

Everything you wanted to know about microbes and oil spills but were afraid to ask

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Is it true that microbes cleaned up the oil spill in the Gulf of Mexico? Can bacteria really "eat" oil, and if so, how? To help clear up the confusion the American Academy of Microbiology has brought together the nation's leading experts to consider and answer some of the most frequently asked questions regarding microbes and oil spills.

"Long before the Gulf oil spill microbes evolved the ability to degrade the complex [hydrocarbon](#) mixture we call petroleum. They were already present in the [Gulf of Mexico](#) and ready to attack the oil when the spill occurred," says Ronald Atlas of the University of Louisville, a member of the steering committee.

The report entitled *FAQ: Microbes and Oil Spills* is based on the deliberations of over 20 of the nation's leading experts who came together for one day to develop clear answers to seven frequently asked questions regarding the role of microbes in the oil spill.

The questions considered by the report are:

- What does it mean to say microbes can 'clean up' an oil spill?
- Where do the 'oil-eating' microbes come from?
- What do the microbes need in order to biodegrade oil and how long does it take?

- How do dispersants and nutrients affect oil biodegradation?
- Is it possible to engineer microbes so they work even better?
- What happens to the oil after the microbes degrade it?
- What happens to the microbes when the oil is all gone?

Most answers begin with a simple paragraph summarizing what is known, followed by a more detailed explanation. Spread throughout the report are sidebar boxes discussing issues related to the questions such as a brief introduction to oil or new ways to find oil-eating microbes.

FAQ: Microbes and [Oil Spills](#) is the first in a new series of reports designed to provide a rapid response to emerging issues. Traditionally Academy reports are based on multi-day colloquia after which the final report can take up to a year to develop. The FAQ series will be based on single-day meetings focused on specific questions after which a final report will be published in 2-3 months.

"The Academy FAQ reports explain complex microbiological problems in a timely, balanced format that is easily understandable by the public, the media, and policymakers," says Stanley Maloy of San Diego State University who moderated the colloquium.

More information: A PDF of *FAQ: Microbes and Oil Spills* can be found online at: [academy.asm.org/index.php/coll ... a-reports/faq-series](http://academy.asm.org/index.php/coll...a-reports/faq-series)

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