



Is what Tamara Rubin reports on her blog “fear-mongering”?

By Justone Lead-Soldier, 27th September 2020

Background

A recent edition of LEAD Action News (v20n3, May 2020) included an article titled [‘What I Have Learned About Lead - Part 1 Plumbophobia’](#). This elicited a “rebuttal” from Tamara Rubin titled [“I don’t do what I do to instill fear. I do what I do to educate, so YOU can make informed choices for your family.”](#)

Tamara kindly gave permission for her blog post to be reprinted in LEAD Action News (v20n4, June 2020) titled (as in the original) [Is the work of Lead Safe Mama Fear-Mongering?](#) The reprint concluded (at the bottom) with a LEAD Action News Editor’s Note titled: *Elizabeth O’Brien’s question about negative and positive blood lead results* suggesting that blood test results would be better quantified with an actual values rather than a positive or a negative.

Tamara’s response to that included ““Negative” = zero (no Lead detected) and “positive” = some amount of Lead present (some Lead detected.)” and “The outcome of encouraging testing with those “absolutes” is that likely everyone will test positive if they have an accurate test (or - unfortunately - negative if their doctor uses a test with a low threshold of 3.3 or 2.0 or 5.0 or whatever) - and accordingly everyone should be incentivized to take on the inquiry of the impact of Lead in their homes (lives, and communities).”

The reprint of Tamara’s blog post in LEAD Action News (v20n4, June 2020), was followed by a short letter - initial [Response to Tamara Rubin from JustOne Lead Soldier.](#)

The rest of this article is a more complete response to Tamara’s blog post.



Volcano Art Prize 2018 Entry, Artist: Mark Ju. School: Creative Einstein. Title: Kitchen Still Life. Lead-Safety Message: Let’s make sure our kitchen things like glass, ceramic ware and cutlery are free of lead. Description of Work: Colour pencil, age: 12.

