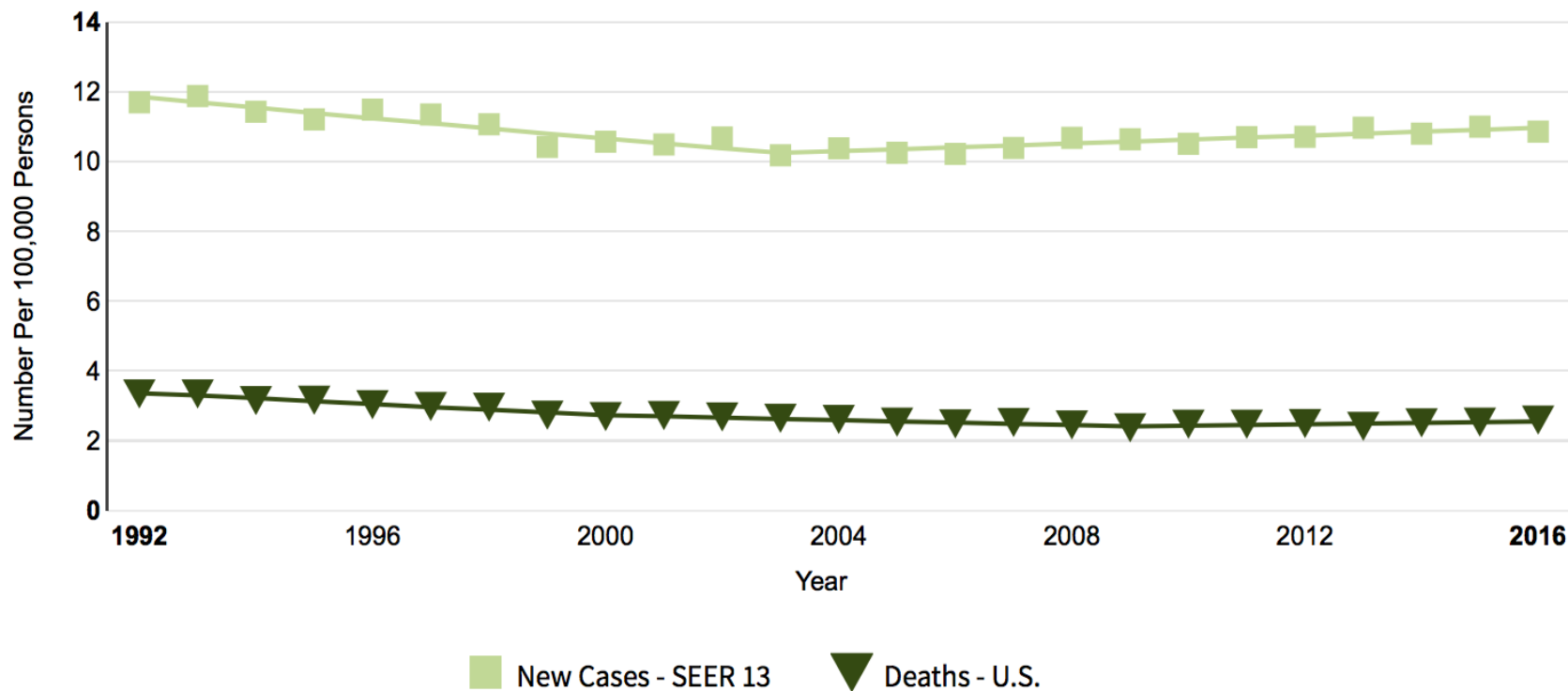




Estimated New Cases in 2019	53,000
% of All New Cancer Cases	3.0%

Estimated Deaths in 2019	10,860
% of All Cancer Deaths	1.8%

Percent Surviving 5 Years
<b>65.3%</b>
2009-2015



# Oropharyngeal Cancer Facts

✓ Most common sites include:

- Tongue
- Tonsils and oropharynx
- Gums, floor of the mouth, and other parts of the mouth (rest found in lips, minor salivary glands e.g. in the roof of the mouth etc.)



