

## A PROBLEM WITH THE IDENTIFICATION OF LEAD PAINT

Many lead compounds including white lead have a sweet taste. Particles of old lead paint once tasted by a young child become attractive "sweeties" and are sought after. For this reason the identification of old lead paint and its subsequent removal is desirable when young children are likely to be present.

Recently I was asked to examine a house, in which a child with pica had been diagnosed with lead poisoning, for the presence of lead paint. The property had been previously examined by a local health authority officer using a lead spot test kit. Little if any lead paint had been found.

I took a selection of paint samples from various places in the house back to the laboratory. The samples were tested by both a spot test similar to that used by the council and by other methods after the paint resin had been destroyed by heat.

In the child's bedroom there was some antique painted woodwork, some of the paint was flaking off. The health officer's spot test had reportedly failed to show the presence of lead on samples from this area. My spot test on the sample also failed to show the presence of lead. After ignition and testing the primary pigment in the sample was found to be white lead. The paint was unoxidised and still had a surface gloss. The intact resin in the paint covering the white lead particles had prevented the simple spot tests from detecting the lead.

A few weathered samples from the outside of the house showed the presence of lead with both the spot test and the other test methodology.

**SIMPLE SPOT TESTS FOR THE PRESENCE OF LEAD ARE UNRELIABLE IN UNDEGRADED PAINT SAMPLES.**

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