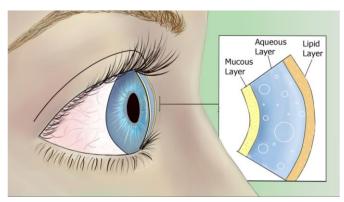


# **Dry Eye Disease**

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## What is dry eye?

Dry eye occurs when your eyes do not produce enough tears or make the right type of tears. As many as 1 in 5 Americans have dry eye disease. It can happen for many reasons, including other medical conditions and medication use.



<u>Fig 1.</u> Your tears are made of three layers: an oily outer layer, a watery middle layer, and a mucus inner layer.

### Common Symptoms:

- Red, irritated, stinging, scratchy eyes
- Frequent tearing or watering
- Light sensitivity

- Mucus in or around your eye
- Blurred vision that comes and goes
- Eye fatigue

# Reduce your risk factors:



Reduce first- and second-hand smoke exposure



Reduce screen time



Wash off makeup fully every night



Adjust CPAP fit to reduce air leak



Avoid windy and dry climates



Use warm compresses to improve eyelid Inflammation

#### Treatment:

#### Artificial tears

Use artificial tears regularly *before* you start feeling symptoms. Most people need to use 3-4 drops daily in order to see an effect. If you use artificial tears more than 4 times a day, it is important to use *preservative free (PF)* formulations. Some example of drops that are available over the counter are<sup>1</sup>:

	Thin consistency	Thick consistency
Lipid (oil) replacement	NanoTears TF (PF) Oasis Tears Plus Oasis Tears (PF) Refresh Optive Mega-3 Retaine MGD (PF)	Retaine MGD (PF) Systane Balance
Aqueous (water) replacement	Bion (PF) GenTeal (PF) Refresh Optive Advanced (PF) Soothe (PF) Systane Ultra (PF) TheraTears (PF)	Blink Tears GenTeal gel Soothe XP Emollient (PF) Systane gel drops Refresh Celluvisc (PF) Refresh Optive Gel Drops

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These are most commonly used at bedtime because they cause blurry vision.

Apply a *small* amount to the corner of your eye, then rub the lower eyelid and blink

to spread evenly. Keeping the ointment tube warm will help it come out more easily.

GenTeal Gel (PF) Systane Nighttime (PF) Soothe (PF)

Refresh Lacrilube Refresh PM (PF)

Ocular Lubrication - Please do not use any that say "Redness Relief" or "Gets the Red Out"

### Other Treatments:

□ Prescription eye drops (     □	Restasis,	Xiidra,	Autologous	Serum	Tears,	other)
☐ Oral antibiotics						
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☐ Punctal Occlusion: In-office procedures using plugs (a tear duct drain "stopper") or cautery to help keep tears on the surface of the eye for longer

**<sup>1</sup>** - Specific name brands are given as examples only. The University of Iowa does not endorse any specific product and does not have any financial relationships with these manufacturers.