| Asbestos & Lead |                                | Synopsis   |
|-----------------|--------------------------------|--|
|                 | Lead-based paint and Asbestos  | Describes in detail Georgia's Lead Renovation, Repair, and Painting Program (RRP) as well as an      |
|                 | Awareness - GA Env. Protection | Asbestos program. Lead is found at home, schools, in products, water, outdoor air, soil, and dust.   |
| Title           | Division                       | In the home it is found in paint on walls, doors, and windows, in pipes, vinyl blinds, toys, and the |
| Author(s)       | EPA                            | soil around the home. The most at risk for health effects caused by lead is pregnant women and       |
| AA Location     | 2-8                            | children. In children it causes behavior & learning problems, anemia, lower IQ, hearing problems,    |
|                 |                                | slowed growth, and in rare cases, seizures, coma, or death. It can also cause premature birth,       |
|                 |                                | cardiovascular problems, decreased kidney functions, and reproductive problems in adults. Lead       |
|                 |                                | poisoning in children costs \$43 billion per year for direct and indirect costs.                     |
| Web address     |                                |  |
|                 |                                |  |
| Title           | Childhood Lead Poisoning       | The World Health Organization provides an outline of the consequences and sources of childhood       |
| Author(s)       | WHO                            | lead poisoning throughout the world. Lead poisoning accounts for 0.06% of total burden of            |
| AA Location     | 2-9                            | disease worldwide and is completely preventable. Lead exposure can be from paints, petrol,           |
|                 |                                | mining, paints and pigments, food cans, ceramic glazes, drinking water with lead pipes, electronic   |
|                 |                                | waste, and products like cosmetics and toys. Exposure can cause colic, anemia, depression of the     |
|                 |                                | central nervous system that causes coma, seizures, or death. It also has a severe detrimental        |
|                 |                                | effect on the developing brain and nervous system and can lead to loss of intelligence and           |
|                 |                                | shortening attention span. There is no threshold level of lead exposure that is considered safe and  |
|                 |                                | not detrimental to human health. Childhood lead poisoning costs \$43 billion annually and for every  |
|                 |                                | one dollar spent to reduce lead hazards, the benefit is \$17-\$220 dollars.                          |
| Web address     |                                |  |
|                 |                                |  |
| Title           | Lead Poisoning                 | Over 500,000 children under 5 in the US are poisoned by lead, and 24 million US homes have lead-     |
| Author(s)       |                                | based paint hazards. Lead poisoning causes a decrease in IQ, cognitive function, and                 |
| AA Location     |                                | developmental delays. High levels can cause seizures, coma, and/or death. \$38,000 per impacted      |
|                 |                                | child over three years is the economic cost of lead poisoning. For every \$1 dollar spent on         |
|                 |                                | reducing lead hazards, \$17-\$220 is saved. It is estimated that without HUD's intervention in       |
|                 |                                | 370,000 housing units contaminated with lead, 265,000 children would have had gotten lead            |
| Web address     |                                | poisoning.   |

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| Title<br>Author(s)                               | Childhood Lead Poisoning:<br>Conservative Estimates of the<br>Social and Economic Benefits of<br>Lead Hazard Control<br>Environmental Health Perspectives | A cost-benefit analysis was done of indoor lead-based paint hazard control. It was found that for<br>every \$1 dollar spent on hazard control, \$17-\$221 dollars were saved. This amount to a net savings<br>of \$181-\$269 billion per year.  |
| AA Location                                      | 3-9   |   |
| Web address                                      |   |   |
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| Title<br>Author(s)<br>AA Location<br>Web address | Lead Exposures in US Children,<br>2008: Implications for Prevention<br>Environmental Health Perspectives<br>5-3   | There is no threshold for safe lead exposure levels. Even low levels of exposure to children causes<br>intellectual development and achievement. Lead-based paint and dust account for 70% of all<br>elevated blood lead levels in children in the US. However, the remaining 30% can come from a<br>variety of sources. To continue to limit lead exposure to children, collaborations across all levels of<br>government is needed to assess, control, and remediate lead exposure and its sources. |
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| Title  | Automated counting of airborne<br>asbestos fibers by a high-<br>throughput microscopy method  | It has been known for awhile that inhalation of asbestos causes serious health issues and death,<br>yet 3,000 Americans die from exposure to asbestos every year. Lung cancer and malignant<br>mesothelioma are both fatal outcomes of asbestos exposure. High-throughput Microscopy is one<br>potential alternative for evaluation of airborne asbestos content in a given area.   |
| Author(s)  |   |   |
| Web address                                      |   |   |