

FORMALDEHYDE: THE PIECES FIT



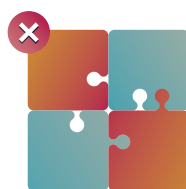
Put together, the lines of scientific evidence demonstrate that formaldehyde does not cause leukemia.

It is critical to consider all the lines of evidence (pieces of the scientific puzzle) to understand the toxicological properties of a substance and the potential risks associated with exposure.

Chemical assessments must be based on realistic assumptions and the latest scientific information when establishing a “safe” exposure level. There is a rich body of epidemiological, toxicological and mechanistic data that fits together in the puzzle and supports the existing safe exposure levels developed by the World Health Organization and the European Union. Additionally, new research conducted since 2011, when the National Academy of Science (NAS) originally questioned the EPA’s conclusion that formaldehyde causes leukemia, have conclusively demonstrated that formaldehyde cannot cause leukemia at relevant levels of human exposure. As such, it is concerning that the 2022 draft of the Environmental Protection Agency’s (EPA) again failed to integrate the science and inappropriately concludes that formaldehyde causes leukemia at concentrations well below the exposure limits established by the WHO and European Union.



The pieces fit together to support a safe level of exposure



The pieces don’t fit together in order to conclude causality of leukemia

Why The Pieces Fit to Complete the Picture: There is no Causal Link Between Formaldehyde and Leukemia

A Dose-Response has not been Supported

According to the weight-of-scientific evidence, even at concentrations higher than those typically found in homes and the workplace, no effects were demonstrated to conclude a link between formaldehyde exposure and leukemia.

Human Evidence Is Clear

No well conducted epidemiology study has shown a causal link between formaldehyde and leukemia. Early studies have been updated and continue to show no cause and effect association.

Indisputable Data Demonstrates Formaldehyde Does Not Reach Distant Sites in the Body

Numerous state-of-the-art studies by university researchers show that inhaled formaldehyde does not migrate beyond the nose and cannot reach the blood or bone marrow, therefore demonstrating the biological implausibility to cause leukemia.

No Supporting Animal Research

Several well conducted carcinogenicity studies in laboratory animals, as well as government-funded research in two strains of mice genetically predisposed to develop leukemia showed no leukemia effects after extremely high formaldehyde exposure.

We Have A Clear Picture

According to several regulatory bodies and scientific agencies, the weight of evidence clearly indicates that formaldehyde poses no risk at environmentally relevant exposure levels. Decades of research, hundreds of published scientific papers, and global agencies including The World Health Organization (WHO) and The European Chemicals Agency have found that there is no association between formaldehyde and leukemia.

Learn more at formaldehyde.americanchemistry.com.