Alternative Institutional Responses to Asbestos

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Abstract

The level of asbestos risk varies widely, with insulation workers facing risks many orders of magnitude greater than other groups, such as school children. After a period of regulatory neglect, asbestos risks are now among the most stringently regulated risks, with costs per case of cancer prevented on the order of $100 million. Asbestos litigation triggered much of the public action against asbestos, as asbestos cases constituted the majority of all product liability cases in the federal courts from 1988 to 1991. The litigation costs have, however, been substantial, almost three times as great as the amounts transferred to asbestos disease victims. Risk communication potentially could promote efficient risk levels and victim compensation.

Key words: asbestos, risk, tort liability, insurance

Asbestos hazards have been among the most prominent societal risks. Workers' asbestos exposures have given rise to hundreds of thousands of tort claims against asbestos companies. Asbestos has also been a leading target of government regulation. Other societal institutions, such as workers' compensation and market processes, also come into play.

The distinctive feature of asbestos is that asbestos risks are virtually synonymous with mass toxic torts. Since the asbestos hazards have given rise to the largest set of mass torts and to one of the most prominent examples of these torts, it is interesting to assess how the various societal institutions that could have dealt with these risks have performed. In this article, I will examine several institutions whose efforts potentially could have influenced the ultimate impact of asbestos on society—the market, workers' compensation, government regulation, and tort liability.

In making my assessment, I will assume that our objectives are twofold. First, we would like to establish economic incentives to generate efficient levels of the risk. Second, in situations in which people will suffer injuries, it is desirable to provide them with efficient levels of insurance compensation. Because of the lagged nature of the link between asbestos exposures and the adverse outcomes, it is not surprising that the various institutions with responsibility over asbestos did not fully address the deterrence and insurance objectives for all of the populations exposed to asbestos. Nevertheless, these institutions did react to the impact of asbestos and attempt to promote a better societal outcome. How successful these institutions were in performing this task is the subject of this article.

In section 1, I will begin with an exploration of the nature of asbestos risks and their magnitude. I will then examine the role of a market in section 2, and the workers' compensation system in section 3. After assessing the impact of direct government regu-
lation of asbestos exposures in the environment and the workplace in section 4, I will investigate the rather substantial role of tort liability in section 5. Section 6 concludes.

1. The nature of asbestos risks

Asbestos is one of most well-known carcinogens associated with large individual exposures. Indeed, the adverse health effects resulting from asbestos have given rise to such substantial litigation over the asbestos-related injuries that the rise of mass toxic torts is almost synonymous with the emergence of asbestos litigation.¹

Although asbestos has not been known to be a carcinogen throughout its use, there has long been awareness in the scientific community of the presence of health hazards associated with asbestos.² In 1906, there was documentation of 50 deaths associated with asbestos exposures in a weaving mill in France. After the development of X rays, there was documentation in 1927 of the presence of lung abnormalities among two-thirds of all asbestos workers. This ailment lead to the designation of the term “asbestosis” to describe this particular disease. It was not until 1935 that asbestos was linked to lung cancer. However, this study was not conclusive, since almost all individuals in the study also smoked. Indeed, the first reliable epidemiologic study of asbestos and its link to lung cancer was that of Doll (1955), with the first case of mesothelioma (a cancer of the lining of the lung) being documented in 1956.

The type of asbestos appears to affect the risk level. Asbestos comes in two principal varieties—blue asbestos (or amphibole) is believed to be quite harmful; white asbestos (chrysotile) is believed to pose very little risk. Regulatory efforts and other interventions have not yet reflected these distinctions.

The locus of the asbestos exposures that give rise to the adverse health effects has changed in terms of the scientific assessment of the prevalence of the risk. Whereas public health experts formerly believed that the risk was confined mainly to those subject to high exposures, such as those who work in mines, in the late 1960s, Selikoff documented a risk among insulation workers and in other contexts. More recently, there has been a hypothesis that even smaller levels of exposure to asbestos, such as that present in office buildings, may impose risks as well.

Whether small exposures actually create risks is unclear, since the nature of the dose-response relationship at low levels of dosage is not well established. In the case of asbestosis, for example, the scientific consensus is that there is a low risk threshold that must be exceeded before there is any risk. We typically assume that the asbestos-risk relationship is linear and that this curve passes through the origin, although this assumption is largely a matter of practical convenience and a reflection of official attempts to be “conservative” in the risk estimation procedure. This conservatism does, however, create an upward bias in the risk estimates, particularly at low levels of exposure.

Another distinguishing feature of asbestos risks is the long gestation period before the health effects become apparent. Although some chemical exposures may have acute effects that occur immediately, in the case of asbestos, the lag times involved are considerable. The lag for mesothelioma, for example, is at least ten years after the date of