

GP Webinar conducted by NSW Health 14 June 2023

The following slides were anonymously sent to the CCSN due to the GP's concern around how NSW Health was approaching this emerging health issue.

Interpretation

- ▶ **Is it done in an appropriate sample?**
 - ▶ Whole blood, plasma, urine (spot/24-hrs), hair, nail
- ▶ **What is the result?**
 - ▶ Qualitative or quantitative
 - ▶ Quantity/magnitude
 - ▶ Unit
- ▶ **Is the finding significant?**
 - ▶ Available toxic reference level?
 - ▶ Clinically significant?
- ▶ **What is the application?**
 - ▶ Inform management?
 - ▶ Counselling – always

Agenda

Priscilla Stanley – Director, Public Health,
Western NSW Public Health Unit

Jeff Standen – Director, Environmental
Health Branch, Health Protection NSW

Dr Catherine Bateman – Medical Advisor,
Environmental Health Branch, Health
Protection NSW

Dr Thanjira Jiranantakan - Medical Advisor,
Centre for Alcohol and Other Drugs and
NSW Poisons Information Centre

Dr Paul Byleveld – Manager, Water Unit,
Environmental Health Branch, Health
Protection NSW



Health

Agenda

Item	Topic	Carriage
1	Welcome and Acknowledgement of Country	Chair – Priscilla Stanley
2	Background – Concerns, EPA response, NSW Health input	Catherine Bateman
3	Toxicological considerations	Thanjira Jiranantakan
4	Discussion – questions and concerns	All

[Click here to join the meeting](#)

To be recorded



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Key concepts

- ▶ Heavy metals are metals and metal compounds
- ▶ Sources of heavy metals
 - ▶ diet, medications, environment, work/recreation
- ▶ Many of these heavy metals
 - ▶ In very small amounts – necessary to support human body function
 - ▶ In larger amounts – may become toxic
 - ▶ Threshold for toxic amounts – often unclear and varies (interindividual, interspecies)
- ▶ Heavy metal exposure ≠ Heavy metal poisoning

The image shows a periodic table of elements. A red box highlights the transition metals (groups 3-10), and a yellow box highlights the post-transition metals (groups 11-12). The elements are arranged in rows and columns, with their symbols and names visible.

