

## Taking your temperature doesn't require a fancy thermometer

By **Eve Glicksman**



April 5, 2020 at 10:00 a.m. EDT

I can't be the only one nervously lifting the back of my (scrupulously washed) hand to my forehead for quick assurance I've eluded fever for another day.

Some will prefer using a scientifically tested tool called a thermometer to measure temperature. A warmer-than-normal reading is a red flag that your body is fighting off infection.

With any luck, you already have a thermometer because lately they are as hard to buy as toilet paper. But getting a second thermometer is optimal if someone in your household has covid-19 symptoms, says Michael Hochman, an internal medicine physician and director of the Gehr Family Center for Health Systems Science & Innovation at Keck Medicine at the University of Southern California.

If you're in the market, an inexpensive, easy-to-use digital thermometer is fine, experts say — the no-frills type in drugstores and supermarkets for under \$20.

"The accuracy is not based on how much it costs," says Gary L. LeRoy, a family physician in Dayton, Ohio, and president of the American Academy of Family Physicians.

For adults and children age 4 and older, oral temperature taking is most popular. Rectal thermometer readings are more accurate, researchers found, but the slight outcome difference is not significant for ordinary use.

Some basics: Before each use, wash your thermometer in cool water. Then wipe it down with rubbing alcohol and rinse again. Don't eat or drink anything hot or cold for at least five minutes before placing the thermometer under your tongue. Recently being out in the cold or heat or in a hot tub could also throw off a reading, as could vigorous exercise.

Remember to keep your mouth completely closed and breathe through your nose during the 30 to 40 second reading. When finished, clean the thermometer again with water and alcohol. Use a towel when you put it away or hand it to someone, Hochman suggests.

Rectal thermometers are advised for children up to age 3. To take rectal temperatures, use water-soluble or petroleum jelly for lubrication and insert the thermometer no more than a half-inch into the rectum. Never use the same thermometer for taking oral and rectal temperatures, LeRoy says.

Ear thermometers aren't as precise as oral or rectal readings but acceptable for adults and children older than 3 months. Armpit temperature-taking is the least accurate and should be avoided unless it is the only option, LeRoy says.

Mercury thermometers? LeRoy scolded me when I confessed that's all I have. OK boomer. While they work, these thermometers were phased out in 2011. If the glass cracks, mercury exposure is hazardous. If you own one, you are advised to surrender it and follow hazardous waste disposal recommendations where you live.

Now for the numbers. Conventional wisdom is that 100.4 degrees signals fever. "Normal" varies, however, and ranges from 97 to 99.5 degrees in people. Women tend to have higher temperatures than men, older adults typically run lower. Rectal and ear readings are usually higher than temperatures taken orally.

Your temperature can change as much as a degree depending on the hour, too — lowest in the morning and increasing throughout the day. "If you are 100.4 degrees in the morning, that's a real fever," Hochman says. But if your temperature goes up in the afternoon or evening, that's "natural variation" he says, and doesn't mean you are sicker.

"Don't make yourself crazy by taking your temperature more than two to three times a day," Hochman adds for those with symptoms. The thermometer provides one piece of information, he stresses. He is more worried by someone who appears ill or confused than a number on a thermometer.

LeRoy points out that a low reading does not guarantee you are fine. "You could be in a chilling phase of the fever," he explains, when the body is trying to reset its temperature. Recheck your temperature from time to time if you are not feeling well, he says.

When to call a doctor about fever? "You can be febrile for several days without being alarmingly ill," Hochman says. With covid-19, it is the cluster of symptoms with fever that are concerning — a dry cough, shortness of breath, fatigue.

"Use your judgment," Hochman says. "Be guided by the overall picture."

Updated February 24, 2021

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**multatuli** 10 months ago

I still have mercury oral thermometers in the house, and have no problem with them. I've never seen one break. Metallic mercury, unlike it's compounds, is not as fearsome as some would have us believe. My thermometers don't need batteries, and while they need a little technique to shake the column down before each use, they have served us well for a hundred and fifty years and I don't see the need to replace mine.

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**HokieBabe1** 10 months ago

I know...you use it, you wash it off and put it back in the case. SMH.

Everything is a goal line these days.

If you have one...use it. Going out and buying a digital thermometer is NOT being more environmentally conscience. Using what you have is.

