

**Selenium**  
Exposure to high concentrations causes Selenosis, which can cause hair-loss, nail brittleness, and neurological abnormalities (i.g. numbness and other odd sensations in the extremities).<sup>12</sup>

**Beryllium**  
Exposure can cause lung cancer and chronic beryllium disease (berylliosis) (affects lungs).<sup>3</sup>

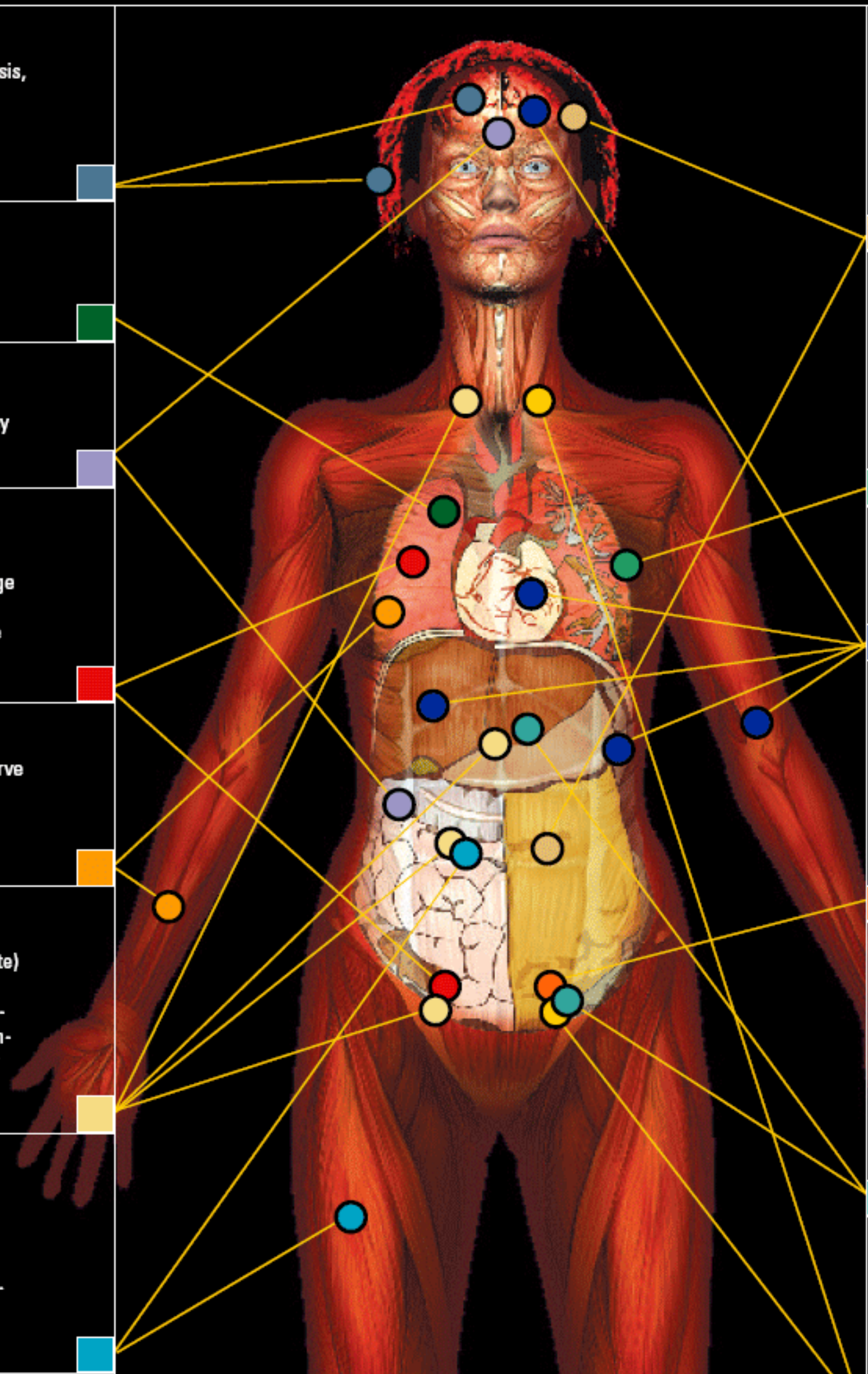
**Mercury**  
Exposure through ingestion or inhalation can cause central nervous system damage and kidney damage.<sup>1</sup>

**Chromium (IV) - Hexavalent Chromium**  
Exposure can cause strong allergic reaction (linked to Asthmatic Bronchitis) and DNA damage to cells. Workers are exposed at disposal stage and Chromium (IV) can also be released into the environment from landfills and incineration.<sup>1</sup>

**Arsenic**  
Long-term exposure may cause lung cancer, nerve damage and various skin diseases. Arsenic gas (AsH<sub>3</sub>), used in tech manufacturing, is the most toxic form of arsenic.<sup>1</sup>

**Trichloroethylene (TCE)**  
Exposure to TCE (depending on amount and route) can cause liver and kidney damage, impaired immune system function, impaired fetal development, or death. Manufacturing workers and communities where TCE leaches into drinking water are at greatest risk.<sup>13</sup>

**Cadmium**  
Long-term exposure can cause kidney damage and damage to bone structure is also a known carcinogen. Short term or acute exposure can cause weakness, fever, headache, chills, sweating, and muscle pain.<sup>5</sup>



**Lead**  
Exposure can cause brain damage, nervous damage, blood disorders, kidney damage, and developmental damage to fetus. Children are especially vulnerable. Acute exposure can cause vomiting, diarrhea, convulsions, coma, or death.<sup>8</sup>

**Polyvinyl chloride (PVC)**  
PVC is the most used plastic, found in everyday electronics. When burned it produces large quantities of hydrogen chloride gas, which combines with water to form hydrochloric acid (HCl). Inhaling HCl can cause respiratory problems. Production and incineration of PVC creates dioxins.<sup>11</sup>

**Barium**  
Exposure may lead to brain swelling, muscle weakness, damage to heart, liver and spleen, or increased blood pressure.<sup>1</sup>

**Brominated flame retardants (BFRs)**  
Suspected of hormonal interference (damage to growth and sexual development), and reproductive harm, BFRs are used to make materials more flame resistant. Exposure studies reveal BFRs in breast milk and blood of electronics workers, among others.<sup>1</sup>

**Polychlorinated biphenyls (PCBs)**  
Toxic effects of PCBs include immune suppression, liver damage, cancer promotion, nervous damage, reproductive damage (both male and female), and behavioral changes. PCBs were widely used (prior to 1980) in transformers and capacitors. Though banned in many countries, they are still present in e-waste.<sup>10</sup>

**Dioxins and Furans**  
Exposure can cause hormonal disruptions, damage to fetus, reproductive harm, and impairment of immune system. These highly toxic compounds bio-accumulate (concentrate in the body) and persist in the environment.<sup>7</sup>