

## SHIP AIR POLLUTION

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Ships transport 90 percent of the world's consumer goods, including computers, cars, shoes, clothes and toys. People and the environment pay a high price for these cheap goods in the form of cancers, breathing problems and premature death from inhaling air toxics in ship engine exhaust. Container and cruise ships also pollute the oceans and coastlines by dumping sewage, dirty graywater, and garbage directly overboard.

Because the shipping industry is under-regulated, these environmental and public health impacts will escalate tremendously as global trade triples over the next two decades – until new air pollution and no-discharge laws are enacted by national and international bodies.



Photo by Steve Ringman, The Seattle Times  
A container ship travels through the Santa Barbara Channel along the California coast.

## EMISSIONS AND BUNKER FUEL

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- Ships generate 30 percent of the world's smog-forming emissions.
- Bunker fuel burned by ships is 1,000 times dirtier than highway diesel used by trucks and buses.
- A single ship coming into harbor produces the smog-forming emissions of 350,000 new cars.
- Every day ships docked in Los Angeles and Long Beach produce the air pollution of 1 million cars.
- Ship engines are far dirtier than on-road engines due to lack of strong regulation.

## HUMAN HEALTH

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- Ship exhaust contains harmful air toxics that cause cancer, respiratory illness and premature death.
- Ship air pollution often disproportionately harms poor people of color who live near ports.
- More than one in 10 children has asthma in the world's biggest port cities.
- Near the Ports of Los Angeles and Long Beach, cancer risk due to breathing air toxics is five times higher than normal.

## CLIMATE CHANGE

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- Ships burn tons of fuel per hour, generating large volumes of global warming gases and black carbon that contribute to climate change.
- Researches suspect that the black soot from ship smokestacks settle on polar ice sheets and help cause melting.
- The world's shipping fleet generates about four percent of the world's carbon dioxide emissions.
- The shipping industry burns 300 million tons of bunker fuel per year.