

Excerpt: “Colstrip Steam Plant” entry from the Global Energy Monitor Wiki

Death and disease attributable to fine particle pollution from Colstrip Steam Plant

In 2010, Abt Associates issued a study commissioned by the Clean Air Task Force, a nonprofit research and advocacy organization, quantifying the deaths and other health effects attributable to [fine particle pollution](#) from coal-fired power plants.^[36] Fine particle pollution consists of a complex mixture of [soot](#), [heavy metals](#), [sulfur dioxide](#), and [nitrogen oxides](#). Among these particles, the most dangerous are those less than 2.5 microns in diameter, which are so tiny that they can evade the lung's natural defenses, enter the bloodstream, and be transported to vital organs. Impacts are especially severe among the elderly, children, and those with respiratory disease. The study found that over 13,000 deaths and tens of thousands of cases of chronic bronchitis, acute bronchitis, asthma, congestive heart failure, acute myocardial infarction, dysrhythmia, ischemic heart disease, chronic lung disease, and pneumonia each year are attributable to fine particle pollution from U.S. coal plant emissions. These deaths and illnesses are major examples of coal's [external costs](#), i.e. uncompensated harms inflicted upon the public at large. [Low-income and minority populations](#) are disproportionately impacted as well, due to the tendency of companies to avoid locating power plants upwind of affluent communities. To monetize the health impact of fine particle pollution from each coal plant, Abt assigned a value of \$7,300,000 to each 2010 mortality, based on a range of government and private studies. Valuations of illnesses ranged from \$52 for an asthma episode to \$440,000 for a case of chronic bronchitis.^[37]

Table 1: Death and disease attributable to fine particle pollution from Colstrip Steam Plant

Type of Impact	Annual Incidence	Valuation
Deaths	31	\$230,000,000
Heart attacks	48	\$5,300,000
Asthma attacks	530	\$4,000
Hospital admissions	22	\$28,000
Chronic bronchitis	19	\$8,600,000
Asthma ER visits	31	\$11,000

Source: "[Find Your Risk from Power Plant Pollution](#)," Clean Air Task Force interactive table, accessed February 2011

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