

Introduction

Driving home after a 13-hour emergency room shift, my eyes started to sting with what felt like fire tears.

They hurt so badly that I pulled over to the side of the road. I hate to touch my eyes after working around patients' bodily fluids, but because my tears burned like acid, I wiped them away using the shirt underneath my scrubs. I'm classy like that.

My eyes stopped watering. The pain eased off. I blinked and signaled before merging back into my lane.

After every long shift, this became my own little ritual: involuntary and painful crying for a few seconds, about 10 minutes into my drive home.

I casually asked an ophthalmologist, "Have you ever heard of your own tears hurting you?"

"No," he said. "Never."

Oh.

Painful crying didn't happen after every shift, only my 12-hour ones. It seemed worse if I didn't drink enough water while I worked. And my car's air filter system, blowing hot or cold air in my face, felt like torture.

Hesitantly, I told my own ophthalmologist, Dr. Christine Suess, "I think I have dry eyes."

To my surprise, she lit up. This is one of her passions.

Why the heck would our eyes dry out?

Either you're not making enough tears, or your tears evaporate too fast.

Dr. Suess took a look at my eyes with the slit lamp and said, "The average tear lasts 10 seconds. Yours last 3."

Huh. One example where fast does not equal good. Darn it.

You need tears to moisten the cornea, which is like the windshield of your eye, the front, clear part of it. And you can get tears through two different ways:

1. Slow, steady tears through basic tear secretion.

2. Emergency waterworks because you're so happy you got a new kitten or because your eye is trying to flush a piece of metal that got stuck to your cornea. These are called reflex tears.

Basically, my eyes were so desiccated from staring at patients and computer screens all shift long that my body was triggering reflex tears on the way home.

Once you develop dry eyes, both types of tears don't last as long, and can inflame your corneas. Hence the sensation of fire tears.

To read more about this unfortunate series of events, check the DEWS II report at <http://www.tearfilm.org/>. You have to click on a link and give them your e-mail address to access the report.

How do I know if I've got dry eyes?

How do your eyes feel?

Achy

Burning

Dry

Gritty

Itchy

Painful

Sandy

Scratchy

Sore

Sticky

Tired

How's your vision?

Blurry

Sensitive to light

Watery

How do your eyes look?

Red

Still watery

Eyelids appear super attractive because they're red and swollen, or crusty with discharge. Nothing says, "Do me!" like crusty eyelids.

Obviously, not all of these things are caused by dry eyes, so go talk to your friendly neighborhood eye expert. In case you didn't know, here's a quick guide to some different kinds of eye savants, in ascending levels of training:

Opticians: technicians trained to fit and verify contact lenses and glasses.

Optometrists: have a four-year degree in optometry (eye school, not medical school). They check your vision, your cornea (windshield), and retina (film screen at the back of your eye). Their additional training in eye diseases means that they can diagnose and treat eye problems. They usually sell contact lenses and glasses.

Ophthalmologists: medical doctors who do an extra five plus years of training on the eye. They're the eye surgeons. They can also diagnose and treat all eye diseases and dispense contact lenses and glasses.

When I was a medical student, I saw a man who was blinded by a battery exploding in his face. In this case, you want the ophthalmologist. Do not pass Go.

If in doubt, look for the one with all the extra h's. One ophthalmologist claimed that their title is the most misspelled word in medicine, because people forget the first h.

Dr. Suess is an ophthalmologist.

Family doctors and other generalists may be very knowledgeable as well. Make an appointment and tell them you want them to examine your dry eyes. Yes, I know that it may cost you money. But there's no substitute for a real, live, trained person looking at your eyeballs and telling you what's going on.

Once you get there, they may give you any of these diagnoses: keratoconjunctivitis sicca (KCS), dry eye syndrome, aqueous tear deficiency, evaporative tear deficiency, dysfunctional tear syndrome, LASIK-induced neurotrophic epitheliopathy (LNE), or lacrimal keratoconjunctivitis.

Guess what? It all means that you have dry eyes.

That may seem useless. After all, you'd already figured that out. But wait! There's more. They can tell the severity.

You want to know what your ground zero is.

If you've got the most critical, eleventh-hour eyeballs in this hemisphere, you may need world experts to achieve even a 10 percent improvement.

It's better to turn the ship around when you have a mild to moderate case. Prevention is best of all.

I promise I will give you as unbiased a source of information as I can on dry eyes. I do not promise to be a world expert who can magically heal you by typing out words. You must seize the reins of your own health to change your life.

Why is this happening to me?

Because you won the dry eye lottery!

About 5 to 30 percent of people develop dry eyes during their lifetime. So, not everybody, but it's pretty common.