✓ Average age of diagnosis - 62 (can occur in young people; rare in children; a little more than one-quarter in patients younger than 55)

# Oropharyngeal Cancer Facts

- ✓ Includes mouth and pharynx (back of the throat)
- ✓ Oral cancer accounts for 2-4% of all cancers in the United States
- ✓ About 65,410 people will be diagnosed with oral cancer annually
- ✓ About 14,620 will die annually



# Oropharyngeal Cancer Facts

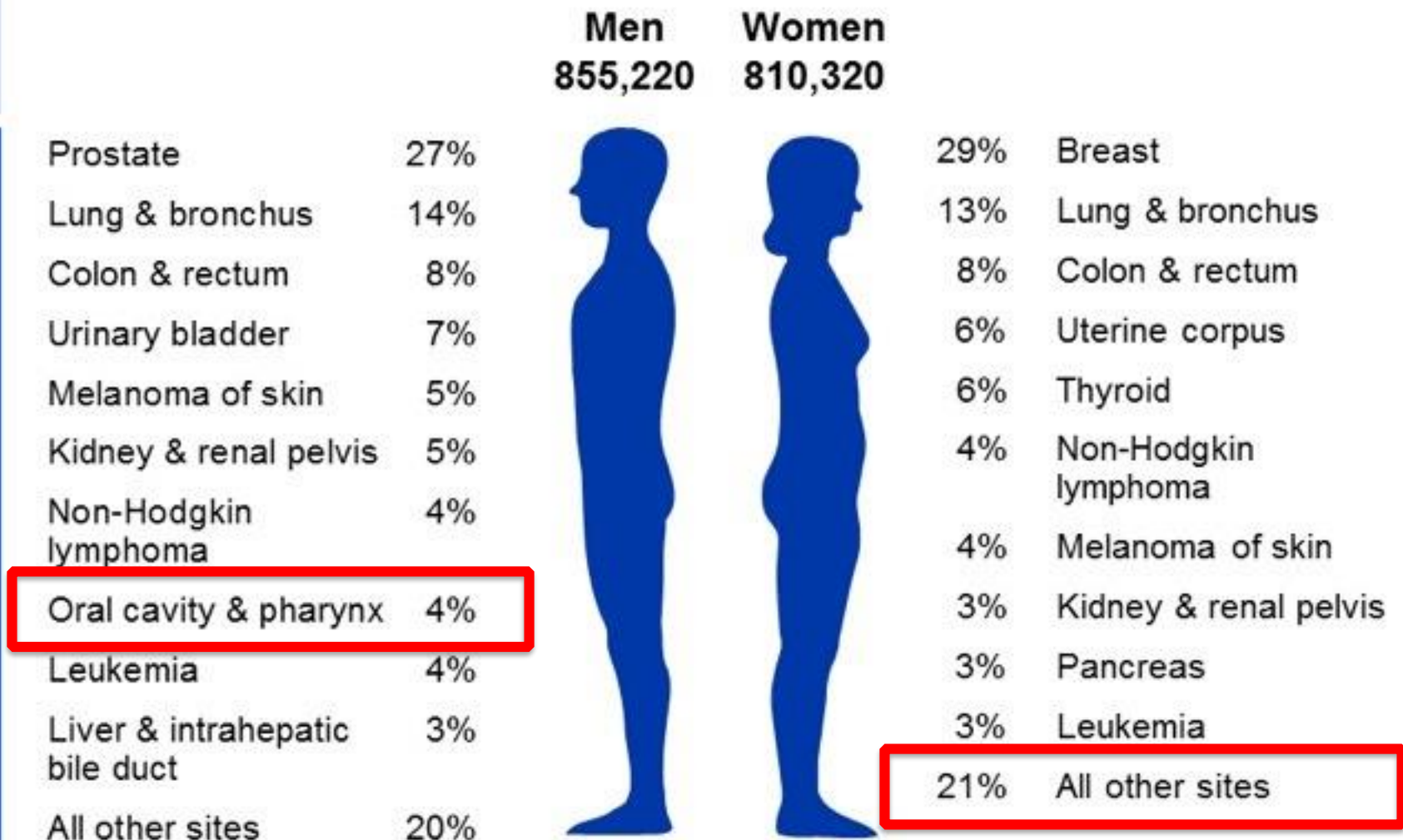
- ✓ 5 years survival 65.3 percent
- ✓ Occurs in people > 40 (ave. 62 y/o)
- ✓ Men 2x's greater than women
- ✓ Success with early diagnosis
- ✓ Treatment can be disfiguring and uncomfortable







## Estimated New Cancer Cases\* in the US



\*Excludes basal cell and squamous cell skin cancers and in situ carcinoma except urinary bladder.

