Hello, and welcome to As It Is, from VOA Learning English. I'm Steve Ember in Washington.

Today on the program, we report on how antibacterial soap manufacturers must prove their products are more effective than normal soap and water.

But first, researchers have developed a medical device which they say can find malaria infections in the human body. The laser beam scanner is the first device that can find the sometimes-deadly disease without going inside the body. VOA reporter Christopher Cruise has more.

Device Finds Malaria Infections in Seconds

At the present time, a trained medical worker needs costly equipment, a person's blood and a lot of time to know if a person has been infected with malaria. Trained workers, equipment and time are not always available in poor parts of the world.

The newly-developed device only needs a person to place a finger on a laser device. Dr. Dmitri Lopotko is a researcher at the department of biochemistry and cell biology at Rice University in Houston, Texas.

"We shine a very short light pulse through the skin. And this light pulse is absorbed only by malaria parasites because of the wavelength we use. And in response to this short light pulse, the parasite literally explodes."

The light pulse comes from a low-powered laser. It has less power than a laser pointer. It shines on a very tiny particle called the hemozoin, which is produced by the malaria parasite once it has infected red blood cells. Hemozoin crystals are not found in red cells that are not infected with malaria.

As the crystals are heated by the laser, they create small bubbles inside infected cells. Dr. Lopotko says the bubbles explode, and then make a sound that scientists can hear and count.

"You can detect just (a) few infected cells by a million normal cells."

Dr. Lopotko says when researchers tested the device it was never wrong, and it was able to find malaria infection early, when treatment is very important.

The device can be carried, and uses batteries. It costs about $10,000 to $20,000 to make, but Dr. Lopotko says considering the number of people it can test, that is not a lot of money.

"Each device will be capable to screen more than 200,000 people per year. So the cost of analysis for each patient will be less than 50 cents."

People without medical training can use the device to discover whether people are infected with malaria.

Dr. Lopotko says the light beam used by the device is safe. Researchers will now test the device at a hospital in Houston that cares for patients infected with malaria. If those tests are successful, researchers will test the device throughout the world this year.

An article describing the malaria detection device was published in the journal Proceedings of the National Academy of Sciences.

I'm Christopher Cruise.

And I'm Steve Ember. You are listening to As It Is from VOA Learning English.

FDA Investigates Antibacterial Soaps

One of the best ways to avoid getting sick is washing your hands with soap and water. It has been shown effective in removing harmful germs and preventing their spread. But some soaps may be causing more harm than good. VOA's Milagros Ardin has more.

Some companies have gone to great lengths to manufacture germ-killing products, like antibacterial soaps. In the United States, a federal agency recently called on the makers of such soaps to prove they are more effective than traditional soap and water. The Food and Drug Administration said the widespread use of antibacterial soap may be partly to blame for an increase in rising rates of drug-resistant bacteria. Some evidence has suggested the products may even be harmful to your health.

The FDA has proposed that manufacturers be required to prove that antimicrobial soaps lower rates of disease more than other soaps. It also would require the companies to show how these cleansers do more good than harm.

FDA officials estimate there are about 2,000 antimicrobial soaps on the market. People may think such products do a better job protecting them from getting sick. However, some studies suggest long-term use of the products can affect hormone levels and may be linked to cancer.

The Natural Resources Defense Council has taken legal action against the FDA for letting companies use the chemicals triclosan and triclocarban in soaps. Mae Wu is a lawyer with the group.

"I think it's a great first step!"

But for soap industry representatives say they do not understand the FDA proposal. In a statement, the Personal Care Products Council says it has

already given "in-depth data" to the government. It says the information shows that antibacterial soaps are more effective in killing germs when compared with non-antibacterial soap. It also says the soaps do not add to resistance of antibiotic drugs.

Sandra Kweder is the deputy director of the FDA. She says her agency's move is an attempt to learn the benefits of using antibacterial products and their possible risks. If the proposed rule is approved, soap manufacturers would have to carry out studies showing their products are safe and more effective than plain soap.

If approved, Ms. Kweder expects the rule would take effect in 2016.

I'm Milagros Ardin.

And that's our program for today. Be sure to join us again tomorrow for another edition of As It Is. I'm Steve Ember. Thanks for listening!