<http://volcanoartprize.com/portfolio-item/kitchen-still-life/>

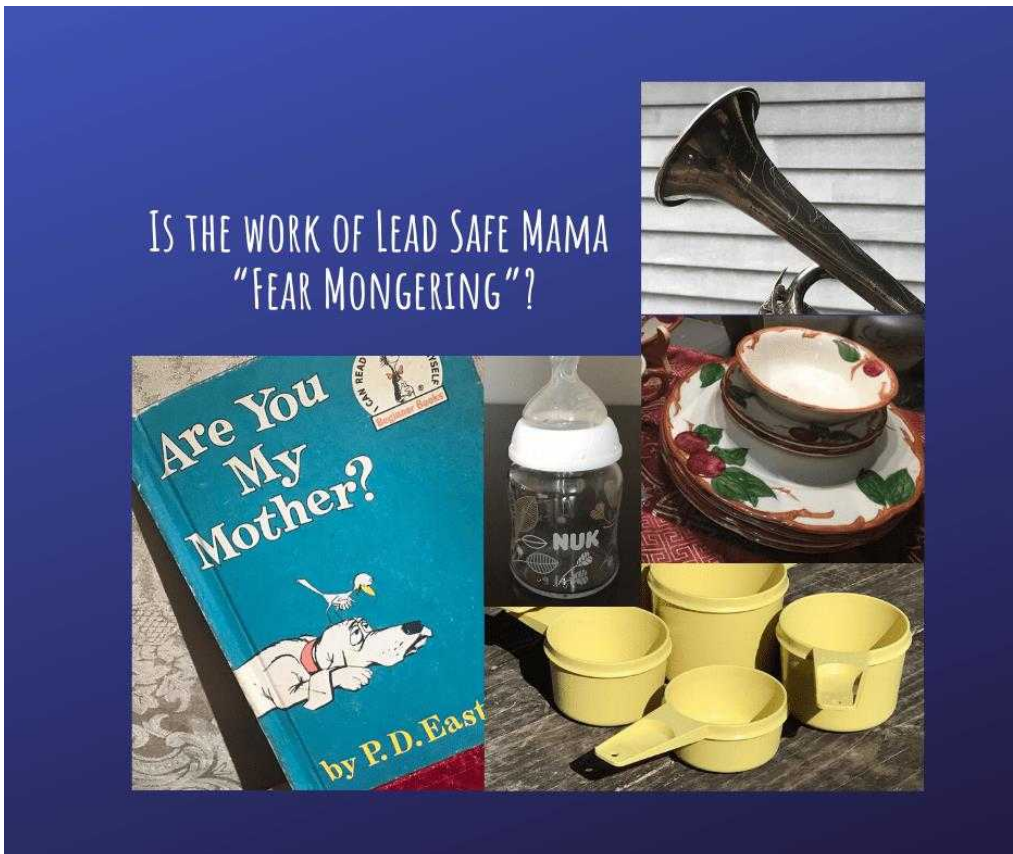


Introduction

Anyone who is involved in lead poisoning prevention (LPP) is likely to be aware of the fantastic work done by Tamara. Since two of her sons were tragically poisoned by lead, she has been a tireless advocate despite extreme financial and legal challenges. Her work includes testing consumer items for lead and providing personal consultations for families experiencing lead threats. She also shares her findings via [her blog](#) and on [Facebook](#) creating an extremely valuable resource for those concerned with lead exposure through household objects.

This article provides opinions on the content of Tamara’s “rebuttal” blog entry. If Tamara reads this I hope she takes it as respectful feedback with honest and humble suggestions on how she might improve the incredible work she does. The content of her blog is copyright and the content below us provided with the kind permission of Tamara.

The blog entry text is shown below in black with headings in **pink**. Opinions are in **green**.





Is what I report on this blog “fear-mongering”?

Yesterday an article was shared with me that mentioned me and my advocacy work. This blog post here, today – on my website, is by way of a rebuttal – addressing not only a few misconceptions articulated in that particular piece, but also comments and critical reactions to my work that have appeared (and reappeared) over the years.

The only mention of Tamara in the article was actually regarding harassment of lead poisoning prevention activists. This subject is not discussed in the blog entry which is a pity. It is also a pity that a link to the LEAD Action News (LAN) article is not provided to help her blog readers judge for themselves.

It seems likely that the paragraph that drew Tamara’s attention is this:

“The point being that, as lead poisoning prevention advocates, we have to realise that simply warning people about lead is not good enough. We have to assess whether there really is a risk to physical health before we tell people there is lead in something and therefore imply it is dangerous. It is not whether lead is in something that matters, but whether it comes out or comes off the surface. Lead that stays where it is, is safe. For example, the battery in your car “.

Some of the responses to the article were as follows (paraphrased because they are from a private group):

Very interesting! Thank you for sharing

I have needed to read this article for years, thank you. We should know more about living with lead rather than just living in fear.

There are relative risks from various sources that we need to think about so that we are not making ourselves and our kids fearful.

I appreciate The Lead (Pb) Group. I am one of those who hear the whisper, but the scream terrifies me.

I loved reading your article.

While, as I said, this post was not written only in response to that piece from yesterday, in the piece the author contends that it is relatively useless to simply know whether or not something contains Lead. The allegation sounds reasonable enough at first glance: that simply *knowing* that any particular example of a consumer good – even a plate, mug, bowl or other dishware – “merely” *contains* Lead serves no function; that only if something has *confirmed currently leachable / bioavailable* Lead is that information of any value.

I emphatically disagree.

I actually believe the opposite. Simply knowing if something has Lead (or Mercury, or Arsenic, etc.) puts consumers in a position of power in making choices for their family and for the health of our environment.

For a new product, of a known brand, this is true. If something has no detectable lead in it, then no detectable lead can come out. What needs to be considered is that, although many items have been tested by Tamara, it is still a tiny proportion of items that have ever been made. It may also be suggested that saying that one example, or a few examples, of a type of item contains lead, puts the



Above is a picture of a different bombilla and mate cup. It looks like stainless steel, but perhaps it is soldered with lead. If a reader owns a bombilla of this, or a different design, then it might be helpful if Tamara included a suggestion about what they should do? It would be great if there was some commentary about how to identify lead in a bombilla – would a LeadCheck swab be enough? Perhaps Tamara would recommend that all owners throw away all their bombillas and suggest to their family and friends that they do the same. As Tamara says there are hundreds, if not thousands, of variations available. Clearly it is not going to be possible to test them all so that consumers are fully informed. We will be left with doubt, fear and guilt.

The data that Tamara has collected about bombillas, and many other types of items, is very useful ammunition to present to governmental agencies in a campaign for tests, reports and an information scheme. I am not aware of Tamara being involved with campaigning for government action. This could multiply her findings so that many more products could be tested and many more families protected. An example is the petition launched by the [Environmental Working Group](#).

Lead is everywhere. We cannot avoid it. It is how much, how often and for how long we are exposed that counts. Somethings contain lead, but it is released at a rate that is not dangerous. For example, decorative horse brasses on a pub wall – unless there is evidence to the contrary.

