could not understand how the lead could be rising again and that it was occurring at the third house we lived in.

The PHU refused to come and test our house in Leonay, saying that it was likely to have been the house in Avalon that caused the lead levels to rise. They also said they can't test food. I asked them how I could and they provided me with the details of the National Measurement Institute (NMI). We would have to pay for food testing ourselves.

I asked our paediatrician to request that the PHU come to test our house in Leonay, and she did but they refused again around 25 August 2020.

My understanding is that this paediatrician had requested the Health Department come to help us twice in Avalon and again in Leonay and they refused. We also asked them to come again in Glenbrook to test the dust from the manhole and again in Leonay and they refused. I also asked the Environmental Health Manager again on 23rd September and he avoided the question and began going over details that had been provided on a number of occasions already.

We retested the whole family over a few weeks in August and September 2020 as advised by our paediatrician.



The results were as follows:

My husband and I again had the same blood lead result as each other, but we had gone from 2.1 ug/dL (25/26 October 2019) to 2.3 ug/dL when tested 21 August / 8 September 2020.

My son, 22 months, had the highest blood lead level of anyone in the family - 14.17 ug/dL on 1st of September 2020. He was X-rayed on 11 September 2020 to rule out that he had ingested anything. He hadn't.

Even my eldest daughter, had a blood lead level of 5.4 ug/dL, blood taken on 8 September 2020.

At this point all three children now had notifiable blood lead levels (ie above 5 ug/dL) and were diagnosed to have lead poisoning.

I emailed my son's results to the PHU on 8 September 2020 asking what they would do now that two children were lead poisoned in one home. I didn't know at the time that three of my children were in fact lead poisoned.

The Manager of Environmental Health, at PHU Nepean Blue Mountains, rang me on 8 September 2020. They were not prepared to come and test our Leonay home. He told me that our middle child was detoxing normally and her results show a normal metabolism / detox process. I didn't get that impression from our paediatrician. Our middle child's results in fact showed her lead levels were increasing at the last blood test (despite discarding the doll's house – the only source of lead identified by PHU).

The Manager of Environmental Health emailed me a food diary for us to look for common foods the kids and us were eating. They were not prepared to test these foods, however.

This was our last contact with the PHU until I received a voicemail on Thursday, 17 September 2020, requesting our address and that of our doctors. They had received our eldest child's results. They didn't seem to have realised that our eldest child was the sister of our middle child and our youngest child. I am not sure who rang. I couldn't hear the message very well. I have not had any contact with this person so far. She left a number (02) 4734 2207 that no one answered and there was no option for voicemail on 21st September 2020. I rang the number twice around 2.25pm.

On 23rd September 2020, the Manager of Environmental Health from Nepean PHU called asking me about the food diary. He said that he now had my three children with a "notifiable condition" in the database. I asked him what he was going to do now that they had three.

He avoided the question and asked about some mail he had received from me the day before. I said I hadn't sent him any mail and he said "oh I had only had a preliminary read of it".

He then looked at it again and said it must have been from a doctor looking after our children. He asked which doctor and I said I didn't know. He then asked why we had three doctors. I explained that



one was a local GP that we needed to refer us to the Paediatrician and the other was a functional GP with extensive experience and knowledge of heavy metal detoxing.

I told him this functional GP was recommended by a psychiatrist I began seeing this year for insomnia that has come as a result of ongoing stress without help with our children's lead poisoning. He mentioned the food again and the dining table. One of our doctors had returned a letter to PHU with the information we had provided to the doctors. I said we were doing our own investigations and had a number of samples in for testing at the moment. He then asked for me to contact PHU with the results. I asked for his Director's name.

To this day, we have not had a letter telling us of my son's or eldest daughter's results - despite the fact that both of them, along with our middle child, currently meet the criteria for notifiable blood lead levels. Our son's result is also substantially higher than our middle child's was last year when they visited our home.

I would have thought they would be very concerned to know that three young children were diagnosed in one home, and there was no known source of lead.

I would have thought the Manager of Environmental Health would arrange for our house to be retested as a matter of urgency to investigate the lead poisoning of three young children in one home.

Again, like the PHU Officer, he was more interested in dates of when we moved and addresses and going over the details of the "investigation" as he called it, which in my mind involves collecting physical evidence. All they seemed concerned with was collecting dates and addresses for the second, third, fourth time.

Their lack of help has me concluding they do not really care about protecting the health of young children.

