



## Test Your Knowledge of Hyperhidrosis Diagnosis + Treatments

1. At what age does the medical condition of hyperhidrosis (excessive sweating) typically first manifest with its symptoms of dripping, slippery, soaking, chilling, and/or embarrassing wetness?

- A. Middle-age and, in women, at menopause
- B. Young adulthood when “real” life gets stressful
- C. Childhood and adolescence

Answer: C

Hyperhidrosis (Hh) usually begins during childhood or adolescence. According to research, 64% of people with excessive sweating of the hands or feet (palmar/plantar Hh) had their sweating disorder manifest before the age of 12. Interestingly, primary hyperhidrosis is different from the “hot flashes” and “night sweats” often associated with menopause and part of Hh’s diagnosis is, the fact, that people with the condition typically do not sweat excessively during sleep. Unfortunately, while excessive sweating tends to begin during youth, contrary to popular opinion, it’s not something sufferers “grow out of” and 88% of Hh sufferers say their excessive sweating has either stayed the same or gotten worse over time. Visit [www.SweatHelp.org](http://www.SweatHelp.org) for more information.

Source:

- Glaser D, Ballard A, Hunt N, Pieretti L & Pariser D. Prevalence of multifocal primary hyperhidrosis and symptom severity over time: results of a targeted survey. *Dermatol Surg* 42:12 (2016): 1347-1353.

2. How long do hyperhidrosis (excessive sweating) sufferers tend to wait before talking to a healthcare professional about their problem?

- A. 6 months
- B. 1 year
- C. 3 or more years

Answer: C

Studies shows that 85% of hyperhidrosis (excessive sweating) sufferers wait 3+ years before talking to a healthcare professional about excessive sweating and 50% wait 10+

years. In other research, 27% of adults with the condition are never diagnosed. This is despite the fact that 60% of hyperhidrosis sufferers indicate excessive sweating has negative impacts on their general health, and despite depression and anxiety being more common among hyperhidrosis sufferers than the general public.

Sources:

- Glaser DA, Hebert A, Pieretti L, Pariser D. Understanding Patient Experience with Hyperhidrosis: A National Survey of 1,985 Patients. *Journal of Drugs in Dermatology*. 2018 17(4):392-396
- Doolittle J, Walker P, Mills T, et al. Hyperhidrosis: an update on prevalence and severity in the United States. *Arch Dermatol Res* doi: 10.1007/s00403-016-1697-9. Published online October 15, 2016.
- Bahar R, Zhou P, Liu Y, Huang Y, Phillips A, Lee T, et al. The prevalence of anxiety and depression in patients with or without hyperhidrosis. *J Am Acad Dermatol* 75:6 (2016): 1126-1133.

3. Compensatory sweating is a common side effect of which of the following hyperhidrosis (excessive sweating) treatments?

- A. Antiperspirants
- B. Botulinum toxin injections
- C. Oral medications
- D. ETS surgery (endoscopic thoracic sympathectomy)

Answer: D

Compensatory sweating is excessive sweating that occurs on the back, chest, abdomen, legs, face, and/or buttocks as a result of ETS surgery (endoscopic thoracic sympathectomy). It can be equally or even more extreme than the original severe sweating problem, usually of the hands (palmar hyperhidrosis), for which ETS was performed to address. In a study involving 220 patients, some degree of compensatory sweating occurred in 94% of those undergoing ETS. Similarly, in a Danish study, 80% of the patients undergoing ETS reported compensatory sweating. Fortunately, there are numerous *other* treatments available to help those living with excessive sweating to find relief. Visit [www.SweatHelp.org](http://www.SweatHelp.org) to learn more.

Sources:

- Chwajol M, Barrenechea IJ, Chakraborty S, Lesser JB, Connery CP, Perin NI. Impact of compensatory hyperhidrosis on patient satisfaction after endoscopic thoracic sympathectomy. *Neurosurgery*. 2009 Mar;64(3):511-8; discussion 518. doi: 10.1227/01.NEU.0000339128.13935.0E. PMID: 19240613.
- Licht PB, Clausen A, Ladegaard L. Resympathectomy. *Ann Thorac Surg*. 2010 Apr;89(4):1087-90. doi: 10.1016/j.athoracsur.2010.01.005. PMID: 20338311.