Consumers have a right to know what they are buying — particularly if the items include neurotoxic elements.

I think all consumers have a right to know if the products they buy for their home (or use every day) “merely” contain Lead (or Mercury, Arsenic, Cadmium, Antimony or any other toxic heavy metals)! Moreover, leach-testing on every single item ever made would obviously be wildly cost-prohibitive, and as a practical matter would also be impossible – but knowing if a manufactured consumer item contains (or is likely to contain) Lead or other highly neurotoxic metals (using high-precision XRF technology) is a very important piece of information that families can use to make informed choices for their household.

The word “merely” was not used in the LAN article. We may agree that leach testing every single item ever made would be impossible, but then so would XRF testing. How much would it cost to have a trained professional such as Tamara test every item in the average home? She charges a minimum of \$600 for a two hour house visit. How many items could be tested in that time?

Furthermore, people will not be fully informed unless they are told of the actual risk of lead migrating from a surface into their bodies. Surely full information comes from further analysis of the rate of release of lead from a surface as well as which compounds of lead are present. Some compounds, e.g. lead phosphate, lead sulphate, ([Sauve et al. 1998](#)) are less soluble and so less bioavailable ([Yan et al. 2017](#)).

A paper by [Cotter-Howell, 1996](#) describes how a lead phosphate (pyromorphite ($Pb_5(PO_4)_3Cl$)), which is not bioavailable, is formed in soils contaminated with lead if sufficient phosphorus is available. However, it was also found that “Pyromorphite accounted for less than 2% of the total Pb in these soils.” The other 98% will be formed of other lead compounds which may, or may not, be more or less bioavailable.

Analysis by [Guardian Industries Goole Ltd](#) explains how the surface of pure lead oxidises to form lead sulphite and lead sulphate, but still retains about 10% lead carbonate which is bioavailable. This is still



a dangerous ppm, but less than would be detected by XRF analysis.

The FDA, with greater resources than Tamara, have provided the following list of ceramic items of concern, but the emphasis is that what is important is leachable lead:

https://www.accessdata.fda.gov/cms_ia/importalert_122.html

It could be said that Tamara does what she can with the tools she has. That is great and every test result she shares adds to our accumulated knowledge about the prevalence of lead in the home environment. Perhaps Tamara could consider adopting additional tools to further enhance the available data. For Tamara's speciality, this would seem to be leach testing.

Would it not be possible to do a simple leach test by exposing a suspect item to an acidic food then measuring the lead content of the food with the XRF scanner? If an XRF cannot be used in this way then it is not the right tool for the job and is not providing all the information consumers need to make fully informed decisions. However, perhaps the XRF could be used for initial screening followed by leach testing.

The fact of the matter is that if we had advance knowledge that something contained 20,000 or 50,000 — or even “only” 10,000 ppm Lead, most of us would likely *choose* to not purchase (or otherwise acquire) that particular item for use in our home. This is especially true if the item in question is something intended for *food use*, in our kitchens or dining rooms. That we (as humans) are likely to choose non-toxic options (over items with heavy metals) is even more likely when you consider how many *non-toxic / Lead-free* options are out there [and surprisingly, that in most cases the Lead-free options are also often the *least-expensive options!*]

Tamara should be congratulated for the work she does to identify as many new branded items that contain toxins as possible. There is no good reason why toxic substances are used so we must all hope that Tamara is willing and able to continue to do this with the same fervour for many years to come.

What may need to be considered is what message Tamara's reports send to people who already own an item that has been tested – or perhaps a similar item. They may infer that they have been poisoning themselves, their family and friends. This could cause considerable anxiety even when there is actually no risk of lead migrating from the item in dangerous amounts, in normal use.



Tamara addresses this question in her article [“What should I do with my Lead-contaminated dishes? To Toss or Not To Toss?”](#)

Here she talks about bio-available lead, but does not make this distinction in her product reports - which would be useful. However, the article contains the statement “I don’t have a definitive answer for you”.

Would others agree that number that really matters is whether any member of the household has an elevated lead level? If children, in particular, are screened for lead then the services Tamara provides can be very useful in identifying which items in the home could be causing the exposure. This could be supplemented by dust tests to give more information about the lead loading in the home. It might possible for Tamara to analyse dust wipe samples using her XRF scanner as described in this [EPA report](#).