The PHU sent a letter about our middle child's fourth notifiable blood lead result on the 11th of August 2020 telling us her result, and providing us with information about lead exposure in children - including possible sources. But the information is outdated, for example "Lead-based household paints were used before 1970 in Australia..." should be changed to "Lead paint was used before 1997 in Australian homes..." given the new definition of Lead paint in the 2017 update of the Australian/New Zealand Standard "AS/NZS 4361.2:2017 Guide to hazardous paint management Part 2: Lead paint in residential, public and commercial buildings."

The letter included wrong information, namely: "Your child's/children's blood lead level result was between 5 ug/dL and 10 ug/dL... **Blood lead results in this range have not been shown to cause any health effects**, but this level is considered higher than most other Australians."

According to the World Health Organization's publication on "Childhood Lead Poisoning" at <https://www.who.int/ceh/publications/leadguidance.pdf> (2010):



In light of the growing amount of evidence on neurodevelopmental and other systemic effects of lead at levels below 10 µg/dl, some researchers have suggested that the current level of 10 µg/dl may not be adequately protective of child health (Lanphear et al., 2000; Canfield et al., 2003; Bellinger & Needleman, 2003; Wasserman et al., 2003; Lanphear et al., 2005; Hu et al., 2006; Kordas et al., 2006; Schnaas et al., 2006; TellezRoj et al., 2006; Surkan et al., 2007).

Some jurisdictions in the United States (e.g., the California Environmental Protection Agency and the New York City Department of Health) have translated more recent evidence on low-level lead toxicity into policy. A number of public health agencies are considering or have already taken action to recognise that any level of exposure to lead is associated with harm to the developing child, and scientists have suggested that a lower blood lead level – perhaps 2 µg/dl – should be the trigger for follow-up and assessment of a child by health professionals (Gilbert & Weiss, 2006).

And The LEAD Group has published quotes from dozens of research articles in a fact sheet called: “Health effects of a blood lead level below 10 µg/dL in both adults and children and even below 1 µg/dL in pregnancy” at: https://www.lead.org.au/fs/Health_Effects_of_PbB_Level_Below_10_uq_per_dL_&_Even_Below_1_uq_per_dL_20200922.pdf

This is in line with the view of our Paediatrician, who says there should be no lead (ie a non-detectable level, below the limit of detection) in our children’s blood. This is what we are working tirelessly to achieve.

The letter from the PHU also said “while the test results do not indicate a current health risk, should your children’s blood level/s increase further, it could result in health effects.”

This standard letter, apart from being inaccurate, also had no meaning in our situation. Our middle child’s levels had begun to rise again despite treatment. It was evident that the source of the lead had not been picked up, and that it had followed us to three houses.

I think the PHU had written us off because of the organic collagen (because it was not bought at Woolworths) but interestingly they never tested it.

Since their visit on 31st of October 2019 we had removed this from our diet, just in case.

We had always had an unprocessed diet and only ate organic / free range / grass fed meats and fruits and vegetables. And more recently our food was largely sourced from Woolworth’s organic section.

For clarification, with regard to our housing situation during this period.

We lived in Glenbrook from the end of 2014 until the end of 2019.

We moved house on these dates:



1 November 2019 we moved from Glenbrook to Leonay (for 4 weeks to get away from the lead – our middle child's blood lead levels went down fastest in this first period - see blood results - the recycled timber table in question was not with us during this period);

27 November 2019 we moved from Leonay to Avalon and the table came with us;

18 July 2020 we moved from Avalon to Leonay and the table came with us;

We are now in Leonay in the Nepean Blue Mountains Local Health District.

In early September 2020, we were desperate to find out what was going on. We couldn't understand why the problem was following us and had got worse and was affecting all of us.

We now suspected our food or toys. Still we received no help from the PHU.

Our paediatrician recommended we contact Jo Lia, a Building Biologist, from NoToxRox, to help us uncover the source.

Jo came to the house in Leonay on 16th of September 2020 armed with a LEAD Group Kit purchased from The LEAD Group charity at www.leadSAFEworld.com/shop - to collect environmental samples (paint, soil, dust wipes, water, etc) to be sent for lead analysis at Sydney Analytical Laboratories (SAL).



Jo also had some sample containers (also from The LEAD Group) to collect foods and supplements for testing at the National Measurement Institute (NMI) government lab, and 3M LeadCheck colour-change Kits for on-the-spot screening for lead paint.

Jo was in regular contact with Liz O'Brien from The LEAD Group throughout her time at our house. Liz was helping Jo decide which samples to collect from a range of toys, children's jewellery, and foods we had identified that may be problematic.

We were desperate to find the source and very grateful for Liz's expert knowledge in finding the sources of lead.

If only we had Jo and Liz to help us last year, we could have saved our children's little bodies from massive lead exposure and neurotoxins for a year of their young lives.

