



smoking and eye disease

a closer look

WHAT ARE THE HEALTH EFFECTS OF SMOKING?

Tobacco smoking is directly linked to many adverse health effects, including high blood pressure, heart disease and cancer. Smoking is also linked to specific eye diseases.

HOW DOES SMOKING AFFECT THE EYES?

People who smoke cigarettes are at increased risk for developing cataracts, a clouding of the naturally clear lens of the eye. **Cataracts** cause a variety of vision problems, including blurry distance vision, sensitivity to glare, loss of contrast and difficulty seeing colors. When eyeglasses or magnifiers are no longer helpful for someone with cataracts, or when cataracts develop in both eyes, surgery is the only option.

Tobacco smoking is also one of the preventable risk factors for **age-related macular degeneration (AMD)**. Studies have shown that current smokers and ex-smokers are more likely to develop AMD than people who have never smoked. AMD has two forms: dry (called atrophic or non-neovascular) AMD and wet (called exudative or neovascular) AMD. In dry AMD, your retina gradually thins. There is no proven cure for this type of degenerative disease. In wet AMD, new blood vessels grow in the retina, leak blood or fluid and damage the macula, the part of the retina responsible for your central vision. The types of treatment currently available for specific forms of



wet AMD are standard laser surgery, photodynamic laser surgery, and medication injection, all of which may stabilize the disease.

In people with high blood-sugar levels, some studies suggest that smoking may be linked to **diabetic retinopathy**, or damage to the blood vessels in the retina.

The **optic nerve** is also susceptible to damage from smoking. People with poor diets who smoke heavily and drink excessive amounts of alcohol run the risk of developing optic nerve-related vision loss (called tobacco-alcohol amblyopia). Certain optic nerve problems run in families (called Leber's optic neuropathy). People with this condition who smoke have increased risk of vision loss. In some patients with thyroid disease (called Graves' disease) who also have eye involvement, smoking can cause the eyes to become worse, with vision loss possible.



smoking and eye disease

People who do not produce enough tears to keep their eyes comfortably lubricated have a condition called **dry eye**. For these people, smoking is a significant irritant, worsening the symptoms of scratchiness, stinging or burning of the eyes, and excess tearing from irritation.

HOW DOES SMOKING AFFECT FETAL AND INFANT EYE HEALTH?

Studies have also shown a strong association between smoking during pregnancy and the risk of invasive **meningitis** during early childhood. The risk of bacterial meningitis is five times higher among children whose mothers smoked during pregnancy. In addition to other severe health problems, childhood meningitis can cause inflammation of the cornea and pink eye.

Smoking during pregnancy is also associated with low birth weight and premature birth. Also, oxygen therapy given to sustain the lives of premature infants can cause **retinopathy of prematurity**, leading to permanent vision loss or blindness.

THERE ARE RESOURCES TO HELP YOU QUIT SMOKING

There are numerous community organizations committed to helping people quit smoking. The American Cancer Society (ACS) offers smoking cessation classes around the United States. Contact ACS at 800.ACS.2345 or online at www.cancer.org to find a chapter near you.

NOTES

COMPLIMENTS OF YOUR OPHTHALMOLOGIST:

The Eye Center of Central Pa.
Toll Free: 1.866.995.3937
www.eyecenterofpa.com

Academy reviewed 03/11

© 2011 American Academy of Ophthalmology. The American Academy of Ophthalmology, The Eye M.D. Association and the Academy logo are registered trademarks of the American Academy of Ophthalmology.