Giving people **access to information** regarding the historic (or current) use of toxicants in the manufacture of particular consumer goods does not, by default, automatically incite or encourage **fear**. I do acknowledge that **some** people are fearful – over many things. Some people are ignorant, misinformed, confused or overwhelmed; others have been traumatized, and may have developed [diagnosed or un-diagnosed] *OCD* over their fear of the toxicants in our world. That does not – **must not** – trump the importance of disclosing toxicants [**still**] widely used in the manufacturing of consumer products (or prevalent in family heirlooms we may use daily.)

Readers must agree that disclosing toxins used in currently available goods is really valuable. What could extend this value is some understanding of the prevalence of contaminated items. Everything untested may contain dangerous levels of lead, but if we had some idea of the likelihood of encountering the items, then Tamara’s readers could feel even more informed.

Few people are doing this work

Given *no public agency* is looking at many categories of these currently -manufactured products commonly found in our homes [not to mention, *vintage* products] I contend the work I do *is* of value — because it provides specific information to families that no one else is providing (again – so they can make their own *informed choices, based on scientifically replicable accurate data*).

It should be possible to take an additional point of view. Tamara seems to work bottom up, whereas there can also be a top down approach. At a micro level it is true that a family can informed about the objects they own, or are considering buying. This is very valuable to them. However, it does not help other readers to decide whether all the dishes in their cupboard are safe or not. Or all the other items that they use. Or all the other items used by everyone in the world. Proving data about specific items or to specific family about their home is a great service, but Tamara can only do a limited amount of this work. Everyone else is left in doubt.

It is also important to focus on persuading governments to invest in the public agencies to do more testing, more screening as well as improve regulations and enforce them. That way we protect many more people from many more possibly dangerous products.

I am very careful with language in all of my posts and work hard at *not* indulging in *sensational posts or click-bait headlines*, nor any *needlessly alarming, or exaggerated statements* on my blog. It is very important to me that the information I share is *simple, factual* and consistently



science-based (and that all consumer goods test results reported are replicable.)

It could be agreed that Tamara's reporting is factual, but perhaps in the style of a magazine rather than of a scientific research journal. The reports are of case studies rather than statistical sampling. This is excellent if it makes the information more accessible. However, we may observe that Tamara's headlines and content are often questions, e.g. "[Does vintage and new functional pottery and dishware have unsafe levels of lead? Why is that a problem?](#)". That sounds alarming and the article continue to ask more questions and gives anecdotal information. More questions mean more doubt and doubt leads to fear. Perhaps it is not responsible to ask a question of the general public unless an answer is available.

There are only a few specific types (or *brands*) of products that I consider *inherently very unsafe* [because of their function and usage in a typical home, and risk of consequent (possibly *chronic*) exposure to the toxicants used]. In those few cases, I endeavor to be clear and explicit about my concerns with these products. [Some examples of more concerning products: *all Franciscan Potteries china, colorful vintage Pyrex bowls, and pre-2010 Tupperware.*]

This a good start and perhaps all that can be said, but the reader may still be left with doubt. How colourful, how old is vintage, how can I tell the age?

I am not fear-mongering

Most of my readers (this includes more than 1,948,000 readers in 2019 alone – in more than 200 countries) do *not* react to what I write with *fear*. Most read the words without "reading between the lines" (*looking for* – i.e. *making up* – some kind of "tacit" meaning beyond my words) and most use the information provided to make informed choices.

How does Tamara know this? What is seen in "The Lead(Pb) Group" on Facebook is many people asking questions. Tamara provides a fantastically valuable service to those families she visits and to those considering buying specific products. For the rest there is just doubt.



Here are some recent sample comments from [The Lead \(Pb\) Group on Facebook](#):

“Do I need to worry if it is leaded?”

“How do you home test broken tile and jewelry?”

“Am I crazy for freaking out?!”

“I sometimes feel like I am failing my daughter”

“What does this equate to in ppb leaching? “

“This is so overwhelming!”

“feel like I’ve lived reckless life”

“so I’ve poisoned my family.”

“so where are the issues? if it breaks ? or more ?? is it the color? or the entire exterior? to what degree does it come off? or is it encased?”

“Holy crap.”

“HmMMM nothing is safe ?”

“It is every where.”

“How nervous should I be? “

Also, on Tarama’s web site is a dialogue titled “[Stop using your vintage Tupperware NOW. These measuring cups are positive for 2,103 ppm Lead + 250 ppm Arsenic.](#)”

Tamara speaks from a position of apparent authority and tells us to stop using Tupperware now, but without evidence that Tupperware can actually cause harm in normal use. Some of the comments reflect the uncertainty and fear this generates:

you have no idea how upset I am.