It is heart-breaking and unbearable to think about this as a parent. Unfortunately, I didn't know Jo or Liz existed at the time or we would have contacted them straight away.

I had made a long list of suspected items before Jo arrived. We worked through this list as well. On



my list was our white wash recycled timber dining room table. The table was made from a re-used painted timber door. Jo used the LeadCheck Kit on the table and the table instantly tested very high for lead, turning bright pink straight away.

Jo first tested under the table and took samples and then she tested various spots on top of the table. Every spot was bright pink upon testing.

Even the floor underneath where Jo collected the samples was smeared in pink where some of the testing kit liquid had fallen in the dust that had been dislodged from the table by Jo when collecting the sample.

Jo followed-up by collecting dust wipe samples (the laboratory-grade dust wipes come in The LEAD Group Kit) from the table and the floor underneath it, and paint from where the door was peeling underneath, and sending the samples to SAL for lead analysis (as per usual in a LEAD Group Kit.



As at 24th September 2020, we are still awaiting NMI lab results on food and Kombucha, which we'll receive via The LEAD Group and NoToxRox.

The LEAD Group Kit results from SAL arrived on 23rd September 2020 with an Interpretation Guide and Comments from The LEAD Group. The degraded paint on the table had **2.8% lead** and dust wipe samples from the re-use painted timber dining table and a dust wipe sample from the floor beneath it –

confirmed extremely high lead results as foretold by the LeadCheck screening Kit turning dark pink instantly. (See the results and Liz O'Brien's Comment's in red below.)

This all now makes sense. My two youngest have been most affected by lead. They were seated in the same spot at the head of the table in a heighten child seat to reach the table.

I put them at the head of the table so that they had a wall or couch behind their chair.

Upon inspection there is a green / aqua old fashioned colour paint here becoming more and more exposed under the white wash. Their food and fingers would have touched this area daily while they ate their 3 meals a day. A sickening thought.



My children have eaten at this table their whole life and played under it. We realised while Jo was here that there is peeling paint underneath it. They had been playing under the table the morning Jo came to our house.

As soon as Jo left, I called the owner of Mitchell Road Antiques in Alexandria,

where we purchased the table for \$1200 in September 2014.

We removed the table and called the local Council to remove it as toxic waste on 21 September 2020. We cleaned the floor and windows and whole area with sugar soap and then had cleaners do more cleaning of the area.

We emailed asking Mitchell Road Antiques for a refund and to pay for the costs of all the testing we've had to do to finally find out the likely source of the lead on 18 September 2020. We have not heard back from them.

I am devastated to think that had an experienced PHU officer visited our home on 31st of October 2019 and identified the table, our children would have received a year's less lead poisoning from this table.

I want to see a revision of the training given to PHU officers and if they are following a protocol for following up notifiable blood lead levels, then the protocol needs serious revision, including that it not be so limiting of the number of samples that can be tested or so focused on finding one source of lead then refusing to investigate further. The WHO (2010) document mentioned above states:

A recent cost–benefit analysis suggests that for every US\$1 spent to reduce lead hazards, there would be a benefit of US\$17–220. This cost–benefit ratio is better than that for vaccines, which have long been described as the single most cost-beneficial medical or public health intervention (Gould, 2009).



With a cost-benefit ratio better than that for vaccines, why isn't more of the NSW Health budget put aside for lead?

Even if a cost limit for testing is applied, parents should be given the option to pay for extra samples to be tested, or to pay for a LEAD Group Kit or NMI analysis and have the PHU Officer/s (properly trained and experienced) come to the home to follow The LEAD Group Kit instructions and collect the samples.

If I had been told about The LEAD Group Kits in the letter from the PHU about our middle child's notifiable blood lead level, I would have used a LEAD Kit myself to test the table in 2019. If PHU Officers brought their own LEAD Group Kit to a home, they'd be far better prepared and informed on collecting the right samples and having the equipment to collect all relevant sample types, such as dust wipes, water and ceiling dust.

Furthermore, had there been Australian standards and mandatory testing in place for recycled furniture, our children would not have been poisoned by lead their whole lives.

I hope this case will also invoke NSW WorkCover to inspect workplaces where re-used painted timber is turned into furniture or other items, to ensure the workers are not lead poisoned too, or taking lead paint dust home to their families.

We may still have 6-12 months of having to detox our three children. This treatment is rigorous and stressful for the whole family. My children often refuse treatment. My whole day is spent chasing them around trying to get the needed supplements and DMSA (chelation therapy) into them. I currently have a combination of 17 supplements / medications and cream to help with the detox – including DMSA, vitamins, minerals, topical creams and salts. I have an unwilling 5, 3 and 1 year old to get these into numerous times per day. Very stressful. Very preventable with the right assistance from the PHU. Prevention is way better than cure.





