



Is  
Asbestos Killing  
100,000?  
People Each Year

*A careful examination of studies shows that this statement is grossly misleading and represents only selective parts of the scientific info.*

Chrysotile vs. Amphiboles:

# HOW Can Health Agencies Still Ignore the Difference?

All the estimates about the health effects of asbestos are based assuming exposure to mixed fibre. Using this hypothesis, the lifetime risk of death from malignant mesothelioma is 100/100,000/fibre.year per ml.

In 2000, Hodgson and Darnton have estimated the same risk but differentiated by fibre types.

The results are self-explanatory:

- For CROCIDOLITE (blue asbestos)  
400/100 000/fibre.year per ml;
- For AMOSITE (brown asbestos)  
65/100 000/fibre.year per ml;
- For CHRYSOTILE (white asbestos)  
2/100 000/fibre.year per ml.

Knowing that today's reality is that only chrysotile fibres are used commercially, it is obvious that estimates grossly exaggerate the risk for developing mesothelioma by at least a factor of 50.

Even if the authors of the studies mention that there is a huge difference between fibre types, why are some people in these agencies still denies the facts?

# The legacy of the past

*The figure about 100,000 death is far from the truth.*

This estimate is based on data collected from European countries and extrapolated to the rest of the world. This approach is not taking into account different fibre types, structure and composition of the industry and past uncontrolled heavy exposures.

Undoubtedly, bad work conditions and the use of various amphiboles fibres have caused diseases among asbestos workers.

Because of the latency period, the diseases appearing today are the results of exposures that were encountered 20 to 40 years ago.

In fact, the rate of asbestos related diseases have started to decline, thanks to the improvement in working conditions implemented from the 1970's and the prohibitions of amphiboles in the late 1980's. The concern today is the presence of amphiboles and friable products in buildings that have to be properly managed in order to prevent the apparition of industrial diseases. To do so, proper information, good work practices and appropriate control measures – not a blind prohibition – will help to achieve this objective.

The 100,000 death figure is misleading, because it implies that asbestos is used nowadays in the same way it was managed 50 years ago.

And yet, many scientific studies published in the last 25 years have shown that the rates of industrial diseases of workers of the asbestos-cement industry – which accounts for 90% of the use of chrysotile in the world today – do not exceed the national average.

# Is Asbestos Killing 100,000? People Each Year

Very often, the anti-asbestos lobby justify its campaign against the use of asbestos by the figure that 100 000 people dies annually from the exposure to this mineral. Even the World Health Organization (WHO) and the International Labour Organization (ILO) seem to have accepted this data as a fact.

Since 2002, press releases by the Ban Asbestos activists within the ILO, in a repetitive way, state that from an estimate of 2 million victims each year of accidents and occupational diseases, asbestos all by itself is responsible for some 100,000 deaths annually. This data is now widely used by many people accepting and believing this data as if it were sacrosanct and not subject to challenge.

Even on its website, ILO write that the data regarding asbestos are there for information purposes and do not pretend to be scientifically accurate. Not surprisingly, the Ban Asbestos lobby widely uses this estimate to support its campaign.

Beyond the dramatic media impact such large number can create in the public's perception; this figure is grossly misleading and must be examined.

## Asbestos Kills? Which Asbestos? At What Level?

Knowing the fundamental differences between the several asbestos fibre types, stating that «Asbestos kills 100,000 workers every year» is not only unscientific; it is nonsense. What would be the basis to affirm that «chemicals kills x workers» or «metals are responsible for the death of x workers»? Nonsense. Chemical and metals include a wide variety of products with different properties, uses and health risk.