If it’s vintage, it’s likely to be leaded

so how do these metals get shed from the plastic and in what amounts over what period of time?

Unless we know this, we know nothing is dangerous yet

I just don’t see the extreme caution this has been made

The levels of various heavy metals in plastic mean little or nothing on their own. You need to know what RELEASES those metals into food and at what levels.

Where would you dispose of these things?

Please do not forget the Green, Red, Blue as well. Please provide lech rates for each as well If it does not come out of suspension it is not a hazard.

Before we scare people maybe we should suggest they get themselves tested for lead first.

She is monetizing fear.

Ok, I want to know...if I measure out 1 cup of sugar from one of these Tupperware measuring cups, how much of the lead and how much of the arsenic is transferred to that cup of sugar?

So here you are posting this huge post putting the fear of God into everybody who has any Tupperware

What do you consider vintage? Is it from 20 years ago? Is it from 40 years ago? Is it from 30 years ago? You don’t specify so now everybody is panicking and doesn’t know what to do.



Um, I dont cook with my measuring cups? So wheres the harm??

If they're hazardous where are we supposed to dispose of them??

Could you allow various liquids like water and vinegar to sit in the cup for 5 or 10 minutes and see if the liquid leaches?

It may not be going too far to suggest those comments represent doubt, fear or guilt. That is not to say that this information should not be shared. It is frightening, lead exposure is definitely something to be feared, but it also needs to be qualified when it is not known how much lead comes out of these items in question in normal use. The point being that some of these people are in fear of lead in their lives when there may actually be no dangerous levels of lead exposure.

Anxiety is a useful response, but when information is not complete, anxiety can be uncontrolled and cause lots of problems in itself as described in the LAN article. The fear of lead can be worse than the lead itself.

Beyond any possible direct health risks or concerns (for the end user of any given product), there are also legitimate environmental issues surrounding the mining, refining, and use of toxic heavy metals in consumer products. But any "fear" / *hysteria* around this information is counter-productive – and arises in the individual reader – in that person's unintended *interpretation or inappropriate response* to the posting of the simple routine *factual scientific test results* I publish [*normally shared intentionally devoid of any emotional charge and always shared without baseless allegations or assertions.*]

With so many readers of Tamara's work it might be suggested there is some responsibility on her, as the author, to manage the response to ensure that it is not unintended. Asking emotive questions such as "[How toxic is YOUR 2019 Starbucks Christmas mug?](#)" could cause anxiety. The 40 ppm Cd limit mentioned refers to products intended for children. Whether 40 ppm is safe or dangerous for any one product is not known. What is safe must surely vary by material and usage.

Lead is incontrovertibly toxic – in extremely small amounts / at very low exposure levels. This is a fact.

If the presence of Lead were not *inherently problematic at even very low levels*, the information shared on this blog might arguably *not* be valuable or relevant information. However, the mere *presence of any Lead in a child's environment* has been well-documented to be inherently problematic — at *remarkably low levels* [so low that after researchers reached the consensus that there is *no known "low threshold of toxicity" for Lead*, our public health agencies in the U.S. and internationally eventually acknowledged this fact, *and officially and universally moved to include the language that "there is no safe level of Lead exposure"*].

Many sources do use the "no safe level" wording. Others make it clear that there is no known safe level. For example,

["No safe blood lead level in children has been identified." CDC](#)

["According to the WHO, there is no known safe level of lead exposure." UNICEF](#)



Even in pre-industrial times, the background blood lead concentration was [0.016 ug/dL](#). The earth's crust is [14ppm lead](#). If there is no safe level then we have never been safe, and can never be safe. "No safe level" may be interpreted as "only dangerous levels". Lead-free is unachievable, so it may be said we should promote an acceptable level of lead exposure. It could be that this is where the health impacts are so rare or slight that they are less prevalent than other threats. Deal with the worst first and the least last.

Perhaps there should be some reassurance in Tamara's work that it is possible to survive and thrive in a world contaminated by lead, and many other things.

If you are blasé about newly-manufactured consumer goods that contain *high* levels of Lead (Leaded brass, Lead fishing weights, Lead crystal) then *your focus is too narrow*. If you don't have any concern for Lead in products of these types at the levels typically found (because as-of-yet no one has "proven to you" the impact to the end user for these products), then you are obviously *not looking at the bigger picture*.

