



# The High Costs of Inaction

The failures of our current regulatory system impose great costs on our local economy and create long-term risks for U.S. firms.

## ► Risky for Business

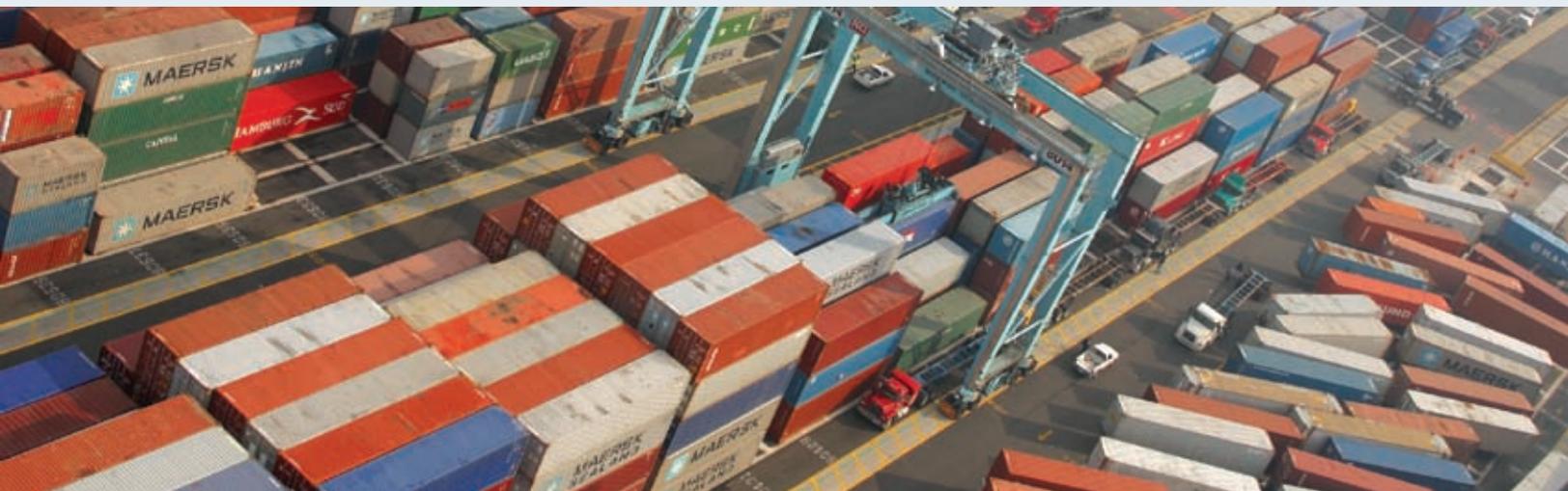
In this highly competitive global marketplace, with many overseas governments updating their health and environmental regulations, and consumers having rapid access to information, it is evident that companies that ignore chemical issues “are turning a blind eye to circumstances that could fundamentally affect their competitive position.”<sup>1</sup>

“The need for companies to know what’s inside—what chemicals make up their products—has never been greater. **Toxics ignorance creates risk: reputation risk, toxic tort risk, and market risk.**”<sup>2</sup>

U.S. exporters have previously faced losses by not keeping up with regulations and consumer attitudes in other countries. For example U.S. corn exporters were hurt by European attitudes toward genetically modified crops, and U.S. ranchers suffered loss of exports following the mad cow disease scare.

Countries around the world are beginning to pass new laws regulating toxic chemicals. For example, the European Union has ratified the new Registration, Evaluation and Authorization of Chemicals (REACH) policy, an innovative system of chemicals regulation. According to Tufts University economists in their report on the impacts of REACH on the U.S.: “Unfortunately, experience has shown that it is possible to lose foreign markets quite rapidly by ignoring foreign regulations and concerns about health, safety and the environment.”<sup>3</sup> **“What is at stake for the U.S. is substantial: we estimate that chemical exports to Europe that are subject to REACH amount to about \$14 billion per year, and are directly and indirectly responsible for 54,000 jobs.”**

As the Tufts economists concluded: “Chemicals produced elsewhere, such as in the United States, and exported to Europe will have to meet the same standards as chemicals produced within the European Union.”<sup>4</sup>



“Failing to comply with REACH, ... exposes an important and growing sector of the U.S. economy to the total loss of its European trade... **Massachusetts in particular would risk losing 9,000 jobs and the highest percentage of REACH production of any state if industry fails to comply with REACH,**” the Tufts economists concluded.<sup>7</sup>

**“Childhood illnesses and disabilities caused by environmental factors impose staggering costs on society. Since these environmental factors are under human control, the resulting illnesses can and should be prevented.”**

— Frank Ackerman, Ph.D.,  
Director of Research and Policy at the  
Global Development and Environment  
Institute at Tufts University<sup>12</sup>

### ► **Preventable Illness: The Price We Pay for Pollution**

When people become sick due to toxic exposures, the resulting costs cascade through an economy. Economic studies in Europe and the U.S. show that avoidable illnesses caused by toxic exposures place a large economic burden on families, communities, government and industry.<sup>8</sup>

In 2001, the European Environment Agency published an extensive report on 14 case studies covering the costs of inaction on major health and environmental dangers, titled “Late Lessons from Early Warnings.” For example, they reviewed the massive impact of society’s inaction on the dangers of asbestos despite the early evidence of its deadly dangers. They

report that asbestos use is estimated to result in 400,000 European asbestos cancer deaths, and that in the U.S. asbestos compensation settlements reached two billion dollars.<sup>9</sup>

