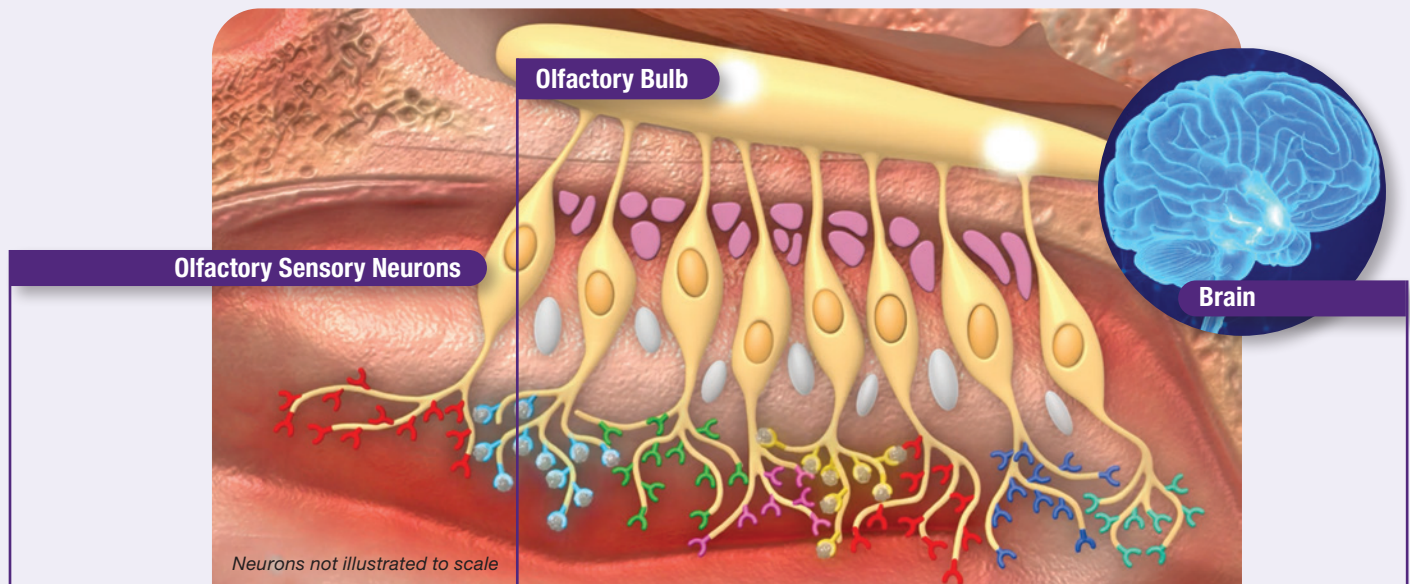


The Journey of Smell to the Brain

Smells activate special cells inside your nose that then send signals to your brain.



Substances around you release invisible odor molecules that activate olfactory sensory neurons high inside your nose.

These neurons send a unique pattern of signals to an area in your brain called the olfactory bulb.

Your brain uses those signals to identify specific smells.

Not everyone has a good sense of smell.

Changes to your sense of smell may be caused by:



Aging



Viruses



Smoking



Head injuries

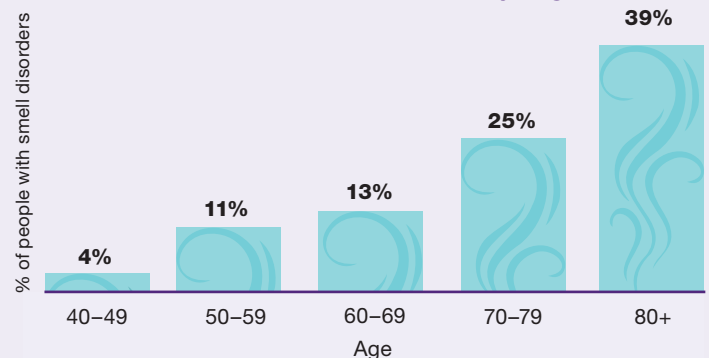


Sinus inflammation and upper respiratory infections



Conditions that affect the nervous system

Smell disorders are more common as you get older.*



Some people may have a specific type of smell disorder.



Hyposmia:
a reduced ability to detect odors



Anosmia:
the complete inability to detect odors



Parosmia:
a change in the normal perception of odors



Phantosmia:
the sensation of odor that isn't there



Having problems with your sense of smell? Talk to your doctor. Learn more at www.nidcd.nih.gov

Sources: Smell Disorders: <https://www.nidcd.nih.gov/health/taste-smell>

*U.S. National Health and Nutrition Examination Survey. Analysis reported in *Reviews in Endocrine and Metabolic Disorders* (2016).



National Institute on Deafness and Other Communication Disorders