4. Which of the following treatments has *not* been reviewed (approved or cleared) by the FDA specifically for the management of excessive sweating (hyperhidrosis)? Check all that apply.

- A. Botulinum toxin injections
- B. Iontophoresis
- C. Qbrexza®
- D. Robinul (glycopyrrolate)

Answer: D

Among commonly accepted therapeutic options for hyperhidrosis, the oral anticholinergic medication Robinul (glycopyrrolate) has *not* been submitted to FDA review for the treatment of excessive sweating. Robinul is, instead, used “off label” to treat excessive sweating. Because anticholinergic medications work systemically and cannot target any one body area, they decrease sweating over the entire body, even in those locations where sweating is not a problem. This overall decrease in sweating can put a person at risk for overheating and dehydration. Anyone taking this medication, or parents of children taking the medication, should be aware of temperature, water intake, exertion, and any symptoms such as pale skin, dizziness, muscle cramping, weakness, headache, and nausea. Patients with glaucoma (especially narrow-angle glaucoma) and those who have impaired gastric emptying or a history or symptoms of urinary retention should not use anticholinergic therapy. Learn more about all the currently available treatments for hyperhidrosis from the International Hyperhidrosis Society at [www.SweatHelp.org](http://www.SweatHelp.org).

5. True or False? Hyperhidrosis (the medical condition of excessive sweating) is so rare that there is not much research going on to help solve it.

Answer: False

Actually, hyperhidrosis or excessive sweating is not all that rare. Approximately 4.8% of the general population and 8.8% of people aged 18-39 years are believed to have hyperhidrosis. That’s 385 million people worldwide living with an excessive, uncontrollable, chronic sweating disorder. Fortunately, there is, in fact, quite a bit of research and development going on to find out more about hyperhidrosis and how best to manage it. According to analysis by the International Hyperhidrosis Society, there are more than 20 hyperhidrosis-related studies currently underway in eight countries around the world looking at eleven different treatments (some new and some familiar options being used in new ways.) [Subscribe](#) to the International Hyperhidrosis Society’s news blog to get updates about hyperhidrosis-related studies.

Source:

- Doolittle J, Walker P, Mills T, Thurston J. Hyperhidrosis: an update on prevalence and severity in the United States. Arch Dermatol Res. 2016 Dec;308(10):743-749. doi: 10.1007/s00403-016-1697-9. Epub 2016 Oct 15. PMID: 27744497; PMCID: PMC5099353.

6. Which of the following is part of the diagnostic criteria for primary hyperhidrosis? Check all the apply.

- A. Age of onset (typically during childhood or adolescence)
- B. Brothers, sisters and other family members have excessive sweating, too
- C. Cessation during sleep
- D. Debilitation or sweating levels that get in the way of life functions, socializing, and inclusion.

Answer: All of the above!

Age of onset trending towards youth, family history, cessation during sleep, and debilitation due to the severity of sweating are all part of the International Hyperhidrosis Society's clinician/researcher-approved hyperhidrosis diagnosis guidelines. You can find these guidelines on IHHS' website at SweatHelp.org and here:

<https://tinyurl.com/f4724tay>

7. Which hyperhidrosis (excessive sweating) treatment has been around since the 1940s and involves the purposeful combination of electricity and water?

- A. Iontophoresis
- B. Phototherapy
- C. Electroconvulsive therapy

Answer: A

While phototherapy, or light therapy, may be used to help manage skin conditions like acne, eczema, and psoriasis as well as jaundice in babies and depression or seasonal affective disorder in adults, it is not, however, believed to be useful for excessive sweating (hyperhidrosis).

Electroconvulsive therapy involves passing small electric currents through the brain to trigger a brief seizure and adjust brain chemistry to help reverse symptoms of certain mental health conditions, like severe depression or mania. It is not used for excessive sweating.