It could be said that biggest picture is the population impact of lead exposure. The [geometric mean](#) in the USA in 2015/16 was 0.82 µg/dL. By Tamara's definition, all blood lead results are positive (ie above zero), because a negative result (=zero) is impossible to receive from any pathology lab in the world. The best result you can ever get is <0.17 µg/dL from the best US laboratory. So, everyone in the world has a positive blood lead result or is lead poisoned according to Tamara – yet a good public health campaign really needs to focus and give priority to those people with the highest blood lead levels and those lead sources which are poisoning the most people or the most sensitive people in the population.

Lead fishing weights and ammunition aside (which are a [risk to wildlife](#)), if commonplace items such as leaded brass and lead crystal are dangerous in normal use then they should be banned. An explanation as to why they have not been banned could be that although items such as these have an unacceptable amount of lead ppm this is not released in sufficient amounts to cause widespread elevation of blood lead concentration. Knowing the numerator is informative, but the denominator also matters. 90ppm is 90 µg in a g, but suppose we only have one mg of lead containing material released from a surface, perhaps in dust. Then there is only .09 µg of lead present. Is that enough to be dangerous?

Consider lead in keys as reported on Tamara's web site ([Typical American house key: 12,800 ppm Lead. Don't let kids \(especially babies\) play with real keys!](#))

An average key weighs around 10g. There are a million µg in a g, so at 12,800 ppm, as found by Tamara, or 1.28%, the key would contain 128,000µg of lead.

Keys last a long time and only show little wear over time. It could be assumed that in 10 years a key might loose 5% of its weight. Based on that, we can estimate the maximum lead exposure as follows - assuming all the released lead was available to be ingested or inhaled and not lost in locks, pockets, purses, etc.



Assumption	Value	Units	Result
Weight of a key	10	g	10g
Percentage lead	1.28	%	128,000 µg Pb
Loss over 10 years	5	%	6,400 µg Pb
Days in 10 years	3653	Days	1.75 µg Pb day ⁻¹
Ingested and absorbed	20	%	0.25 µg Pb day ⁻¹

It seems that children can excrete 30 µg lead per day ([Winecker et al, 2002](#)). The FDA also set a daily Interim Reference Level limit of 3 µg for children ([FDA, 2020](#)) which is “set nearly ten-times less than the actual amount of lead intake from food that would be required to reach the CDC’s blood reference level”.

We may not feel comfortable giving a toddler brass keys to play with, but could we question if this would really be too cautious. It seems unlikely that a child would be sucking on a key all the time, but, on the other hand, it could be several keys at once.

We need some actual facts about how much lead is released from keys before we raise the alarm and make people guilty about their prior behaviour.

There’s a bigger picture here, the planet.

The bigger picture is the concern for the *entire lifecycle* of any product that incorporates high amounts of Lead — and the very real risks to many people all along *the supply chain*. This includes risks to the miners that mine the Lead (and other toxicants) for the raw materials for these products, risk to the workers that make the products, and perhaps most important – the impact on the human habitat. The larger environmental impacts range from the *highly toxic waste* produced in mining and refining of Lead; to global pollution from emissions generated through manufacturing Leaded products; and ultimately including the issues created at the end-of-life for Lead-containing products with disposal (and even the potential contamination of the manufacturing chain for recycled goods.)

The world does not revolve simply around any one of us. If the air we breathe and the water we drink and the soil we grow our crops in are *fundamentally contaminated* with Lead from manufacturing, mining, refining, use, and reclaiming or disposal of Leaded products – we – as stewards of the Earth – bear *responsibility* for those contaminations, too.

Of course, we should use non-toxic substances or employ safe practices for their acquisition, manufacture, use and disposal. That is unless, the cost of those practices causes more damage than they solve. Right now we could not simply dispose of and replace all the lead containing material in the human world without causing an environmental, social and economic catastrophe. What we need to is manage and mitigate the risk focussing on where the biggest benefit can be found for the costs incurred – as stated in the next section regarding lead paint in older housing.

“OCD” or not?



While the biggest human impact problem (when it comes to Lead) is, first-and-foremost *Lead-contaminated dust in older housing and other buildings that were historically painted with Lead paint*, being concerned about the very real additional presence and impact of Lead in *consumer goods* is not “OCD”.

If the still-largely-unstudied/undetermined specific impact of *lower and lower* levels of exposure were not a concern, public health agencies across the globe would *not* have set the toxicity level for Lead in consumer goods at *90 to 100 parts per million*. Consumer goods have the potential to cause harm at very low levels. This is why these government standards have been set. However it is well beyond the capacity of any government to test all things for safety.