**In the U.S., a recent study looked at the costs of children’s illnesses associated with environmental exposures.** A team of researchers estimated costs for four categories of childhood illness that have been linked to environmental factors: cancer, asthma, neurobehavioral disorders, and lead poisoning. The researchers looked at the costs of treating and managing the disorders, including physician visits, hospitalizations and medications. They also estimated loss of future earnings of children whose ability to learn was impaired by illness. They then calculated the estimated percentage of cases that are caused by environmental factors, called an “environmentally attributable fraction” (EAF). For example, the EAF for asthma among children in the United States was estimated in the range from 10% to 35%. Using these figures, they calculated the total cost of avoidable, environmentally induced children’s illnesses in the U.S. **Total preventable costs were estimated at around U.S. \$55 billion per year (between 2 and 3 percent of total U.S. health care costs).**<sup>10</sup>

Based on that study, economists at Tufts University’s Global Development and Environment Institute estimated that **in Massachusetts the costs of childhood illnesses caused by environmental exposures range from over \$1 billion to \$1.6 billion every year.** These costs are borne by individual families, by health care and education systems, and by taxpayers. The direct costs to the state of medical care and special education alone range from \$54 million to \$327 million a year in Massachusetts.<sup>11</sup> ■

## **PEPSI & REEBOK CAUGHT LEAD HANDED**

In March 2006, newspaper headlines told the world how Reebok gave out charm bracelets that were 99% lead with children’s shoe purchases.<sup>5</sup> This led to the death of a four-year-old boy in Minnesota. A month later, Pepsi Cola was caught with labels on soft drinks that contained up to 45% lead and paid a \$1 million civil penalty for violating California laws.<sup>6</sup> Both companies’ management were ignorant of the chemicals used by third party contractors in their supply chain.



# CHILDHOOD CANCER

In the 1990's in Massachusetts, 2,688 children ages 0–19 were diagnosed with cancer and 394 died. **Childhood cancer** used to be a rare occurrence, but now it is **the second largest cause of death to children ages 0–15 in the United States** – second only to accidents.<sup>13</sup>

A panel of experts convened by Mt. Sinai Hospital recently concluded that genetic predisposition accounts for no more than 20% of all childhood cancers and that the fraction attributable to the environment could be between 5% and 90%, depending on the type of cancer.<sup>14</sup> **The evidence supporting the connection between exposure to toxic chemicals and childhood cancer is strongest for leukemia, and brain and central nervous system cancers, which together account for 50% of childhood cancers.** These cancers are typically diagnosed in children under the age of 5.<sup>15</sup>

A growing body of evidence links childhood cancer to toxic chemicals, including:

- Researchers found that children with brain cancer were 11 times more likely than children without brain cancer to have mothers who were exposed to pesticide sprays or foggers during pregnancy.
- Drinking water contaminated with solvents has been linked to childhood leukemia, including in Woburn Massachusetts.
- Children with leukemia were 4 to 7 times more likely to have been exposed to pesticides, than children without leukemia.

While medical treatments have saved the lives of many of these children, their suffering is enormous and the treatments cause lifelong impairments. Nearly two-thirds of childhood cancer survivors will have at least one chronic health problem 20 to 30 years after being diagnosed with cancer. They are at greater risk of second cancers, cardiovascular disease, renal dysfunction and other conditions.<sup>16</sup>

**Imagine if we can prevent cancer in many children by creating a healthier environment!**

## Endnotes

- 1 Directly quoted from Greiner, T., Rossi, M., Thorpe, B., and Kerr, B. (Clean Production Action) (2006) "Healthy Business Strategies Report" June 27, 2006 [www.cleanproduction.org/Green.Healthy.php](http://www.cleanproduction.org/Green.Healthy.php)
- 2 Ibid.
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- 4 Ibid.
- 5 Reebok Recalls Bracelet Linked to Child's Lead Poisoning Death. U.S. Consumer Product Safety Commission. March 23, 2006 Release #06-119. [www.cpsc.gov/cpscpub/prere/phtml06/06119.html](http://www.cpsc.gov/cpscpub/prere/phtml06/06119.html)
- 6 ConsumerAffairs.com. Pepsi Agrees to Get the Lead Out of Mexican Soda Bottles Used in the U.S. April 21, 2006. [www.consumeraffairs.com/news04/2006/04/ca\\_pepsi.html](http://www.consumeraffairs.com/news04/2006/04/ca_pepsi.html)
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- 9 European Environment Agency. "Late Lessons from Early Warnings: the precautionary principle 1896-2000" Environmental Issue Report No 22, 2001 p 58
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- 11 Massey, R. and Ackerman, F. (2003) "Costs of Preventable Childhood Illness: The Price We Pay for Pollution. September 2003. <http://ideas.repec.org/p/dae/daepap/03-09.html>
- 12 Ibid.

- 13 Gouveia-Vigeant, T., Tickner, J., Clapp, R. (2003) Toxic chemicals and childhood cancer: A review of the evidence. Lowell Center for Sustainable Production. May 2003.
- 14 Landrigan, P., Schechter, C., Lipton, J., Fahs, M., and Schwartz, J. (2002) Environmental pollutants and disease in American children: estimates of morbidity, mortality, and costs for lead poisoning, asthma, cancer, and developmental disabilities. *Environmental Health Perspectives*. 2002 Jul;110(7):721-8.
- 15 Gouveia-Vigeant, T., Tickner, J., Clapp, R. (2003) Toxic chemicals and childhood cancer: A review of the evidence. Lowell Center for Sustainable Production. May 2003.
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