The Dry Eye Quiz

Super easy. Let's run through the following factors and see how many points you rack up.

1. Your age

Dry eyes get more common with age.

If you are 40 plus and fabulous, own it! Take a point for every decade over 40.

2. Environmental factors

You know how rock stars sing with a fan blowing their hair back, so they look extra fabulous? I would look red-eyed and full of rage. So if you smoke, live in the desert, or work in a wind tunnel, watch out.

Sometimes the dangers are subtler.

“How long do you spend on a computer?” asked Dr. Geneviève Raby, my optometrist.

“A long time,” I said.

“But not five or six hours a day?”

“Sometimes,” I said, failing to mention that other times, it would be more than that.

Give yourself a point for every environmental factor literally under the sun (yes, the sun dries out your eyes, so you should wear sunglasses and a hat and pretend you’re Angelina Jolie, even if you’re a guy):

- Screen time (phone, computer, tablet)
- Sun
- Smoking
- Extreme sports (sun, sweat, sunscreen in the eyes, chlorine, salt water, and dehydration)

- Caffeine
- Alcohol
- Not drinking enough water
- Flying
- Driving
- Air conditioning
- Forced air furnace
- Generally staying inside too much
- Dry climate
- Pollution
- Children squirting hot sauce in your eyes

3. Contact lenses

“How long have you been wearing contact lenses?” said Dr. Suess.

I shrugged. “Since I was thirteen. I used to wear them all the time, but I’ve been wearing them less. It’s almost like I save them up for a special occasion.”

She nodded. “I don’t wear mine at all any more.” She explained how, basically, a contact lens is a foreign body in your eye, rubbing against the pocket between

your eyelids and your eyeball. Over time, that's irritating, and your eyes dry out. Yay.

Give yourself a point for each of the following factors:

- You wear contacts.
- You wear them over 6 hours at a time, or long enough to irritate your eyes.
- Every decade you've been wearing contacts.

4. Eye surgery and eye diseases

I ended up with a small retinal tear after my dad died, and I kept on working anyway. I'm fine now—Dr. Suess zapped it with a laser—but anything that changes the condition of your eyes makes them more vulnerable. One of my friends was constantly applying artificial tears after LASIK eye surgery, until her tear production readjusted. More points for you!

- LASIK or other refractive surgery
- Cataract surgery; surgery on the rest of the eye
- Blepharoplasty (eyelid lift)
- Blepharitis

5. Diseases in the rest of your body

Whenever someone comes in the emergency department and says, "I get uveitis because of my ulcerative colitis," I quickly examine them and get on the horn with ophthalmology. I do not fool around.

No jokes about

- Diabetes
- Allergies
- Thyroid disease
- Sjögren's syndrome
- Other autoimmune diseases such as rheumatoid arthritis, lupus, and Inflammatory Bowel Disease
- Conditions that affect the eyelids, including Bell's Palsy and burns
- Vitamin A deficiency
- More rare but severe causes: Graft vs. Host Disease can make eyes absolutely dry
- Möbius syndrome causes complete facial paralysis, including the eyes and eyelids

6. Medications

Drugs. We love 'em for what they can do for us, we hate 'em for the side effects. Dry eyes can be a side effect. Give yourself a point each for these prescriptions:

- Antihistamines and decongestants: Diphenhydramine (Benadryl) and Loratadine (Claritin), and other over the counter remedies. They're clearing up your secretions, but drying your eyes at the same time

- Antidepressants, antipsychotic and anti-anxiety medications

- Gastroesophageal Reflux Disease (GERD) treatment, including both H2 blockers like Ranitidine (Zantac) and Proton Pump Inhibitors like Omeprazole, (Prilosec and Losec)

- High blood pressure medications: you may have guessed that diuretics (water pills) like Hydrochlorothiazide would dry your eyes, but even Beta Blockers can affect them

- Anti-Parkinsonian medications: Levodopa and Carbidopa (Sinemet), Procyclidine (Kemadrin), and Benztropine (Cogentin)

- Acne medication: Isotretinoin (Accutane)
- Eye drop preservatives like benzalkonium chloride (BAK)

7. Hormonal changes

Women are more likely to get dry eyes. Just part of the awesomeness that comes along with taking the birth control pill, pregnancy, and/or menopause.

Score

0-2 points: Woo hoo! Cartwheels and fireworks for you. Even if you develop dry eyes for different reasons, you're an environmental master.

3-5 points: Congratulations! The crowd cheers. Many of these factors are beyond our control, so this is terrific. If you reach master status, throw a dance party.

6 points and over: Ah. I see why you're reading this book. Welcome to the club, and applause for joining us. Pour yourself a glass of water, slip on your sunglasses, and enjoy the show.