It is the same with asbestos. There is no justification to put in the same basket the health risk of being exposed to chrysotile and to amphiboles fibres. In their review of many scientific studies about workers exposed to various types of asbestos, Hodgson and Darnton (2000) estimated that the risk for lung cancer from working with amphiboles is 100 times what it is for chrysotile. In fact, the 100 000 death estimates is established from a «combined relative risk» for asbestos, therefore attributing a mortality ratio from exposure to amphiboles to workers working with chrysotile. As logical as saying that a mix of water and poison would kill people; half of them from the ingesting the poison, the other half from water!

Moreover, the 100,000 deaths estimate does not take into account the fact that exposure levels have dramatically decreased in the last decades. In the latest report published under the aegis of the WHO<sup>1</sup>, the authors acknowledges that there is a difference in risk between chrysotile asbestos and the amphibole varieties and that the risk from low exposure levels is undetectable.

In chapter 21, p.1687 of this scientific study, the authors state: « Currently, about 125 million people in the world are exposed to asbestos at the workplace. According to global estimates at least 90,000 people die each year from asbestos-related lung cancer. In 20 studies of over 100,000 asbestos workers, the standardized mortality rate ranged from 1.04 for chrysotile workers to 4.97 for amosite workers, with a combined relative risk of 2.00. It is difficult to determine the exposures involved because few of the studies reported measurements, and because it is a problem to convert historical asbestos measurements in millions of dust particles per cubic foot to gravimetric units. **Nevertheless, little excess lung cancer is expected from low exposure levels.** »

So, if exposure to chrysotile does not present a significant health risk, and if low exposures level does not present excess in lung cancer, where do the 100 000 annual death figure came from?

1 Concha-Barrientos M, et al. (2004) "Comparative Quantification of Health Risks: Global and Regional Burden of Disease Attributable to Selected Major Risk Factors". in: Ezzati M, Lopez AD, Rodgers A, Murray CJL, eds. Geneva: World Health Organization, chapter 21, pp.1651–1801.

## The Risk of Projection

In the 1980's, the U.S. EPA established a model for asbestos related diseases in relation with the number of workers exposed. This model gave dramatic numbers, leading to a series of measures that were not related to the nature of the problems. The U.S. Congress passed the Asbestos Hazard Emergency Response Act (AHERA) in 1986. It ordered school districts to locate all asbestos in their buildings and create a plan to manage it. It also imposed tight regulations on asbestos removal, raising costs and ensuring that the image of asbestos removal workers in spacesuits would keep fears high.

AHERA requirements have cost an estimated \$50 billion over the past 20 years. It was found that the absence of excess lung cancers among residents of chrysotile mining towns implies a risk at least 15 times smaller than that predicted with the EPA model, and the number of mesotheliomas observed is at least 20 times smaller than that predicted by the EPA model. In 1990, the EPA issued the Green Book, which said asbestos in schools and offices presented a low risk. It noted that improper asbestos removal could increase exposure by stirring up dust unnecessarily.

However, the EPA has never sustained an effort to reverse the multibillion-dollar asbestos removal effort that its early pronouncements sparked.

Why have billions been spent attacking a minor health risk?

The experts say the fear created by the health tragedy that befell asbestos workers – real and projected numbers – and the multibillion-dollar lawsuits that followed had overwhelmed the scientific evidence.



## In Conclusion

Reacting to the fact that chrysotile would not be included in the Rotterdam Convention during the 2006 meeting and would not be discussed until 2008, Ban Asbestos co-ordinator Laurie Kazan-Allen stated that:

«At least 200,000 workers will be killed by asbestos-caused diseases before the proposal is tabled again».

Like if an immediate ban on chrysotile trade would solve 50 years of negligence!

This is just another example demonstrating that the international Ban Asbestos secretariat takes people and medias for imbeciles, and that those who are working for a total ban of chrysotile are poorly informed or is maybe seeking such for vested commercial interest.

No one can stop denigration campaign lead by parties having an interest with the prohibition of chrysotile, but it has thus become disturbing that inside both the WHO and the ILO, some people in key positions are embarking on a campaign for a global ban of asbestos based on a very selective and partial reading of the evidence.



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