



Figure Description

Tiny lead fragments, some smaller than a red blood cell. These are ultra-high-resolution X-ray microscope images of tissue (left pair) and a tissue-like gel (right pair) after impact from lead ammunition. The grayscale images show the material structure, while the “Pb” images light up for the lead: each bright speck is a lead fragment. The red dots are added for scale and represent the diameter of a red blood cell (7 micrometers). The scale bars show just how small these particles are: 20 micrometers (about 2–3 red blood cells wide) and 5 micrometers (smaller than a red blood cell). This is why the fragments can be essentially “lead dust,” far too small to see with standard medical X-rays. For perspective, these lead particles are up to 500 times smaller than the tip of a 25-gauge flu shot needle. (image source: Leontowich, A.F.G., Panahifar, A., Chen, S. et al. Lead micro- and nanoparticles directly observed within gunshot wounds in hunted game meat. *Sci Rep* **15**, 36364 (2025). <https://doi.org/10.1038/s41598-025-20285-2>)