Catherine Bateman Steel

Heavy metal testing in bio samples

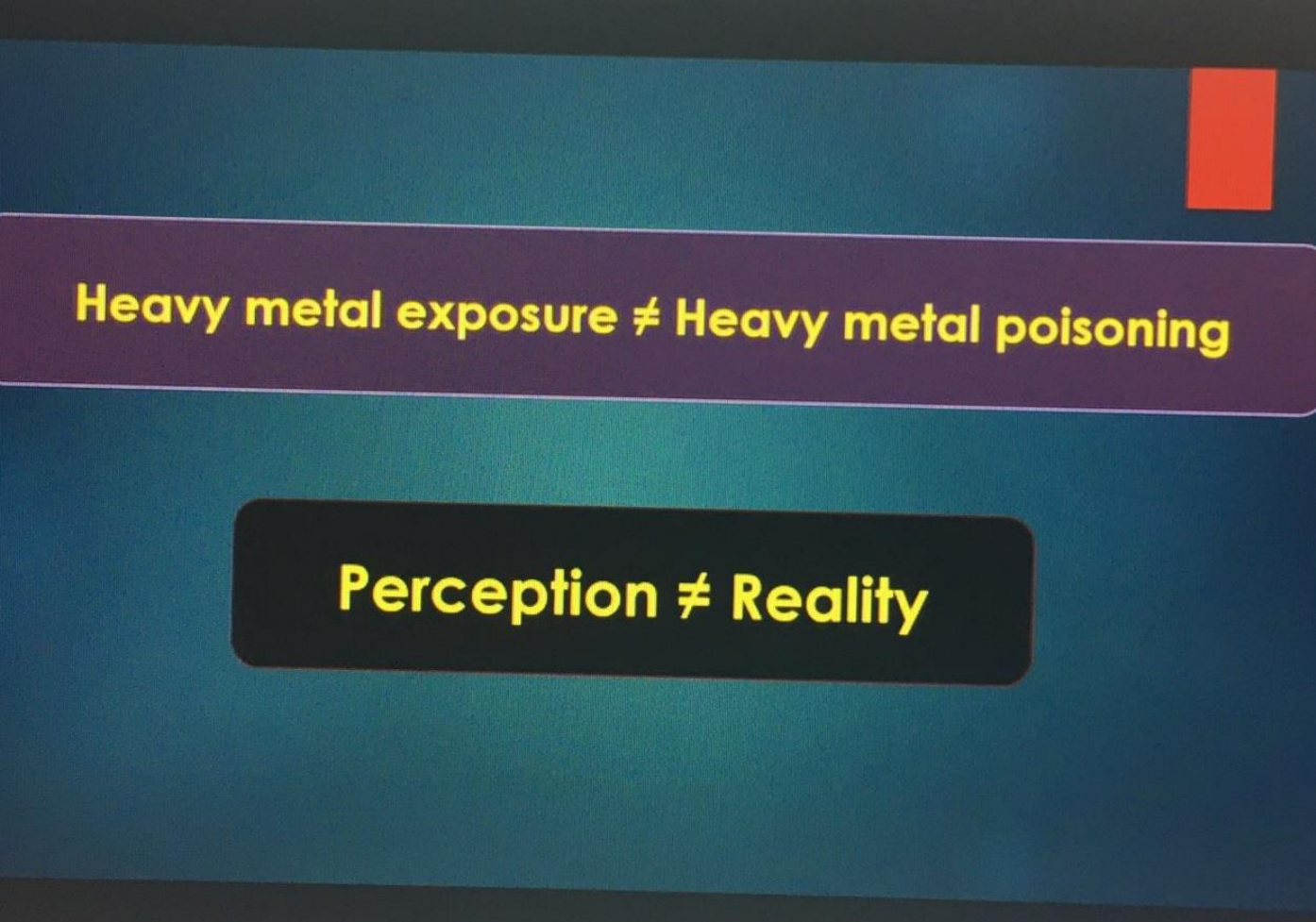
- ▶ Testing for heavy metals should be done **only when indicated**.
- ▶ **Interpretation** of heavy metal detections in biological samples is a **complex** matter.
- ▶ There is **limited evidence** of health impacts from exposure to many heavy metals; hence, there is **no established toxic reference level or guideline** for management for most.
- ▶ Unclear heavy metal testing and detections often cause **significant and unnecessary concern to patients and families**.

Many in the region have stated clearly in their feedback to the CCSN, that the lack of support by NSW Health has **elevated significant and unnecessary concern, and an increase in stress for community members**.

Management

- ▶ **Cease exposure is essential**
- ▶ **Symptomatic treatment**
- ▶ **Chelation (rare)**
 - ▶ For significant/severe toxicity – rarely required
 - ▶ Non-specific to one type of heavy metal
 - ▶ Adverse reaction may be more toxic than heavy metals
 - ▶ Contraindicated if the source of exposure is unidentified
- ▶ **Follow up**
 - ▶ How often and long?
- ▶ **Counselling**
 - ▶ Significance, health impacts, intervention, plan

CCSN believes the heavy metal contamination is coming from a regional source that is out of our control to cease exposure. We believe the exposure to heavy metal contamination is airborne, the community does not have control on the ceasing of this exposure. It was also verbally shared by the anonymous GP that symptomatic treatment was in relation to Lead only.



Heavy metal exposure \neq Heavy metal poisoning

Perception \neq Reality

For many in the community, perception is equalling reality with quantitative evidence in blood, 24 hour urine and hair samples showing single/multiple heavy metal contamination.