Like 👍 17   Link ↻   Report 🚩



**multatuli** 10 months ago

Thanks for that. I'm not really a hundred and fifty years old, by the way, but Trump sometimes makes me feel that way.

Like 👍 8   Link ↻   Report 🚩

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 **Buddveccermatovich** 10 months ago (Edited)



**duddyoscarinclair** 10 months ago (edited)

“If you own (a mercury thermometer), you are advised to surrender it and follow hazardous waste disposal recommendations where you live.”

This is bad advice if a mercury thermometer is all you have. They are supposed to last indefinitely if you can avoid breaking them. I tried to replace it with a digital, but had to return the digital because it was defective.

Like 26 Link Report



**macjaspy** 10 months ago

Yeah.  
Our digital one has never worked properly.  
We use the old mercury one.  
Thank goodness we have it.

Like 12 Link Report



**Catherine9** 10 months ago

I had two different digitalis by two different manufacturers. Neither of them lasted long at all. I still use the old mercury thermometer that I saved “just in case”. It works.

Like 3 Link Report



**tejanarus55** 10 months ago

Also, mercury thermometers last forever unless they broke. My digital thermometer died a week into lockdown/Stay Home. None to be had in any store. Ordered one (after considerable searching online) the next day. Finally it arrived yesterday more than two weeks after ordering. I think it came from China.  
It works, but sure enough it needs a battery. So did the one that died – but I couldn't get the tiny battery out, or find a replacement for it anywhere.  
I wish I still had my old mercury thermometer.

Like 3 Link Report



**macjaspy** 10 months ago

We have two thermometers.  
One is digital the other mercury

One is digital, the other mercury.

The digital one has never really worked properly.

The mercury one is excellent and quite accurate.

But you have to keep it in your mouth for a few minutes. Not seconds.

NOT giving up the mercury thermometer.

Like  22   Link    Report 

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**NDOKVHA** 10 months ago

I wish I had one.

Like  5   Link    Report 

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**trytobenice** 10 months ago

Same here. Just bought a new digital one in December. It keeps telling me my temp. is 95 degrees. My "back up" mercury thermometer has never failed.

Like  2   Link    Report 

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**AKRivers** 10 months ago *(Edited)*

1) I'm an environmental scientist but came here to tell you that NO ONE is going to surrender their mercury thermometer right now! I've got one, in addition to a digital model. BTW wait more than 30-40 seconds if you are using a mercury thermometer. It can take several minutes to get a good read.

2) Elemental mercury is not an immediate threat to people or the environment. It needs to undergo the process of methylation before it becomes toxic. So if you do happen to break a mercury thermometer, or old school thermostat, etc. right now, don't add concern over Hg exposure to your overall panic. Just try to clean up all the little droplets and wash your hands (which you're doing anyway, right?).

3) If you have a digital meat thermometer that can detect relatively small increments, you can use that. Just be careful when you put the sharp tip under your tongue. And taking your temp on the left side of your mouth is more accurate due to nearby blood flow from your heart.

Like  18   Link    Report 



**BluGrass** 10 months ago

Agree with #3: my Thermanpen gives a highly accurate reading in 3 seconds.

Like 2 Link Report



**cancel dec 4 2020** 10 months ago *(Edited)*

Thanks for the meat thermometer tip. My 2 digis are low / out of battery juice and I'm not going to risk contracting/shedding/spreading for batteries.

And, I can wash it fully well in hot soapy water.

Like 2 Link Report



**Silver Blaze** 10 months ago

If you break a mercury thermometer, the mercury will form little balls. Get down on the floor with a paper cup and some toothpicks and scoot the balls into the cup. No need to touch them.

And a mercury thermometer needs to be in the mouth for three or four minutes. In fact, my digital thermometer recommends the same. And you need to avoid eating or drinking for longer than five minutes—I once had a dinner that included a glass of ice water, put on my coat, and drove 4 miles to a blood drive. I had to sit and pant with my mouth open for about 5 minutes before their thermometer would register any temperature for me!

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**KittyWumpus** 10 months ago

When mercury thermometers were all there was, and the school nurse, the doctor's office and at home (with both the oral and rectal readily available) there MUST have been some breakage along the line.

Does anyone know of a single case of mercury harming anyone during that time?

