

## US NGO Announces That Over Half of Low-Cost Jewelry Contains High Toxic Chemicals Including Lead, Cadmium, Nickel and Chromium

The Ecology Center, US NGO based in Michigan, has published new research on toxic chemicals in low-cost children's and adult jewelry. Researchers tested for chemicals - including lead, cadmium, arsenic, mercury, bromine and chlorine (PVC) - which have been linked in animal and some human studies to acute allergies and to long-term health impacts such as birth defects, impaired learning, liver toxicity, and cancer.

Ninety-nine pieces of jewelry were tested from 14 different retailers. Samples were collected from 6 different states, including Ohio, Massachusetts, Michigan, Minnesota, New York and Vermont.

Over half (57%) of the products tested had a "high" level of concern due to the presence of one or more hazardous chemicals detected at high levels. Four products contained over 10% cadmium, a known carcinogen. Fifty percent contained lead, with over half of these containing more than 100 ppm of lead in one or more components, exceeding the Consumer Product Safety Commission (CPSC) limit of lead in children's products.

### Highlights of study results:

- Overall -- 59 percent (58) of products tested were rated as having HIGH level of concern due the presence of one or more hazardous chemical detected at high levels.
- Lead -- 27 of 99 (27%) of jewelry contained greater than 100 ppm lead in one or more components. 100 ppm is the CPSC limit of lead in children's products.
- Cadmium -- 10 of 99 (10%) of jewelry contained greater than 100 ppm cadmium in one or more components.
- Chromium -- 92 of 95 (93%) of jewelry contained greater than 100 ppm chromium.
- Nickel -- 30 of 95 (30%) of jewelry contained greater than 100 ppm nickel.
- Brominated flame retardants -- 7 of 95 (7%) of jewelry contained brominated flame retardants (greater than 1,000 ppm bromine).
- Chlorine -- 11 of 95 (12%) of jewelry contained PVC (greater than 25,000 ppm chlorine).
- Other chemicals analyzed include mercury and arsenic.

Many NGOs and health advocates in US states call for overhaul of federal chemical regulations as well as urge legislatures to enforce state limits on toxic chemicals.

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HealthyStuff.org measured the presence of these chemicals with an X-ray fluorescence (XRF) analyzer – a proven, accurate indicator of elements in products. Anyone concerned about these jewelry products can visit HealthyStuff.org and search by brand, jewelry type and chemical detected.

No.048 March 2012