

**DEPARTMENT OF
ENVIRONMENTAL SCIENCES**
Faculty of Science and Engineering

Macquarie University
NSW 2109 Australia
T: +61 (2) 9850 8382
F: +61 (2) 9850 8420
mq.edu.au

ABN 90 952 801 237
CRICOS Provider No 00002J



MACQUARIE
University
SYDNEY · AUSTRALIA

19 September 2019

Lead exposure risk to urban chickens from legacy contamination

Dear Resident,

Lead exposure in residential urban chickens is a new research project being conducted by the Department of Environmental Sciences at Macquarie University.

The research is being undertaken as part of a PhD thesis program by Ms Sara Yazdanparast.

This project will to determine establish trace element pathways and metal exposure (in particular lead) from backyard urban soils into the 'urban' livestock (chickens). The study will focus on Sydney.

Interested persons can watch a short ABC program video on the issue from 2017 by [clicking here](#).

The study will be the first Australian project to assess systematically (using ~100 chickens) the link between urban contamination in soils and dusts, and uptake into domestic chickens and their eggs.

This project requires engagement with the local Sydney community by providing access to backyards and chickens for analysis. Importantly, no chickens will be harmed during the collection of samples.

Our research will benefit the community by increasing knowledge and awareness of the links between trace metals in their residential environment, home-produced foodstuffs and any potential risks.

The study results would be published in different formats and will include maps, tables and figures. All data will be de-identified to the extent that no address or other information can be used to specifically identify the precise location of samples / persons involved in the study.

Participants will receive a formal analysis report. Remedial actions and guidance on ways to mitigate any potential hazards at their home will be provided as required.

The project has ethics and animal approval from Macquarie University and researchers will be trained by a qualified veterinary practitioner for the collection of chicken blood samples.

If you are interested in participating in this program, please register your interest with Sara (sara.yazdanparast@hdr.mq.edu.au).

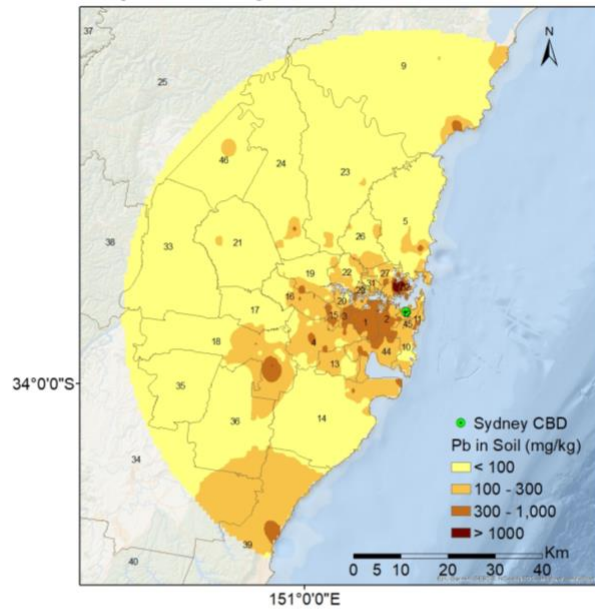
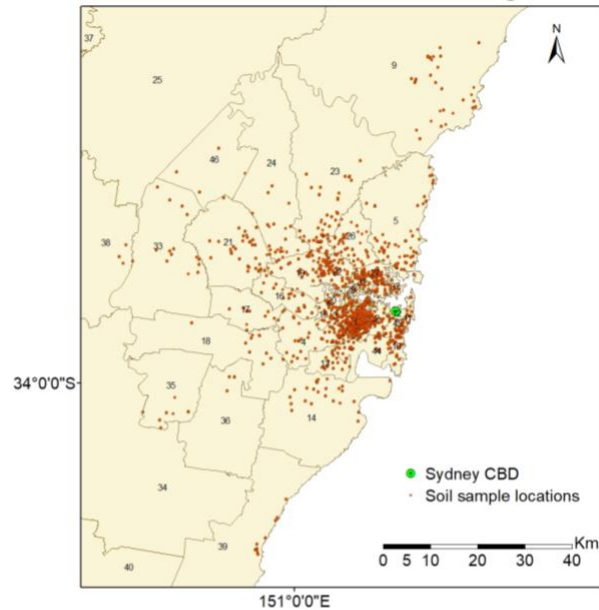
Kind regards,

Sara Yazdanparast, PhD researcher

Professor Mark P. Taylor, research supervisor

Acknowledgements - The research project has received funding support from the Inner West Council and Macquarie University

Do you live in one of the lead contaminated areas of Sydney and keep chickens? If so, register for the Macquarie study on lead in backyard chickens



Sydney councils	12. Woollahra Municipal Council	24. The Hills Shire Council	36. Campbelltown City Council
1. Inner West Council	13. Georges River Council	25. Hawkesbury City Council	37. Lithgow City Council
2. Council of the City of Sydney	14. Sutherland Shire Council	26. Ku-ring-gai Council	38. Blue Mountains City Council
3. Burwood Council	15. Strathfield Municipal Council	27. Willoughby City Council	39. Wollongong City Council
4. Canterbury-Bankstown Council	16. Cumberland Council	28. Upper Lachlan Shire Council	40. Wingecarribee Shire Council
5. Northern Beaches Council	17. Fairfield City Council	29. The Council of the Municipality of Hunters Hill	41. Shellharbour City Council
6. Cessnock City Council	18. Liverpool City Council	30. North Sydney Council	42. Oberon Council
7. Lake Macquarie City Council	19. City of Parramatta Council	31. Lane Cove Municipal Council	43. The Council of the Municipal
8. Singleton Council	20. City of Canada Bay Council	32. Mosman Municipal Council	44. Bayside Council
9. Central Coast Council	21. Blacktown City Council	33. Penrith City Council	45. Waverley Council
10. Randwick City Council	22. Council of the City of Ryde	34. Wollondilly Shire Council	46. Hawkesbury City Council
11. Waverley Council	23. The Council of the Shire of Hornsby	35. Camden Council	

Macquarie University's published studies on Sydney residential soil lead contamination

- **VegeSafe:** a community science program measuring soil-metal contamination, evaluating risk and providing advice for safe gardening. Available at: [10.1016/j.envpol.2016.11.024](https://doi.org/10.1016/j.envpol.2016.11.024)
- **Elevated lead levels in Sydney back yards:** here's what you can do. Available at: <http://theconversation.com/elevated-lead-levels-in-sydney-back-yards-heres-what-you-can-do-68499>.
- **Human exposure and risk associated with trace element concentrations in indoor dust from Australian homes.** Environment International. Available at: [10.1016/j.envint.2019.105125](https://doi.org/10.1016/j.envint.2019.105125)