Iontophoresis, on the other hand, utilizes small electric currents passing through water and the skin's surface to minimize or stop sweating. This is particularly useful for hyperhidrosis of the hands or feet and techniques and devices for its use in the underarms are also improving. It's not quite understood, yet, how iontophoresis works to

control sweating, but we know that for many people it does, indeed, work. One study found that iontophoresis helped 91% of patients with excessive palmoplantar (hands and feet) sweating. Another study showed that iontophoresis reduced palmoplantar sweating by 81%. To maintain sweat relief, iontophoresis treatments need to be conducted on a regular basis, such as once per week. You can learn more about iontophoresis from the International Hyperhidrosis Society at [www.SweatHelp.org](http://www.SweatHelp.org) and here: <https://tinyurl.com/xxkzb266>.

Sources:

- Bouman HD, Grunewald Lentzer EM. The treatment of hyperhidrosis of hands and feet with constant current. *Am J Phys Med.* 1952;31:158-169.
- Karakoç Y. Safe control of palmoplantar hyperhidrosis with direct electrical current. *Int J Dermatol.* 2002;41:602-605.

8. In order to get the most efficacy out of your antiperspirant, when should you apply it?

A. Immediately before you exercise so it's fresh and ready to conquer the sweat of a workout.

B. As soon as you get up in the morning and before you rush out the door to begin your busy day.

C. Right before you go to bed; as big a part of your nightly routine as brushing your teeth.

Answer: C

The best time to apply your antiperspirant and make the most of its sweat-minimizing abilities is before you climb into bed, when you are winding down and your body temperature naturally drops. Once an antiperspirant is applied to the skin, light perspiration in the underarm grabs and dissolves the antiperspirant particles, pulling them into pores and forming superficial plugs that are just below the surface of the skin. When your body senses that a sweat duct is plugged, a feedback mechanism stops sweat flow. Plugs can stay in place for at least 24 hours and then are washed away naturally (hence the need for routine re-application). But, because antiperspirant plugs need time to form, applying antiperspirant in the evening is best. This is when, under normal conditions, you'll be sweating less and therefore can give the plugs a chance to take shape relatively undisturbed and without the antiperspirant being washed away by exercise-sweat or morning-rushing-around-sweat. Gently massaging antiperspirant into the skin may be a useful addition to your routine, and, to avoid irritation, only apply antiperspirant to completely dry skin.

9. What else, besides the primary, idiopathic, medical condition of hyperhidrosis, can cause excessive sweating?

- A. Medications
- B. Other, underlying medical conditions
- C. Both A and B

Answer: C

Primary hyperhidrosis refers to excessive sweating that is a medical condition unto itself. There is also another main type of hyperhidrosis referred to as secondary hyperhidrosis. This type of excessive sweating is caused by another different condition or is a side effect of a medication. That's why it's called secondary - it's secondary to something else. A key difference between the two types of hyperhidrosis is that people with secondary hyperhidrosis may often experience their sweating symptoms while sleeping. Another is that secondary hyperhidrosis usually starts in adulthood, whereas primary hyperhidrosis starts in childhood or adolescence. Finding a potential treatment for secondary excessive sweating often involves first determining what (if any) underlying medical condition or medications may be the root of the problem. With either type of excessive sweating, it is important to talk to a knowledgeable clinician who can look at your medical history, provide an examination, run necessary tests, and consider any medications you may be taking (remember to tell your provider about all medications you're using - including over-the-counter and herbal/natural products). For lists of drugs/medications known to cause hyperhidrosis as a side effect and diseases and conditions that may cause hyperhidrosis, visit the International Hyperhidrosis Society at SweatHelp.org and here: <https://tinyurl.com/cfka42tz>. And, please, never halt or change the doses of any of your medications without discussing with your prescribing physicians first.

10. Which treatment has received FDA clearance for the treatment of unwanted body hair, body odor, and excessive sweating?