In the absence of the government testing of all things – just because something has not yet been proven to be harmful, does not mean it is safe. And thus people like me play a role in nudging scientific research and public policy along in the right direction, shifting public concern in a way that encourages scientists to do further study. To wit – years after activists (including me) began testing and reporting unsafe levels of Lead in *coffee mugs*, a formal study was done concluding that this was actually a problem. Years after activists (including me) began reporting unsafe levels of Lead in *vintage plastic toys*, two formal study were undertaken, concluding this was actually a problem. Years after activists (including me) began reporting unsafe levels of Lead in the *painted decorations of functional (relatively modern) glassware*, a study was done (in England), concluding this was actually a problem. I am actually just about to publish some new groundbreaking findings about Lead in vintage books and I expect these findings (which are scientifically replicable) will likely precipitate further study by a scientific body. (*I will post that link here as soon as it is published.*)

It is very important to keep nudging. Governments will need to be given examples with hard evidence. To label this as “OCD” would seem to be quite wrong.

What may need to be considered is what impact incomplete information will have on those suffering with OCD or other mental health conditions such as panic attacks, anxiety and depression. It is ironic that lead is associated with these conditions ([Bouchard et al, 2009](#), [Rueben et al 2018](#)). It seems that lead gets at us in two ways. It makes us susceptible to worry, then gives us something to worry about. Surely, we should only worry people when we are sure that normal use of a lead containing item will cause harm, because the harm from the damage to mental health could be worse than the harm from the lead itself.



Someone has to start the conversation

To those cynics who may be resistant to accepting “new” scientific information — tending to remain *highly skeptical* until such information is *widely acknowledged at a cultural level*: in every field there must be early pioneers.

Just because someone is a pioneer in reporting seemingly “new” facts or “new” concerns does not *invalidate* those concerns (just be patient...there’s always a lag between a first discovery, subsequent related *scientific findings* and *popular knowledge*). [*Let’s see how the timeline plays out with my new findings around vintage books!*]

It might said that Tamara’s “rebuttal” suggests that she is also not receptive to conversations on new ideas and responds as though alternative views are an attack on her work. We might hope that Tamara can accept that no one knows it all and no one can do it all. Those campaigning for more action on lead poisoning prevention should be willing to learn from each other.

Learning about Lead in household goods is a great introduction (to the larger Lead issue) for new moms

In addition to all of the above considerations, some conversations (like the concern for Lead in dishware) happen to be a great introduction to the subject of the concerns for Lead in our environment (overall). *Everyone has dishes. Everyone* also has (or had) a *mother* and a *grandmother* — and therefore *everyone* (or nearly everyone) has had interaction with potentially high-Lead *dishes from past generations*.

While I have worked with many families who were actually *poisoned* by their toxic *dishes*, in the scope of things, I don’t in fact see this as a *primary* threat (statistically, relative to other sources of Lead exposure), but I do see the topic of Lead in consumer goods as a impactful “*gateway*” / *introduction*, *introducing young families* to the concerns for Lead exposure as it relates to them and their lives (especially impactful for young parents who have not previously thought of Lead-poisoning as potentially “*their*” problem.)

If parents become aware about the potential for Lead in their dishes (whether or not their dishes might contribute to a child’s specific blood lead level) they may get their child tested. If their child is tested and is negative for Lead – great! If their child gets tested and is positive for Lead in their blood the parents will likely start looking around their home for other exposure sources (including sources of Lead dust from deteriorating paint.) With the limited resources available today to combat childhood Lead poisoning, anything encouraging an increase in childhood blood Lead testing is a step forward.

This make sense and seems like a good approach. Tamara has developed the credibility to be listened to. Perhaps she could have a much greater impact if she spoke to governments as well as individuals.

Tamara should also consider that she has an international readership. While blood test for appears to be routine in the USA, and in some states mandatory, this is not the same here in the UK. The rest of the world can look to the USA to be the leader in LPP.

Young parents don’t want to think of their house as toxic. It is too confronting.

Most families are reluctant to explore the potential concern of Lead paint in their homes. The financial liability of that inquiry is too much to bear, both in the short and long term. However examining the



concern for Lead in consumer goods is a manageable task (dishes, to continue the example above – are inexpensive and easy to replace with modern Lead-free alternatives.) Exploring the concern for Lead in consumer goods is a path to helping families discover an issue (and learn how it may or may not relate to their family) in a way that is less confronting (and less expensive) than testing their entire home – and therefore it has value.

