

# ANOSMIA

Created by Michael Guo and Iksha Kumar

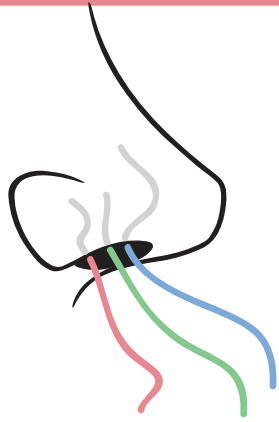
Designed by Erin Lee

Smell is a key part of normal functioning and can severely impact our quality of life. We need to smell in order to detect dangers in the environment such as spoiled food, smoke, and gas leaks. Smell also plays an important role in detecting food aromas, to the point where smell loss may impact the positive experience of food and drink, which can lead to nutritional deficits and depression.

## Types of Smell Loss

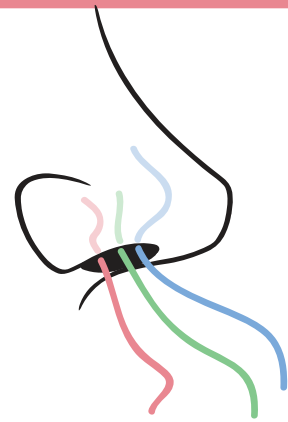
### Anosmia:

Complete loss of smell



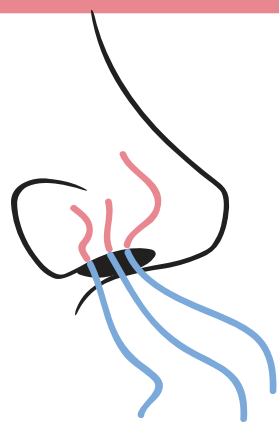
### Hyposmia:

Partial loss of smell



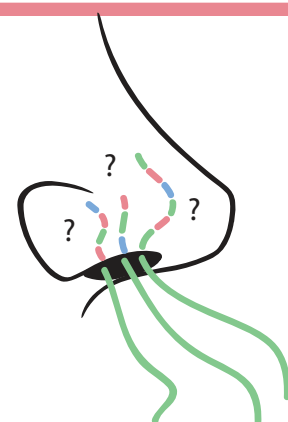
### Parosmia:

Distortion of smell (ie. smelling roses when eating pizza)



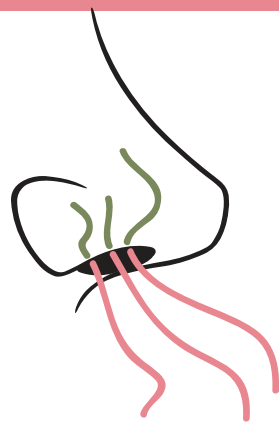
### Olfactory Agnosia:

Inability to detect and specify one odor



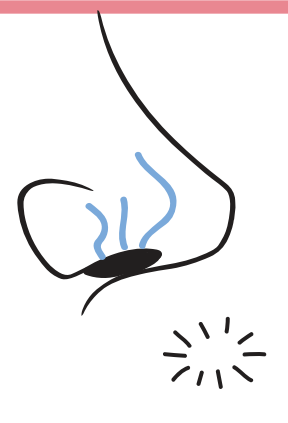
### Cacosmia:

Unpleasant odor in the presence or absence of a pleasant stimulus (ie. detecting the smell of burnt toast when sniffing flowers)