My old grade and high school had pounds of mercury in barometers. I don't recall one breaking, but if it did, I would have been cleaned up and again, no recollection of any

harm.

I'm not saying mercury isn't a problem. So much of it got pumped into the atmosphere from power generation and also manufacturing. Fish ate it and we ate fish.

But the rare use of a mercury thermometer, while a risk, is far less than what might be as repeated here.

Just be careful. Electricity in the wall will fry you, but we have safeguards and people are careful.

Like  13   Link    Report 



**Sbignewski** 10 months ago *(Edited)*

I have a mercury thermometer and I'm not giving it up till it breaks, which is the only way they ever malfunction.

They're easy to use and *very* highly accurate. They never wear out. They don't require batteries. They're made of glass, so they're quite easily cleaned and sterilized.

And, they never "leak". They either break or they don't, there is no in-between. So long as you don't drop it, ONE will last a lifetime.

We've probably had ours for 30 or 40 years. I don't exactly remember when we bought it, but it still looks just as new as they day we did.

When I pass away a team of brave volunteers wearing protective suits can come here and pick it up with a long pair of tongs, put it in a thick lead box, load it on a special rail car, and haul it carefully off to be buried under a mountain with the rest of the used plutonium. Until then I'll just use it to take my temperature.

Like  11   Link    Report 



**district\_dad** 10 months ago

When I was an undergraduate there was one room in the physics building where there had been a mercury spill from some sort of equipment years and years before. The rule was you couldn't eat in that room

... that was you couldn't eat in that room.

That's all I've got.

Like  1   Link    Report 



**VaBluestocking** 10 months ago

Kitty - I remember as a child about 70 years ago playing with the little silver balls from a broken thermometer and here I am. Not saying mercury is not dangerous – just saying you don't drop dead if you touch it out of a broken thermometer.

Like  5   Link    Report 



**Mister Solo** 10 months ago

We also played with Mercury (or 'quicksilver' as it was called) removed from old light switches back in the 60's. We didn't eat it or anything like that and no apparent ill effects decades later.

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**HappilyRetired2** 10 months ago *(Edited)*

Two additional comments.

- 1) For most women, their temperature will vary with their menstrual cycle even when well.
- 2) Because “normal” temperatures vary with the individual, it is advisable to take some measurements over a period of days, while you are well, to find out what is normal for you.

Like  13   Link    Report 



**Awaywiththepixies** 10 months ago

Add to that some women will have higher than normal temperatures due to menopause.

Like  1   Link    Report 



**Billionaire Mikes Million Minions** 10 months ago

It would be a God send to find a couple of million mercury thermometers in a warehouse right now, along with someone with enough common sense to realize they work (well and about forever) and don't need batteries (another hazardous waste). Good grief.

Like 11 Link Report



**Silver Blaze** 10 months ago *(Edited)*

Yes, but digital have the advantage that the numbers are big enough that you can actually read them. And they don't have to be shaken down, which is when I have broken two of them.

Like 3 Link Report



**dindc2** 10 months ago *(Edited)*

"OK Boomer"?!?!?!? Really, Eve? You even had the nerve to direct your insult at one of the doctors who you used as a source!!! Keep the millennial snark on your own website and out of the pages of the Washington Post. They won't even hire you full-time, LOL.

Like 10 Link Report



**Arezzo** 10 months ago

It's already time to retire this catchphrase.

Like 6 Link Report



**HL-28-East** 10 months ago

The phrase is fine when it refers to a dismissive attitude that ignores reality for millions of people.

It fails when applied to people who just happen to be using older but still accurate technology, like a mercury oral thermometer, that actually works quite well thank you.

Like 4 Link Report



**Feldkirch** 10 months ago

Try writing, "OK, n-word," and see how long before you get fired.

Like  1   Link    Report 

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**rongoodman** 10 months ago

Thoughts and prayers.

Like    Link    Report 

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**litnut** 10 months ago

As if anyone could find a thermometer. I've been looking for a month.

Like  9   Link    Report 

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**Silver Blaze** 10 months ago

Our grocery store had plenty even at the height of the purchasing. (Of course, they weren't with the fever relief (aspirin, etc.), so that may have cut down on the people who could find them to buy them.)

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**GrayDogwood** 10 months ago