My mental health and that of my husband has been majorly affected by this situation. I am currently on a mental health care plan, as I write due to the stress this situation has caused us. My husband is about to start one.

We are both doing this under the care of a psychiatrist. I wrote in my initial consult with the psychiatrist that my mental health deteriorated the moment my daughter was diagnosed with lead poisoning with no known cause as far as we were concerned.

I have never seen a psychiatrist in my life and have never needed to. Knowing my daughter's health was at such high risk of life long consequences led me down this path. I began seeing the psychiatrist in June this, as I had insomnia for the first time in my life. I was really struggling to work and look after my three young children while my husband worked long hours out of the home.

I am sharing this about my and my husband's mental health only to illustrate the far reaching consequences of not finding a convincing source of the lead in October last year. Had a competent, well trained team visited our house in October 2019 our children would have been spared a huge amount of neurotoxins, and stress from the amount of supplements to detox them. My husband and I would have been spared immeasurable stress at not knowing how to protect our children from poisoning, and the stress of trying to get so many medications / supplements into our children to try to help them combat the poison.

Since Jo, our Building Biologist came last week and identified the lead on the table, I have had countless nightmares and woken up startled in a Post Traumatic Stressed state. My brain is subconsciously processing all the stress of the past year. These nightmares are about the detrimental effects of lead on my children.

We have been fighting an unknown enemy for a year. Every day since my daughter was diagnosed with lead poisoning in October 2019 has been stressful, not knowing how we could help her.

We currently have a Paediatrician who specialises in nutritional and environmental medicine, and a functional GP, who also specialises in nutritional and environmental medicine and has had extensive experience dealing with heavy metal detoxing helping us detox our children. This doctor has post-graduate qualifications in Public Health. We got him on board as a recommendation from my psychiatrist. We were desperate to find out what was going on with our daughter and wanted to get as much help as possible. These two doctors are world leading experts who I am sure could help PHU update their outdated, inaccurate information on lead and detoxing.

Had it not been for the help of these expert doctors our children could have ended up with irreversible effects of lead poisoning. We are extremely grateful for their help and hope that other affected families could have access to such great expertise.

Over the past year we have also had appointments with an integrative GP and Biomedical GP. We have spent about fifteen to twenty thousand dollars on Doctors, supplements, medications, and therapists to reduce the whole family's stress levels and bought the "cleanest" organic whole foods we



could find to help our children detox. Our middle child has had two hair trace mineral analyses, a urine test, and numerous blood tests.

This situation could have been avoided had we access to an expert team trained in truly investigating sources of lead.

Our experience of Nepean PHU was that they were merely interested in finding out the dates and addresses. Countless times they asked for the same information over the phone rather than actually visiting our house and finding the source.

Three children have been lead poisoned in one house. This was avoidable had PHU done an adequate investigation last year.

The information PHU provided us was out of date, inaccurate, inadequate, and more harmful than helpful. We only realised this in the last week once we paid for private assistance and had the latest, world class information, investigations, and actually identified the source.

Something needs to change and fast. A thorough assessment needs to be made of the actual skills of PHU officers in relation to lead testing. Huge changes need to be made so no more lives are at risk.

We are seeking the PHU to exponentially improve their training of PHU Officers so they can identify lead sources more quickly and easily.

Better still that PHU immediately outsource their lead testing to The LEAD Group / Building Biologists such as Jo Lia who are up to date on the harmful effects of lead and its sources and are able to identify and test multiple sources of lead exposure.

I am confident they would have solved our problem last year. Their dedication, expert knowledge and skills meant they would stop at nothing until the source was identified.

PHU was the opposite. They just tried to find something to close their file. Our house had multiple sources of lead. We never would have known had we remained trusting the PHU officers.

Our impression of the PHU from this years' experience was that they are more of a bureaucratic organisation focused on sending letters and updating their database than actually protecting young children's health.

Our doctor let us know on the last appointment that research has found that in animal studies, high lead combined with high mercury levels leads to death. Children who are currently exposed to high levels of lead and mercury could die or have serious illnesses and probably are getting ill without parents even knowing the reason. Something needs to change immediately to protect Australian children.

Our doctors have also told us that our children could have / would have been likely to develop all sorts



of serious, lifelong, chronic conditions had this table been our family dining room table until they were adults. We had planned to keep this table indefinitely.

If we left our situation in the hands of PHU's phone call and paper-only "investigations" our children could have been seriously affected for life. This is not good enough.

