Q&A How to test for lead in home ceramicware

Initial Question from LEAD Group Inquirer in NSW, Australia, 23 Aug 2026

Further Questions and all Answers by Elizabeth O'Brien, aka Grandma Lead, Lead Scientist and Lead Advisor, The LEAD Group Inc (Australian charity aiming to create a lead safe world)

Initial Q: I heard of you through Alexx Stuart's Low Tox Life Facebook group which I follow closely.

I'm wanting to test some local pottery mugs for possible lead and also other mugs I have at home here just to make sure I'm using things that don't leach lead. I was thinking of ordering a kit through you but watched your video and I'm not sure the kits you have are right for me as I don't need to send samples in - rather to test them at home or in shops. Can you please let me know if you have a product available for this sort of thing. I noticed there are some cheap kits on Amazon (NewPos and AA Wipes) that seem quick and simple to do at home but I'm not sure about their reliability and if they are appropriate. Please let me know what you recommend.

Thanks,

[name provided]



2026 Volcano Art Prize (VAP) Entry:
Photographer: LEAD Group Inquirer
Title: **Testing for Lead**
Lead-Safety Message: When I asked how best to test these ceramic items for lead, The LEAD Group's Lead Advisor, Grandma Lead, advised that a DetectLead Kit from Fluoro-Spec Inc in the US would work well or if I drink or eat acidic, hot or alcoholic things from any of them regularly, I could test the liquid for lead with a LEAD Group Posted Kit or I could just ask my GP for a blood lead series to get free testing.
Description of Work: Photos collaged in Powerpoint and Paint.
https://volcanoartprize.com/portfolio-item/testing-for-lead/ [LID 29938]

A: Firstly, thanks so much for letting me know about Alexx Stuart! I searched her up and was blown away with what I found. A woman after my own heart! I've listed the search results at the end of this Q&A in case other readers want to follow Alexx Stuart like you do.

Now to answer your question by asking and answering related questions:

Q: What's the best way to test for lead exposure from any lead source or combination of sources?

A: Up to 95% of an adult's body lead burden is stored in their bones so in-vivo bone lead x-ray fluorescence (XRF) with a portable XRF analyser is the gold standard for finding out, what your current body lead burden is. For example, if you have bone lead XRF testing done

before you start working or hobbying or shooting with lead or before you try any form of lead detox, and then again have bone lead XRF testing done in a month or two after the change, you'll get the best picture of your whole-of-life lead exposure and how much lead is still in your bones. At the moment, no bone lead XRF portable analyser is operational in Australia, although The LEAD Group and our Lead Safe World Partners and Technical Advisory Board experts are working hard to remedy that lack.

Q: What's the best way, in the absence of the bone lead XRF option, to test for lead exposure from any lead source or combination of sources?

A: Even though only around 1% of an adult's total body burden of lead is in the blood at any one time, both the lead that is freshly coming in to your gut and being absorbed is in your bloodstream AND any lead that might be on its way out of your bones (leaching out of the bone stores) before it is either re-circulated to the heart, brain, liver, then back to the bone stores etc OR is on its way out of the body via urine, perspiration, skin sloughing, menses, bleeding, saliva or sperm, etc a series of blood lead levels over time is the available best way to test for lead exposure.

Ask your GP for a pathology referral for a blood lead series with "send result to patient" written on it. This piece of paper gives you 6 free blood lead tests or however many tests up to a maximum of 6 that you get done within 6 months of the first blood collection date. Get the first result in writing from your doctor or the pathology clinic, and email it to me (Grandma Lead) at The LEAD Group, so I can help you figure out what else, if anything, you should be testing for lead in order to eliminate the possibility that you (and possibly other organisms exposed to the same lead source/s) are currently being exposed to lead. The huge benefit of testing your blood lead level first, is that if your result is really really low or actually undetectable at a lab that has a really low limit of detection, and everyone else you live with is the same, then you don't need to test anything else for lead!! That's a big cost saving and a big weight off your mind!

Q: What's the best way to test for lead in any potential lead source or combination of sources?

A: If you have detectable lead in your blood or you went to a pathology clinic with a ridiculously high limit of detection such that you can't know whether your blood lead result is below The LEAD Group's recommended action level of 1 microgram per decilitre, then a LEAD Group Kit from www.leadsafeworld.com/shop is usually the best, most accurate way to test for lead in a myriad of sample types. Best of all, interpretation of the results and recommendations for actions to take in response (if needed), are provided by Grandma Lead as part of the Kit cost. These two components are actually the most valuable parts of the Kit!

With an Emailed LEAD Group Kit (and in some cases, an Add-on), you can get an exact number and unit result for lead (and other metals) - and asbestos detection if needed - in ceiling cavity dust, soil, vacuum dust, paint, commercial chicken feed, backyard eggs, jewellery and ceramicware. With a Posted LEAD Group Kit, additionally to those sample types, you can also test for lead etc in surface dust wipes and water. All samples are sent to a

NATA accredited lab in Sydney.

When deciding whether your yard is safe for children, pets, poultry or vegetable and herb gardening, you cannot do better - in Australia - than to purchase a LEAD Group Kit.

However, if you have ceramic tableware or cookware that may be leaching lead or cadmium in to your food, the use of a LEAD Group Kit to test for lead and cadmium becomes very pricey as the test methodology is actually that used in the Australian Ceramicware Standard and is intended to help potential or actual ceramicists and importers to determine whether something they want to sell in Australia is lead-safe and cadmium-safe, according to the Standard.

