Di-2-ethylhexyl Phthalate (DEHP)

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Di-2-ethylhexyl Phthalate (DEHP) Latest News

A recent study in The Lancet eBioMedicine found a strong correlation between exposure to Di-2-ethylhexyl phthalate (DEHP) and increased cardiovascular mortality, especially in the 55–64 age group.

About Di-2-ethylhexyl Phthalate (DEHP)

- ***Di-2-ethylhexyl phthalate (DEHP)* is a synthetic chemical primarily used as a plasticiser**, meaning it is added to plastics to **make them more flexible, durable, and resistant to breaking**.
- **DEHP is a colourless, oily liquid** with **little to no odour**, and is **soluble in oils but not in water**. It is **widely used in the manufacture of polyvinyl chloride (PVC) plastics**.
- **Alternate names for DEHP include Dioctyl Phthalate (DOP)** and **Bis(2-ethylhexyl) Phthalate (BEHP)** , often found in industrial and consumer products.
- **DEHP is prevalent in everyday items**, such as **food packaging materials, medical devices (like IV tubes), children's toys, shampoos, lotions, and vinyl flooring**, making **human exposure widespread and continuous**.

- **In 2018, exposure to DEHP was linked to around 356,238 global deaths** in that age group, accounting for **over 13% of global cardiovascular deaths** for individuals aged 55–64.
- **India accounted for the highest number of DEHP-related cardiovascular deaths globally**, with an estimated **103,587 deaths**, nearly **one-third of the global burden**.
- DEHP is known to cause **inflammation in coronary arteries**, thereby **increasing the risk of heart attacks and strokes** over time.
- Apart from cardiovascular issues, **DEHP exposure is associated with multiple health disorders**, including:
    - Obesity and Type 2 diabetes
    - Hormonal disruptions and infertility
    - Increased risk of certain cancers
    - Premature birth and developmental disorders in infants
- **About 75% of the global DEHP-related deaths occurred in regions like Asia, the Middle East, and the Pacific**, highlighting the **disproportionate burden on developing countries.**

Source: DTE