### Phantosmia:

Detecting an odor that is not actually present



## Causes

**Viral**  
(the most common  
ie. herpes virus)

**Trauma**

**Result of surgery**

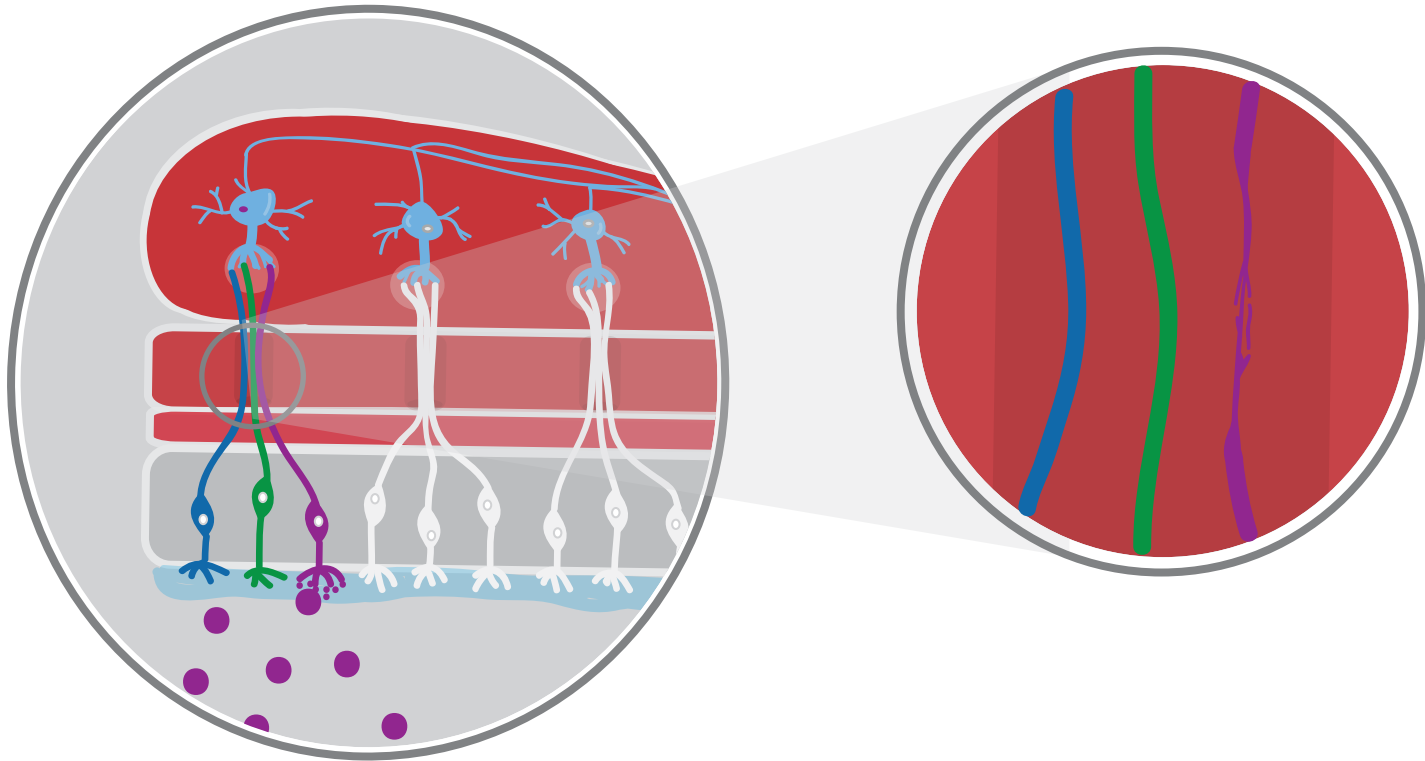
**Drugs**

**Toxic Fumes**

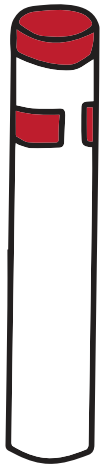
**Other diseases that may affect brain**  
(stroke, epilepsy, tumors, etc.)

**Anatomical:**  
obstruction or changes in anatomy of sinus to impact olfactory clefts (ie. nasal polyps, deviated septum, foreign bodies)

## How your Nerves are Affected



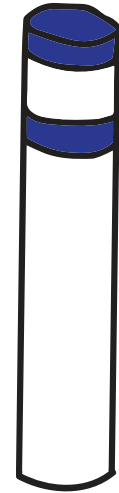
## Investigation at the Clinic



**Threshold:**  
How subtle a smell can you detect?



**Discrimination:**  
Can you tell the difference between smells?



**Identification:**  
Can you tell what smell this is?

You may be exposed to other tests, depending on the clinic you visit but the general principles are similar

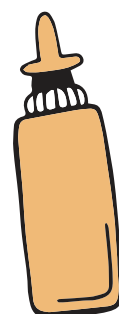
## Treatment

### Smell training:

Repeated exposures to scents which we consciously label as a scent we were previously familiar with can train our brain to recognize those scents again. This can be done at your local rhinology clinic through the use of essential oils.

### Retinoic acid:

A metabolite of vitamin A, can be administered as a nasal spray.



30-70% of patients suffering from smell loss may spontaneously recover depending on the cause. This is more likely for partial smell loss (hyposmia) than for complete smell loss (anosmia).