## The Lifetime Probability of Developing Cancer for Men

Site	Risk
All sites <sup>†</sup>	1 in 2
Prostate	1 in 7
Lung & bronchus	1 in 13
Colon & rectum	1 in 20
Urinary bladder <sup>‡</sup>	1 in 26
Melanoma of the skin <sup>§</sup>	1 in 34
Non-Hodgkin lymphoma	1 in 42
Kidney & renal pelvis	1 in 49
Leukemia	1 in 60
Oral cavity & pharynx	1 in 66
Liver & intrahepatic bile duct	1 in 82

\* For those free of cancer at beginning of age interval.

† All sites exclude basal cell and squamous cell skin cancers and in situ cancers except urinary bladder.

‡ Includes invasive and in situ cancer cases

§ Statistic for white men.

Source: DevCan: Probability of Developing or Dying of Cancer Software, Version 6.7.0 Statistical Research and Applications Branch, National Cancer Institute, 2013.



## The Lifetime Probability of Developing Cancer for Women, 2008-2010\*

Site	Risk
All sites†	1 in 3
Breast	1 in 8
Lung & bronchus	1 in 16
Colon & rectum	1 in 22
Uterine corpus	1 in 37
Non-Hodgkin lymphoma	1 in 52
Thyroid	1 in 62
Melanoma of the skin‡	1 in 53
Pancreas	1 in 68
Kidney & renal pelvis	1 in 83
Leukemia	1 in 86

\* For those free of cancer at beginning of age interval.

† All sites exclude basal cell and squamous cell skin cancers and in situ cancers except urinary bladder.

‡ Statistic for white women.

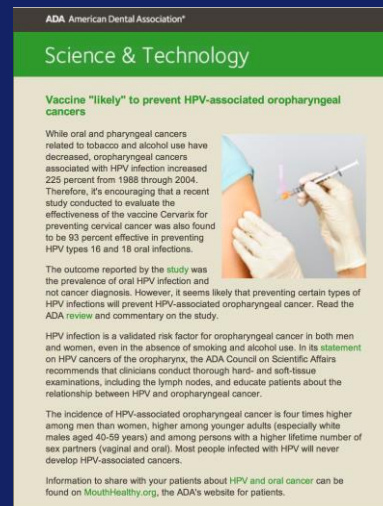
Source: DevCan: Probability of Developing or Dying of Cancer Software, Version 6.7.0 Statistical Research and Applications Branch, National Cancer Institute, 2013.

# Risk Factors - 1

✓ **Tobacco:** tobacco use of any kind, including cigarette smoking, puts you at risk

✓ **Heavy alcohol use:** also increases your chances of developing the disease. Using tobacco plus alcohol poses a much greater risk than using either substance alone

✓ **HPV:** Infection with the sexually transmitted human papillomavirus (specifically the HPV 16 type) has been linked to a subset of oral cancers



## HealthLink Seminars

HealthLink Events

HealthLink On Air

Living Healthy with a Chronic Condition

Smoking Cessation at Upstate

Support Groups

Program Archives



## Smoking Cessation at Upstate

Let's Clear the Air: Upstate supports you in quitting. Resources are available for all patients, visitors, employees and members of our community. These resources are offered at no cost to you:

- Smoking Cessation Classes
- Nicotine Replacement Products (for employees, students, volunteers and their dependents)

### HELPFUL RESOURCES

NY Smokers' Quitsite [↗](#)

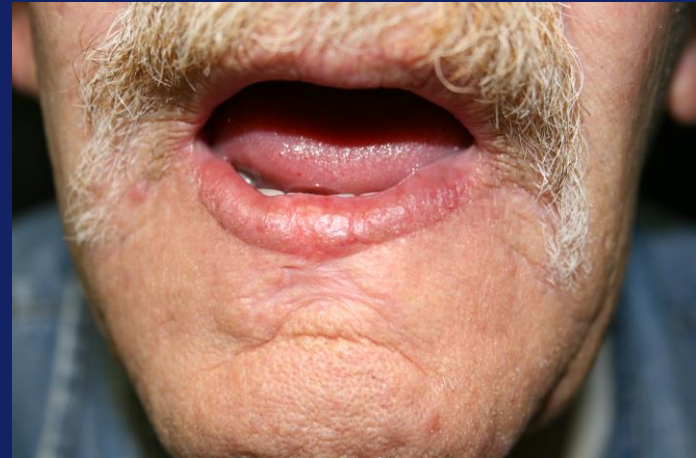
The Case for Quitting [↗](#)