- A. Depilatory creams/lotions/gels
- B. Microwave thermolysis (miraDry®)
- C. BOTOX® (onabotulinumtoxinA)
- D. Blue light therapy

Answer: B

miraDry was cleared by the U.S. FDA in 2011 to treat axillary hyperhidrosis or excessive underarm sweating and is now available in more than 50 countries. miraDry was also FDA-cleared in 2015 to permanently eliminate underarm hair of all colors as well as odor glands (which are a different kind of sweat gland); making it the first FDA-cleared device available to halt unwanted underarm sweat and hair growth while also

eliminating odor-producing glands. For hair reduction, the device is sometimes called miraSmooth instead of miraDry.

Depilatory creams, lotions and gels (like Nair™) are available over-the-counter for the removal of unwanted body hair but are not useful for sweat control or significant [odor management](#) (unless odor is being made worse by the presence of body hair).

BOTOX (onabotulinumtoxinA) is FDA approved for eleven indications including axillary hyperhidrosis (excessive underarm sweating), chronic migraine, and overactive bladder (among others things) but not for hair removal or controlling body odor.

Blue light therapy may be used to help treat skin cancer, sun spots, acne, scarring, and even depression. Blue light can also be used to help with enlarged oil glands -- but not sweat glands, hair, or body odor.

11. Which excessive sweating/hyperhidrosis treatment works by **blocking** the nerve signals that would otherwise “turn on” sweat glands to secrete sweat?

- A. OnabotulinumtoxinA (BOTOX®)
- B. Glycopyrrolate (Robinul)
- C. Cannabidiol (CBD)

Answer: A

OnabotulinumtoxinA (often known by the brand name BOTOX®) is a natural, purified protein with the ability to temporarily (for 4 to 12 months) block the secretion of the chemical that is responsible for "turning on" the body's sweat glands. By blocking, or interrupting, this chemical messenger, botulinum toxin "turns off" sweating at the area where it has been injected. Botox injections are very shallow, meaning that the medicine is injected just below the surface of the skin, where it remains.

Glycopyrrolate (Robinul) is a prescription medicine taken by mouth (orally) that can sometimes be used to treat hyperhidrosis (excessive sweating). It belongs to a class of medications called anticholinergics. Anticholinergics have not been studied in controlled clinical trials specifically for hyperhidrosis. Their use for hyperhidrosis is, instead, “off-label”. Anticholinergic medications work systemically and decrease sweating over the entire body, even in those locations where sweating is not a problem. This overall decrease in sweating can put the patient at risk for overheating. People who participate in sports, people who work outdoors, and anyone who may potentially cause themselves injury by becoming overheated must use extra care if using this treatment. Patients or parents of children taking the medication must remain aware of temperature, water intake, exertion, and any symptoms of overheating such as pale skin, dizziness, muscle cramping, weakness, headache, and nausea.



Cannabidiol, or CBD, is a compound that can be extracted from plants of the Cannabis genus and interacts with the body's endocannabinoid system. The interaction affects the release of neurotransmitters in the brain. Not known to produce a "high" when used by itself (the "high" comes from a different compound found in cannabis called THC or tetrahydrocannabinol), a prescription form of CBD is used for seizure disorder (epilepsy). Animal studies and research based on people's self-reports, suggest CBD may also help with: anxiety, insomnia, chronic pain, and addiction. If extreme sweating were related to a person's anxiety, *perhaps* CBD could be helpful but anxiety provoked sweating and hyperhidrosis are not exactly the same problems. Caution should be used if using a CBD product. According to [Harvard Medical School](#), "a significant safety concern with CBD is that it is primarily marketed and sold as a supplement, not a medication. Currently, the FDA does not regulate the safety and purity of dietary supplements. So, you cannot be sure that the product you buy has active ingredients at the dose listed on the label. In addition, the product may contain other unknown elements. We also don't know the most effective therapeutic dose of CBD for any particular medical condition."

If you decide to try CBD, make sure you are getting it from a reputable source. And talk with your doctor to make sure that it won't affect any other medicines you take.

November is Hyperhidrosis Awareness Month. Get comprehensive diagnosis, treatment, and coverage/reimbursement information through the International Hyperhidrosis Society at [www.SweatHelp.org](http://www.SweatHelp.org). Get involved on: Facebook @SweatingStopsHere, X @WeKnowSweat, and Instagram @WeKnowSweat. Find us on [YouTube](#).