Oil-Dispersant Mixtures — Can They Harm ME?

(For more information on each topic, see 2024 EPA petition.)

What are oil-dispersant mixtures and what are the ingredients?

Corexit dispersants 9500A and 9527A are each chemical mixtures that contain exceptional health hazards, like 2-butoxyethanol (9527A) and dioctyl sodium sulfosuccinate, DOSS (both), and that trigger multiple cancer pathways; affect the health of a developing fetus; are respiratory and/or skin sensitizers that cause that cause chronic breathing difficulties and reoccurring skin rashes; are potent neurotoxins affecting memory, emotions, and behavior; and are toxic to multiple body systems, leading to chronic conditions such as blood cancers, asthma, chemical pneumonia, reactive airway disease, and increased risk of coronary heart disease, among other diseases. When crude oil is present with either of these Corexit dispersants, the resulting oil-dispersant mixture is more harmful than oil alone.

Did deep sea dispersant injection for nearly three months keep oil from rising to the sea surface during the BP Deepwater Horizon oil disaster "field test" of this untried technology?

No. The great bulk of oil released from the damaged wellhead rose from the seafloor through nearly a mile (over 5,000 feet) of water column to the sea surface. About 5% or less of the liquid oil droplets remained trapped in the deep intrusion layer with or without dispersant use.

Did massive aerial spraying of surface oil daily for nearly three months during the BP Deepwater Horizon oil disaster keep the crude oil from coming ashore?

No. Once the oil reached the sea surface it was subjected to rapid weathering by photo-chemical oxidation that occurred within four hours in Gulf of Mexico conditions. This greatly reduced the effectiveness of spraying dispersants onto the sea surface by plane or boat and called into question the utility of such application more than 2 miles from an offshore source.

Did aerial spraying of surface oil during the BP Deepwater Horizon disaster make the air more dangerous to breathe?

Likely yes. Lab studies on crude oil with and without dispersant (Corexit 9500A) at working concentrations used in the BP Deepwater Horizon oil disaster found dispersant use *aerosolized* the polycyclic aromatic hydrocarbons (PAHs), a particularly hazardous fraction of crude oil. As aerosols, PAHs can travel longer distances and penetrate more deeply into the alveoli region of the human lungs than as larger particles—yet the increased health risk from the *smaller size* of the PAH aerosols is undetectable using traditional methods of analysis, because the *concentration* remained unchanged.

Can people in coastal areas be exposed to oil-chemical mixtures created offshore?

Yes. Once aerosolized, the oil-dispersant droplets were transported *above* and *within* the marine boundary layer downwind of the spill and over 80 miles inland, affecting air quality in downwind communities. Much of the surface oil that wound up on the beaches was weathered oil-dispersant mixtures, present as fine coatings of sand grains, residual tar balls and weathered

materials, and submerged sediments or coarsely aggregated material in coastal waters where people walked, waded, and swam throughout the spill area during the response.

Can people in coastal areas be exposed to dangerous levels of oil-chemical mixtures?

Yes. Weathered oil-dispersant mixtures were readily absorbed across human skin, especially moist or wet skin. Who doesn't have wet or moist skin at the beach? Extraordinarily high levels of oil contaminants found in crude oil and dispersants were found in the blood of response workers and coastal residents from children to elders during the spring and summer months of peak oil spill emissions during the BP Deepwater Horizon disaster. The levels of oil contaminants in the blood exceeded the 95th percentile range of the general population.

What do initial symptoms of oil-dispersant exposure look like?

Many initial symptoms of oil-dispersant exposure mimic common cold or flu symptoms, including difficulty breathing, coughing, dizziness, headaches, fatigue, and tightness in chest. Other initial symptoms resemble allergic reactions like skin rashes or ulcers. These symptoms persist, and they don't respond to treatment with antibiotics (if the cause was chemical, not biological like a virus).

Can my regular doctor treat me for oil-dispersant symptoms?

Likely no. Doctors must be trained in a specialty field, Occupational and Environmental Medicine, to understand the environmental exposure history. Successful treatment of long-term harm from oil-dispersant exposures and the other exceptional health hazards depends on early intervention.

Who is liable for harm caused by Corexit dispersants?

The federal government (EPA): A court found Corexit Manufacturer was not liable for harm caused by its product during oil spill response—because the federal government authorized use of Corexit dispersants under the National Contingency Plan and Clean Water Act.

How do we get EPA to ban Corexit dispersants?

Under new rules driven by a citizen lawsuit, products used in oil spill response can now be removed with cause from the list of products authorized for use. In August 2024, ALERT and allies petitioned EPA to remove Corexit 9527A and 9500A from the authorized list. But EPA needs to hear from YOU. These Corexit dispersants are stockpiled for immediate use in every coastal state. Write a letter using ALERT's template.

Can my state lead agency for oil spill response refuse to use Corexit dispersants?

Yes. Under new rules driven by a citizen lawsuit, states are now required to be part of the decision-making process to determine what dispersants, if any, can be used safely in their area—and a state can withdraw its approval of preauthorized use of Corexit dispersants. YOU will live with or die from the consequences of these decisions. This is why your state lead agency for oil spill response and governor need to hear from YOU. Write a letter using ALERT's template.

Take a stand — Demand EPA and YOUR state EXIT Corexit dispersants!