

## Does Hot Water Hand Washing Kill More Germs Than Cold Water Hand Washing?

The short answer is NO, the long answer is:

### The Facts

Soap and warm water have long been said to prevent the spread of infections, but is warm or hot water really more effective than cold?

In its medical literature, the Food and Drug Administration states that hot water comfortable enough for washing hands is not hot enough to kill bacteria, but is more effective than cold water because it removes oils from the hand that can harbor bacteria.

But in a 2005 report in the Journal of Occupational and Environmental Medicine, scientists with the Joint Bank Group/Fund Health Services Department pointed out that in studies which subjects had their hands contaminated, and then were instructed to wash and rinse with soap for 25 seconds using water with temperatures ranging from 40 degrees Fahrenheit to 120 degrees, the various temperatures had "no effect on transient or resident bacterial reduction."

They found no evidence that hot water had any benefit, and noted that it might increase the "irritant capacity" of some soaps, causing contact dermatitis. "Temperature of water used for hand washing should not be guided by antibacterial effects but comfort," they wrote, "which is in the tepid to warm temperature range. The usage of tepid water instead of hot water also has economic benefits."

### Wash Your Hands: The Right Way

When washing your hands with soap and water:

- Wet your hands with clean running water and apply soap. Use warm water if it is available.
- Rub hands together to make a lather and scrub all surfaces.
- Continue rubbing hands for 15-20 seconds. Need a timer? Imagine saying "Happy Birthday" twice through to a friend.
- Rinse hands well under running water.
- Dry your hands using a paper towel or air dryer. If possible, use your paper towel to turn off the faucet.
- Always use soap and water if your hands are visibly dirty.

If soap and clean water are not available, use an alcohol-based hand rub to clean your hands. Alcohol-based hands rub significantly reduce the number of germs on skin and are fast-acting.

When using an alcohol-based hand sanitizer:

- Apply product to the palm of one hand.
- Rub hands together.
- Rub the product over all surfaces of hands and fingers until hands are dry.