

SAFETY TALK

June 18, 2020

Soap Destroys COVID-19

Hand hygiene is an important routine at home and at the workplace to stay healthy and prevent the spread of COVID-19. At work each person is expected to wash or sanitize their hands prior to starting work, before and after eating, drinking, or smoking, after using the toilet, after handling any shared tools or equipment, and prior to leaving work.

When you wash your hands with soap and water, you surround any microorganisms on your skin with soap molecules. The hydrophobic tails of the free-floating soap molecules attempt to evade water; in the process, they wedge themselves into the lipid envelopes of certain microbes and viruses, prying them apart.

“They act like crowbars and destabilize the whole system,” Essential proteins spill from the ruptured membranes into the surrounding water, killing the bacteria and rendering the viruses useless.

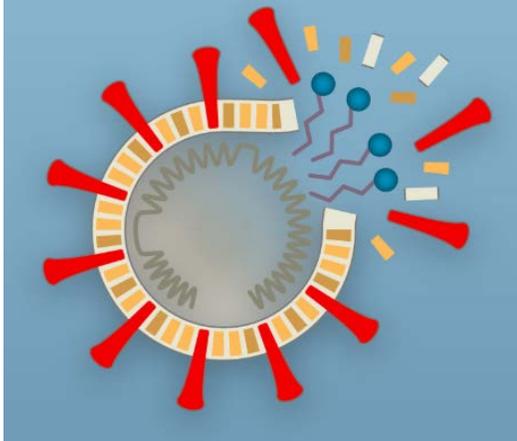
Soap molecules also disrupt the chemical bonds that allow bacteria, viruses, and grime to stick to surfaces, lifting them off the skin. Micelles can also form around particles of dirt and fragments of viruses and bacteria, suspending them in floating cages. When you rinse your hands, all the microorganisms that have been damaged, trapped, and killed by soap molecules are washed away.

Washing with soap and water is a key public health practice. But **the technique works only if everyone washes their hands frequently and thoroughly.**

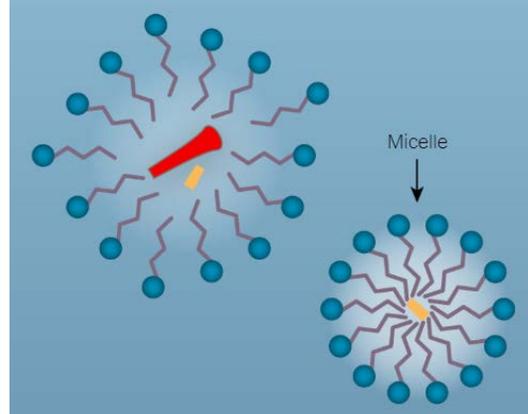
Soap is more than a personal protectant; when used properly, it becomes part of a communal safety net. At the molecular level, soap works by breaking things apart, but at the societal level, it helps hold everything together. Remember this the next time you have the impulse to bypass the sink: Other people’s lives are in your hands.

(Information reproduced from The New York Times – Mar 13, 2020)

SOAP DESTROYS THE VIRUS when the water-shunning tails of the soap molecules wedge themselves into the lipid membrane and pry it apart.



SOAP TRAPS DIRT and fragments of the destroyed virus in tiny bubbles called micelles, which wash away in water.



THINK SAFETY
WORK SAFELY



Project: _____ Address: _____
 Employer: _____ Supervisor: _____
 Date: _____ Time: _____ Shift: _____
 Number in Crew: _____ Number Attending: _____

Other safety concerns or suggestions:

Record of those attending:

Name: (please print)	Signature:	Company:
1.		
2.		
3.		
4.		
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14.		
15.		

Manager's remarks: _____

Manager: _____ (signature) Supervisor: _____ (signature)