Lead is *everyone's* problem – and the age-old conundrum is: how do we get everyone to see this? We are fighting against *more than a century* of marketing efforts by the Lead industry – marketing efforts designed to make us numb to the concern for Lead; marketing efforts specifically designed to make us think “this is not *my* problem, this is *someone else's* problem.” By introducing people to the FACT that there is *Lead* in *their* dishware – you are opening their minds to the FACT that this is everyone's problem, and that we all should consider the value of getting Lead out of our homes and environments.

It is true that lead in dishware is everyone's problem, but when an owner wonders about the items in their cupboard it is their problem. Most people do not have access to an XRF scanner. Sodium rhodizonate swabs can detect lead in ceramics, but may not have the sensitivity required. In normal use, both XRF and swab tests detect lead that is in an item, not whether that lead comes out. However, in both cases, a wipe sample could be taken from the surface of items and analysed.

Where Tamara's point has influence in the power of the crowd. The more people there are that realise lead is still a problem in the modern world, even in developed countries, then the more likely it is that governments will listen and will take then action. If the route to action is through dishware then that is worth pursuing.

But some Lead is useful in consumer products, right?

I disagree with this assertion 100%.

As Dr. Mark Pokras says in my film, I wish we could create legislation that says “Thou shalt not use Lead in *anything, period!*”. It is 2020; today we have alternatives for every application in which Lead was previously used. Uses like Lead in *car-batteries* are now roughly 100-years-old, and there is no reason we should continue this practice. Car batteries absolutely DO poison the planet – the Lead in car batteries is neither unavoidable nor safe. While it is oft-cited as the most “recyclable” source of Lead (and I understand the *Lead mining industry* considers the recoverability/reusability of the Lead in car batteries to be a *problem* that needs to be *addressed!*) it is not ultimately a *necessary* use of Lead — and there are still grave environmental implications with the use of Lead in this way.

If it was not poisonous, lead would be a very useful substance - as has been demonstrated for centuries. I don't think we would find anyone in the readership of LEAD Action News who would not want all new use of lead to be replaced by other materials.

In conclusion

In the meantime, (to those who are dismissing / mischaracterizing my work – as “fear-mongering”), *please stop trying to invalidate the work of honest, hard-working advocates simply trying to inform families so they can make intelligent choices for their families – choices not based on double-speak and marketing language provided by manufactures, but choices based on data and facts and numbers.*

Tamara does not make it clear whether she includes the LAN article in her accusations. At no point



does the article suggest that Tamara mangers fear. The article does not dismiss, mischaracterise or invalidate Tamara’s work and only mentions her in relation to harassment of LPP campaigners.

As described above, the data and facts and numbers that Tamara presents, while very valuable and helpful, leave a lot of questions unanswered. These unanswered questions may lead to anxiety so should be presented carefully.

Instead of taking on all comers, perhaps Tamara could listen to her friends, accept help and advice from them, work with them and help us all to reduce the damage from lead poisoning around the world.

Just because the longterm human implications of something has not yet been well-studied — like what happens to someone’s body if they “only drink out of Leaded crystal *every now and then*”, or if they drink “*really quickly* when they do” [*two actual “objections” to my recommendation to avoid ever drinking from Leaded crystal*] — why would you risk putting one of the most neurotoxic substances known to man up against your lips – when *you can buy a Lead-free alternative for one dollar?! **

The obvious answer to the question posed here by Tamara is that use of lead crystal glasses is considered safe by the authorities in [California](#), [Canada](#) and [Australia](#).

Again, we are left in doubt. Have we been poisoning our guests for years? Do we believe Tamara, who can test how much lead is in a glass, but not how much comes out; or the government agencies who may be lagging behind the latest science?



What does some science say? Here are quotes from two studies:

[Guadagnino et al, 2000](#)

“significant health risks resulting from the ingestion of beverages in contact with crystalware can be excluded.”

[Height, 1996](#)

“Lead release at 1440 min was .. 358 ng/ml in wine”. “Lead release at 1 min was equal to approximately 30% of cumulative lead release measured at 1440 min.”

Based on this, there would be 13µg lead in a 125ml glass of wine. This would be a good reason to not drink too much wine too often from lead crystal glasses.

It may be worth repeating the last line of the LAN article. There are no black and white answers.

Everything about lead is grey.

Thank you for reading.

Tamara Rubin

#LeadSafeMama