

# LEAD POISONING: FROM THE BACKYARD TO A COMMUNITY

A One Health Case Study Prepared for the AAVMC Authors: Stephen Cole, VMD, MS, Peter Rabinowitz, MD, MPH and Shelley Rankin, PhD October 2015

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## SUMMARY

#### Web Resources

CDC Lead Website: http://www.cdc.gov/nceh/lead/

FAO Risk Communication Website: http://www.fao.org/docrep/005/x1271e/X1271E05.htm

Canary Database: http://canarydatabase.org/ (This may be a great resource to suggest to students!)

#### **Textbook**

Rabinowitz, P and Conti, L. *Human-Animal Medicine.* Chapters 4 (Sentinel Disease Signs and Symptoms), Chapter 8 (Toxic Exposures), 14 (Shared Strategies to Maximize Human and Animal Health). <u>MANY other chapter in this book may be helpful.</u>

#### **Peer Reviewed Articles**

Heinz GH, Hoffman DJ, Sileo L, Audet DJ, LeCaptain LJ. *Toxicity of lead-contaminated sediment to mallards*. Arch Environ Contam Toxicol. 1999 Apr;36(3):323-33.

Scotch M, Odofin L, Rabinowitz P. Linkages between animal and human health sentinel data.BMC Vet Res. 2009 Apr 23;5:15.

Dooyema CA, Neri A, Lo YC, Durant J, Dargan PI, Swarthout T, et al. *Outbreak of fatal childhood lead poisoning related to artisanal gold mining in northwestern Nigeria, 2010*. Environ Health Perspect. 2012;120(4):601–7.

#### Animal Health Resources (for those without veterinary training)

Viral Agents of Pigeon Disease:

D. Marlier, H. Vindevogel. Viral infections in pigeons. The Veterinary Journal 172 (2006) 40-51.

Bacterial Agents of Pigeon Disease:

Chlamydophila: Taher Harkinezhad , Tom Geens, Daisy VanrompayChlamydophila psittaci infections in birds: A review with emphasis on zoonotic consequences.Veterinary Microbiology 135 (2009) 68–77.

Salmonella: Pasmans, F., F. van Immerseel, M. Heyndrickx, A. Martel, C. Godard, C.Wildemauwe, R. Ducatelle, and F. Haesebrouck. 2003. Host adaptation of pigeon isolates of Salmonella enterica subsp. enterica serovar Typhimurium variant Copenhagen PT 99 is associated with enhanced macrophage cyto- toxicity. Infect. Immun. 71:6068–6074.

Streptococcosis: A. Kimpe, A. Decostere, K. Hermans, J. Mast, and F. HaesebrouckAssociation of Streptococcus gallolyticus Strains of High and Low Virulence with the Intestinal Tract of Pigeons