

# Infrared thermometers used for COVID-19 testing do not pose risk to pineal gland

**Source:** <https://apnews.com/afs:Content:9121703294>

By ALI SWENSON July 28, 2020

**CLAIM:** Infrared thermometers, which are held near the forehead to scan body temperature without direct contact, point an infrared light directly at the brain's pineal gland, exposing it to harmful radiation.

**AP'S ASSESSMENT:** False. Infrared thermometers don't emit radiation into the brain; they sense heat emitted by the body. They pose no risk to the pineal gland, which is located deep within the brain, according to Dr. Haris Sair, director of neuroradiology at Johns Hopkins University.

**THE FACTS:** Non-contact infrared thermometers that are held up to a person's forehead have become popular during the COVID-19 pandemic as businesses and governments seek ways to detect possible infection without risk of transmission.

These thermometers won't hurt the small endocrine organ deep in your brain called the pineal gland, despite posts arguing they might.

Social media posts circulating widely on Facebook this week falsely suggested the thermometers are aimed at the same "exact point" as the pineal gland and could be exposing it to some sort of harmful radiation or infrared light.

"WHY ARE THEY AIMING A LASER RAY AT OUR PINEAL GLAND FOR A VIRUS THAT HAS A 99.9% SURVIVAL RATE?" read the text on one viral image, which was shared in several posts collectively viewed more than 100,000 times.

Some social media users also speculated on why the thermometers were allegedly targeting the pineal gland — a tiny gland that produces melatonin, among other hormones, and has colloquially been called the "third eye."

"For century's the pineal gland has been connected with spirituality," read one Facebook post, "and thought to be the means of communicating with God."

According to Sair, these posts are false on two counts: the notion that these thermometers target the pineal gland, and the notion that they emit radiation.

Infrared thermometers are meant to pick up the natural infrared wavelengths that your body emits, Sair said. They don't send infrared light or wavelengths into the body.

"It's not sending any kind of signal," he said.

The forehead is also not particularly close to the pineal gland which is located deep within the brain, past several centimeters of brain tissue. The thermometers are designed to pick up surface temperatures.

"This thing is smack dab right in the middle of the head," Sair said. "Nothing is happening between the thermometer and the pineal gland."

Tim Robinson, vice president of marketing at the Utah-based temperature instrument retailer ThermoWorks, said it's a "common misconception" that non-contact infrared thermometers are transmitting waves into the body.

"There's that sensation that you're somehow sending something that's going to bounce back, but none of that is true," he said. "It's just a catcher. It's catching light waves."

Some infrared thermometers include a laser to direct the placement of the tool on its target, but it has no purpose related to measuring temperature, according to Robinson. With such products, manufacturers include warnings to avoid looking directly at the lasers, which can harm the eyes.

The Food and Drug Administration has more information about these devices, and how they can be used safely and effectively, on its website.

-

This is part of The Associated Press' ongoing effort to fact-check misinformation that is shared widely online, including work with Facebook to identify and reduce the circulation of false stories on the platform.

Here's more information on Facebook's fact-checking program:

<https://www.facebook.com/help/1952307158131536>