

EXCLUSIVE: Sanitizer opposed by CDC kills coronavirus "surrogate" in lab tests

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Wednesday, April 1st 2020

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WASHINGTON (SBG) - New scientific testing has found that a commonly used hand sanitizer -- whose active ingredient is not recommended for popular use by the Centers for Disease Control -- is overwhelmingly effective against a strain of the coronavirus highly similar to the one now wreaking havoc around the world, Sinclair has learned exclusively.

The testing conducted by BioScience Laboratories in Bozeman, Montana was commissioned by Three Kings Corp., the Mississippi-based company that manufactures the hand sanitizer, known as "DAB." Unlike the hand-rub products that CDC recommends on its website -- limited to alcohol-based sanitizers, manufactured with concentrations of 60 percent ethanol or 70 percent isopropanol -- DAB, like numerous other commercially available sanitizers, features an active ingredient that is not derived from alcohol: benzalkonium chloride (BZK). It's an ammonium compound that has been approved for registration by the Environmental Protection Agency and for over-the-counter sale by the Food and Drug Administration.

Dr. Sidney Bondurant, the chief medical officer for Three Kings, told Sinclair that BZK hand-rub products demonstrate greater longevity than alcohol-based ones in killing bacteria that have come into contact with human skin. "We know that we've got persistence," he said, citing an academic paper he co-authored last year in *The American Journal of Infection Control*. The study showed that BZK-manufactured products demonstrated "persistent antibacterial efficacy" even up to four hours after bacterial contact with skin -- far longer than the ten minutes or so of skin protection offered by alcohol-based sanitizers.

That paper prompted Bondurant to commission the BioScience Laboratories, in Montana, for a test of DAB's efficacy against the coronavirus. On its Facebook page, the lab says the facility "specializes in the evaluation of Topical Antimicrobial products and has used various bacterial and spore strains as challenge organisms for determining the effectiveness of antimicrobial/antibacterial products."

The study's leader, a virologist named Dr. Volha Teagle, was unable to obtain the strain of the coronavirus that emanated from Wuhan, China: the novel COVID-19 now causing devastation across the globe. So her team selected a structurally similar strain, known as 229E, and tested DAB against it.

"In the lab, DAB did eliminate 99.9 percent of the virus in the 30-second test," Bondurant said. "We also carried the test out to 60-seconds and 120-seconds of exposure time. All three of the tests showed the same thing."

"Since the action of benzalkonium is against the envelope of the virus, and the envelope does not mutate," Bondurant added in an email, "the virologists say that activity against the surrogate almost certainly means the compound will be active against the Wuhan."

The website for the Centers for Disease Control, last updated March 18, acknowledges that BZK products, such as DAB, enjoy the approval of the Food and Drug Administration. But CDC says it does not actively recommend BZK products because "available evidence indicates benzalkonium chloride has less reliable activity against coronavirus than either of the alcohols."

Contacted last week about other BZK products, a spokesman for CDC told Sinclair: "CDC guidelines are, and always will be, based on the best available science. We continue to evaluate our guidance based on new and emerging data. There is no plan at this time to change the current recommendation."

A separate CDC website, last updated on March 14, stated that "the exact role of direct and indirect spread of coronaviruses between people that could be reduced by hand hygiene is unknown at this time." But the centers added that "hand hygiene for infection prevention is an important part of the U.S. response to the international emergence of COVID-19."

In an email late Wednesday, Dr. Teagle, of BioScience Laboratories, said the facility has been testing a variety of formulations against viruses, including members of the coronavirus family, for over fifteen years. "Coronaviruses are large, enveloped viruses that are very sensitive to inactivation with many different chemicals...Many other viruses possess the same characteristics as coronaviruses, such as a viral envelope, and they, too, are very susceptible to inactivating agents."

"CDC still is recommending just alcohol sanitizer," Bondurant said in a subsequent email, "but we think that is based on a lack of knowledge about our data on the effectiveness of DAB against this virus."

Experts at CDC will not be able to evaluate the BioScience testing until the results are written up for a scientific, peer-reviewed journal, an event unlikely to occur before year's end. Bondurant said a pair of physicians, including one who formerly served in the White House, are presently embarked on that effort.