

Dynamic guidance plays a key role in evaluating the safety of toxic chemicals

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Vanessa Zainzinger wrote an article entitled “Critics pan EPA plan for weighing toxic chemical risks” (1). Critics mentioned that EPA’s approach is so far outside of the scientific mainstream on systematic reviews (1). However, the conventional approach which critics recommended has a significant problem. Historically, asbestos fibers have been widely used for its resistance to fire or heat, strong, durable, acids, and friction. Asbestos fibers are often mixed with cement or woven into fabric or mats. However, the first diagnosis of asbestosis was made in the UK in 1924 (2). During World War II, 16.1 million Americans were called to arms (3). The combat death rate was about 18 per thousand service members (3). About 4.3 million Americans worked in shipyards during the war (3). For every thousand wartime shipyard employees, about 14 died of asbestos-related cancer, and an unknown number died of an asbestos disease called asbestosis, or complications from it (3). In the late 1970s, court documents proved that asbestos industry officials knew of asbestos dangers since the 1930s and had concealed them from the public (3). Along with the progress of science, guidance to the safety of toxic chemicals should be dynamically updated with data disclosure in public. Based on the described article, I don’t know whether the proposed EPA plan is better than the conventional approach, or not. By all means, we should avoid such asbestos tragic incident with government’s decades of denial against toxic chemicals.

#### References:

1. Vanessa Zainzinger, Critics pan EPA plan for weighing toxic chemical risks, Science 17 Aug 2018:Vol. 361, Issue 6403, pp. 631-632
2. [https://web.archive.org/web/20131021061734/http://www.silverdell.plc.uk/images/downloads/Silverdell\\_History\\_of\\_Asbestos.pdf](https://web.archive.org/web/20131021061734/http://www.silverdell.plc.uk/images/downloads/Silverdell_History_of_Asbestos.pdf)
3. <http://www.asbestos-attorney.com/pilot3-1.htm>