So, if you have a measurable or actionable blood lead level you might consider discarding everything you already have and replacing it with non-lead tableware and cookware like some people do, and that would potentially be cheaper than properly testing everything you own, given that accurate laboratory testing is expensive and portable XRF testing for ceramicware in your home is a) quite rare in Australia and very expensive but b) also only tells you the total lead on the surface of the ceramicware which does not correlate at all with the amount of lead that might leach from the ceramicware with use.

To know your worst-case scenario quantified lead exposure from ceramicware, you should consider the following workaround. Let's say, you have a ceramic mug from which you daily drink hot lemon juice or home-made honey mead, or you have a ceramic vessel in which you make highly acidic drinks like kombucha, or if you have a child who insists on eating from your childhood cracked Peter Rabbit bowl, or you make your own broth in a ceramic pot, etc, then the best test is to collect a sample of the liquid normally imbibed/ingested from such a favourite piece of ceramicware and test that for lead (and cadmium if you want to pay for the Extra Metal Add-on) with a Posted LEAD Group Kit. I would then compare the lead result in the liquid to the Australian Drinking Water Guideline for lead, and to The LEAD Group's more stringent guidance on lead in liquids. The best result will be non-detectable lead in the liquid, meaning the ceramic item is lead-safe, no matter what a surface lead test result is.

Q: Should I buy cheap colour-change test kits online to test for lead in my ceramic ware at home or local shops where I might purchase, say, a pottery mug?

A: No! Colour-change lead test kits cannot tell you how much lead will leach from pottery/ceramicware under the worst leaching situations: cracked glazing, poorly-fired lead glazing, heat, acidity or alcohol. The cheapest test for cracked glazing is a visual test. If glazing is cracked, simply don't use the item for food or drink. Colour change metal test kits are prone to false positive and false negative results and even the concentration at which they change colour is not generally available in the marketing information so, what does a change of colour really mean? No one in a shop would be inclined to let you use such a kit because the ceramic item might end up with red on it and they'd potentially have a customer wrongly accusing them of the item not meeting the Australian Ceramicware Standard when it really does!

Q: Is there a cheap lead test kit available online, which I can use at home to give me some idea of whether I am using ceramic items which MAY actually be leaching lead in to my food or drink?

A: Yes! Actually, my colleague in the United States, Eric Ritter, sells a very cheap and useful lead test kit called DetectLead which is a liquid you can spray on any surface, not just ceramic surfaces, then shine a black light torch on the surface to give you some idea of how much lead is on the surface - and therefore might get into you when you use that item, or into a child crawling on that floor, etc. The black light brings out fluorescent green specks with a concentration dependent on the concentration of lead on the surface. You could easily use a DetectLead Kit from Fluorospec Inc (www.detectlead.com) on every item of ceramicware in your house and even at a shop if you take a wet-wipe to wipe off any fluorescent green colour that might appear. Just keep in mind that the item may nevertheless still comply with the Australian Ceramicware Standard although you could validly advise the shop manager that they should ask the manufacturer or importer if it complies or that they could purchase a LEAD Group Kit to determine whether the item complies. See "Test With a Kit Not Your Kid" at https://leadsafeworld.com/wp-content/uploads/2026/06/LANv24n1-02.pdf and https://lead.org.au/lanv24n1/LANv24n1-02.pdf in *LEAD Action News* vol 24 no 1, June 2026.

Google search results on Alexx Stuart, for readers who may like to follow her:

https://www.facebook.com/groups/927418927322367/ - Hints, tips and support for living a Low Tox Life in Perth, Western Australia. And a group especially for WA -based graduates of Alexx Stuart's inspirational ecourse Low Tox Living. Self-promotion of your low tox business is allowed on Wednesdays only. Perth, Western Australia. Private. Only members can see who's in the group and what they post.

https://www.lowtoxlife.com/about-new/ - Alexx Stuart is an educator and change agent who founded Low Tox Life in 2010 after seeing the lack of transparency in our food system, personal care and cleaning products. She's built a movement that's non-judgmental, positive and says low tox peeps are a force to be reckoned with!

https://www.instagram.com/lowtoxlife/ - Healthier people and planet 🎧Top 0.5% Podcast 🌐 480+ eps 📚2 books 🌏 🎟️ Low Tox Club for community support and practitioner access."

https://www.bmcc.nsw.gov.au/media-centre/meet-low-tox-living-advocate-alexx-stuart - Aug 23, 2018 · Alexx – an activist and educator who has featured in TV talk shows, magazines and on ABC Radio National – gently clears a path through the maze of mass-market ingredient cocktails in everyday products and shares the latest science and advice from experts.

https://www.homeopathyhangout.com/e/navigating-a-low-tox-life-with-alex-stewart/ - Oct

9, 2024 · In this episode, Alexx Stuart the founder of Low Tox Life and an Australian mother, shares her journey into low-tox living. She emphasizes the importance of simplifying the process of reducing toxins through small, actionable steps, highlighting how food can serve as a gateway to healthier choices.

https://www.youtube.com/@lowtoxlifepodcast - Welcome to the Low Tox Life Podcast on YouTube. I'm your host, Alexx Stuart, founder of the Low Tox movement. With 9 years, 400+ shows, and 6 million downloads, there's not a lot we haven't talked about on the show regarding food, body, home, and mind topics.