We are also calling on the Government to now bring in mandatory standards for testing recycled furniture before it is sold.

I also request that our story (without the children's names) be shared publicly in the media so other families with young children can avoid this situation.

Our children were largely asymptomatic and we believe there may be many other children currently affected and their parents are completely unaware that their vintage furniture / items are poisoning their children.

We have to find gratitude amidst our devastation for the fact that our children have not yet developed any overt illnesses from their lead poisoning, but at the same time we are furious that our children have been poisoned their entire lives so far.

The only way I can rest as a result of this situation is to ensure that Government changes are made to protect other children around the country.

Please help me to help others.

See the laboratory results we received a couple of days ago with regard to our dining room table below.

Thanks for your help.

Karen
B Psych (Hons) LLB (Hons) MDR (Hons) M Psych (Org)
25/9/20



Dust Wipe Lead Loadings and Comments from LEAD Group Kit Number 202009038, samples collected by NoToxRox Building Biology

Sample Collection Location	Detailed Description Of Sample Source	Results <i>ug/m² - micrograms of lead per metre squared</i>
Residential Dining Table Top	30cm X 30cm degraded painted Top of Table made from reuse painted timber, purchased from Mitchell Road Antiques in Alexandria NSW in Sept 2014	15,100ug/m ²
Residential Dining Table Underside	30cm X 30cm degraded painted Underside of Table made from reuse painted timber, purchased from Mitchell Road Antiques in Alexandria NSW in Sept 2014	304,000ug/m ²
Residential Dining Room Floor	30cm X 30cm Tile Floor Under Dining Table made from reuse painted timber, purchased from Mitchell Road Antiques in Alexandria NSW in Sept 2014	148,000ug/m ²

There are no government guidelines for lead dust loading limits on dining tables because it is assumed dining tables will be lead-safe, so these results have been compared to Australian and US lead dust loading "clearance" levels for floors. A clearance level is the level below which the floor is considered lead-safe for children to play on.

All three dust wipe lead loading results (above) are astronomically high but the highest one, 304,000ug/m², from the underside of the table – where it hasn't been touched by the family and ingested, or wiped up during cleaning – is:

- 304 times the superseded 1998 lead dust loading clearance level (of 1,000ug/m²) from the Australian New Zealand Lead Paint Management Standard (ASNZS4361.2:1998) aimed at achieving child blood lead levels below 10ug/dL;**
- 2,815 times the 2017 US Department of Housing and Urban Development (HUD) lead dust loading clearance level (of 108ug/m²), aimed at achieving child blood lead levels below 5ug/dL;**
- 3,040 times The LEAD Group's 2018 recommended level (of 100ug/m²) for child-accessed painted surfaces where the paint is in excellent condition, aimed at achieving child blood lead levels below 1ug/dL; and**



- **25,334 times The LEAD Group's 2018 recommended level (of 12ug/m²) for child-accessed painted surfaces in degraded condition or for non-painted floors, aimed at achieving child blood lead levels below 1ug/dL**

Anyone exposed to this dust should ask the GP for a blood lead test marked urgent.

As the three youngest members of the family have notifiable blood lead levels and the water and soil results were acceptable but the paint result from this table was high, and the home was assessed by a trained and experienced Building Biologist, it is fair to say, that this dining room table is the most likely source of the lead in the blood of all family members.

Thankfully the table has been removed by the Council as toxic waste on the basis of the LeadCheck Kit result used by Jo Lia, Building Biologist of NoToxRox on 16/9/2020.

A public health warning about lead exposure risks from all recycled furniture made of pre-1997 painted timber or metal or ALL (if the age is impossible to determine) painted timber or metal, is warranted.

NSW Fair Trading needs to be notified so they can order the mandatory testing for lead by dust wipe and paint samples, of all re-use painted timber and metal items currently on sale in NSW. Those re-used painted timber and metal items already sold should be recalled for lead testing or offered free lab testing of dust wipes and paint samples with the furniture in situ; and purchasers should be advised to ask their GP for blood lead testing.

WorkCover NSW needs to be notified to inspect the premises where this and other re-use timber furniture is made so that Lead Paint Management Plans, including blood lead testing of workers are instituted at these premises. Recycled furniture business owners should be required to offer their employees free lead dust wipe testing of their homes and vehicles, to track any take-home lead-contaminated dust, so employees families can be advised to ask their GP for blood lead testing as appropriate.

NSW EPA needs to be notified so they can create a re-use timber and metal waste policy which does not allow painted timber or painted metal to be sold without lead testing at a lab, using dust wipe and paint samples.