Tobacco Free Nurses [↗](#)

CDC: Tobacco Info and Prevention [↗](#)

## Risk Factors - 2

- ✓ **Age:** Risk increases with age. Oral cancer most often occurs in people over the age of 40
- ✓ **Sun Exposure:** Cancer of the lip can be caused by sun exposure
- ✓ **Diet:** A diet low in fruits and vegetables may play a role in oral cancer development (obesity)



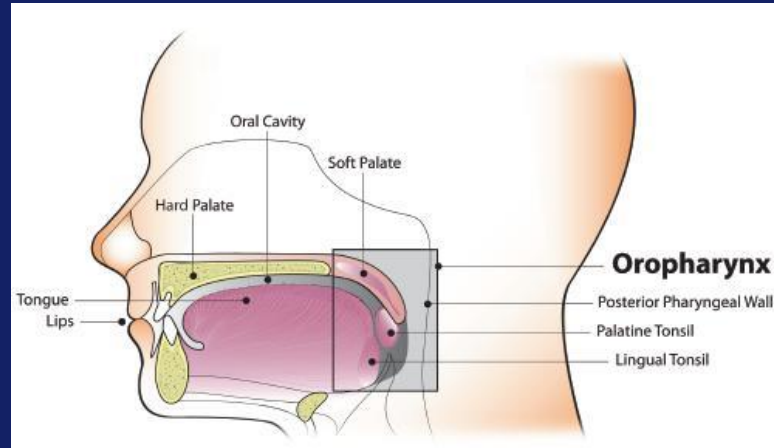
Age & Actinic Keratosis



Anti-Cancer Diet

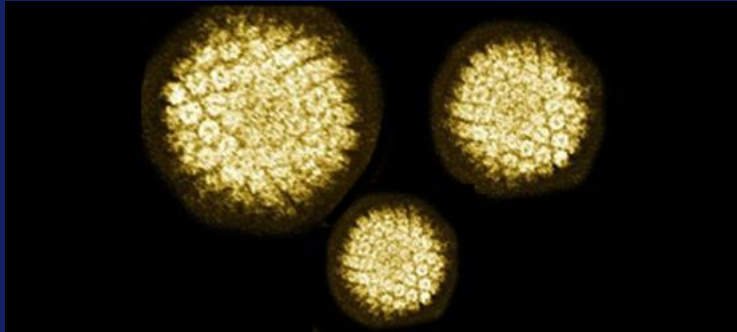


# HPV – Human Papilloma Virus - 1



- ✓ Most common sexually transmitted infection in the US
- ✓ More than 100 types ~ 40 spread through sexual contact
- ✓ Oral HPV is transmitted to the mouth by oral sex, or other ways
- ✓ About 10% of men and 3.6% of women have oral HPV
- ✓ Oral HPV infection is more common with older age
- ✓ Most people clear HPV within one to two years
- ✓ But HPV infection persists in some people / DNA damage

# HPV – Human Papilloma Virus - 2



- ✓ Takes years for CA to develop after HPV infection
- ✓ Unclear if HPV alone is enough to cause CA or if other factors ( e.g. smoking, chewing tobacco, alc ) interact to cause these cancers
- ✓ HPV is not known to cause other head and neck cancers, including those in the mouth, larynx, lip, nose, or salivary glands



# Signs & Symptoms - 1

Consult Doctor if any of following lasts 2 weeks or >:

- ✓ sore, irritation, lump or thick patch in your mouth, lip, or throat
- ✓ white or red patch in your mouth



- ✓ swelling of your jaw that causes dentures to fit poorly or become uncomfortable

## Signs & Symptoms - 2

Consult Doctor if any of following lasts 2 weeks or >:

- ✓ Pain in one ear without hearing loss
- ✓ Feeling that something is caught in throat
- ✓ Hoarseness
- ✓ Difficulty chewing or swallowing
- ✓ Difficulty moving jaw or tongue
- ✓ Numbness in tongue or other areas of mouth
- ✓ Mass / lump in the neck
- ✓ Observe asymmetry (difference b/w right and left)

# Oral Cancer

More common than:

✓ Early Detection  
Leukemia

✓ Oral Cancer  
Melanoma

✓ Hodgkins's disease

# Self-examination - Early Detection

Tissue changes that signal cancer  
can be seen & felt easily

# Self-examination - Early Detection

## White patches - leukoplakia



# Self-examination - Early Detection

White patches – smokeless tobacco





# Self-examination - Early Detection

Red patch - erythroplakia



# Self-examination - Early Detection

Red & white patches - erythroleukoplakia



# Self-examination - Early Detection

Abnormal lump / thickening of the tissues



# Self-examination - Early Detection

## Pigmented lesions



# Monthly Self-Exam

Bright light & mirror:

- ✓ Remove dentures
- ✓ Inspect &/or palpate all tissue  
(feel for lumps / enlarged lymph nodes  
in both sides of the neck including  
under the lower jaw)



# Extraoral Examination



✓ Inspect - face, head & neck (observe symmetry, skin for crusts, fissuring, growths, and/or color change)



✓ Palpate - lymph nodes for enlargement (if detected - mobility & consistency)



# Perioral Tissue



✓ Note color, texture & surface abnormalities



✓ Vermilion - smooth & pliable

✓ Lipstick may obscure underlying surface changes

# Labial Mucosa - Lip



- ✓ Examine mucosa, sulcus & frenum of the maxillary and mandibular vestibule



- ✓ Observe color, texture & any swelling or other abnormalities

# Buccal Mucosa - Cheek



✓ Inspect - from corner of mouth to the anterior tonsillar pillar



✓ Note changes in pigmentation, color, texture, mobility and other abnormalities of the mucosa

# Gingiva & Alveolar Mucosa - Gums



- ✓ Gingiva is keratinized & bound to bone
- ✓ Noninflamed gingiva is stippled & resembles citrus rind (peau d' orange)
- ✓ Alveolar mucosa extends from muco-gingival junction to cover mucobuccal fold

# Tongue - Dorsal Surface - Top



- ✓ Thin, keratinized, filiform papillae interspersed with pink mushroom-shaped fungiform papillae
- ✓ Note any swelling, ulceration, coating or variation in size, color, or texture



# Tongue - Lateral Border - Side



- ✓ May have vertical corrugations or may be smooth & glistening
- ✓ Lingual tonsils on the side of the tongue may become enlarged due to inflammation, infection or neoplasia



# Tongue - Ventral Surface - Bottom



- ✓ Examine ventral surface. Palpate the tongue to detect growths
- ✓ The lingual frenum is the soft tissue attachment of the tongue to the floor of the mouth
- ✓ Over attachment of frenum may result in speech impediments ("tongue tied")

# Floor Of Mouth



- ✓ Tongue elevated - inspect the floor of the mouth
- ✓ Note changes in color, texture, swellings or other surface abnormalities

# Palate - Roof of Mouth



- ✓ Inspect hard & soft palate
- ✓ The hard palate is keratinized and covered by a series of fibrous ridges or rugae



# Soft Palate & Oropharynx - Throat



✓ More vascular than the hard palate, creating darker red color



# Oropharyngeal Cancer Treatment

- ✓ Surgery
- ✓ Radiation
- ✓ Chemotherapy \*
- ✓ Combination of above

\* Oral effects from non-oral therapy



# Early Detection Benefits

- ✓ Early detection promotes more successful treatment
- ✓ Exam is painless – takes a few minutes
- ✓ Regular dental check-up is an excellent opportunity to have the exam
- ✓ Some parts of the pharynx are not visible during an oral cancer exam (based on S&S)

# Pre-CA Treatment Oral Examination - 1

- ✓ Allow time for treatment including oral hygiene:
  - 14 days for invasive procedures before head neck radiation therapy
  - 7 to 10 days before chemotherapy
  - Postpone elective procedures until cancer treatment is completed
- ✓ Eliminate oral infections(low-grade and acute):
  - Caries
  - Periodontal disease
  - Endodontic disease
  - Mucosal lesions

# Pre-CA Treatment Oral Examination - 2

Eliminate sources of irritation/trauma:

- ✓ ill-fitting dentures
- ✓ orthodontic bands
- ✓ other appliances / dental problems

Treat problems in proposed radiation field

Instruction:

- ✓ oral hygiene
- ✓ demineralization
- ✓ dental caries
- ✓ Treatment side effects

# During CA Treatment - 1

Monitor overall oral status

- ✓ Gingiva & Teeth
  - ◇ Brush & Floss
  - ◇ Mouthwash
  - ◇ Fluoride application
- ✓ Constitutional symptoms – e.g. fever
- ✓ Xerostomia

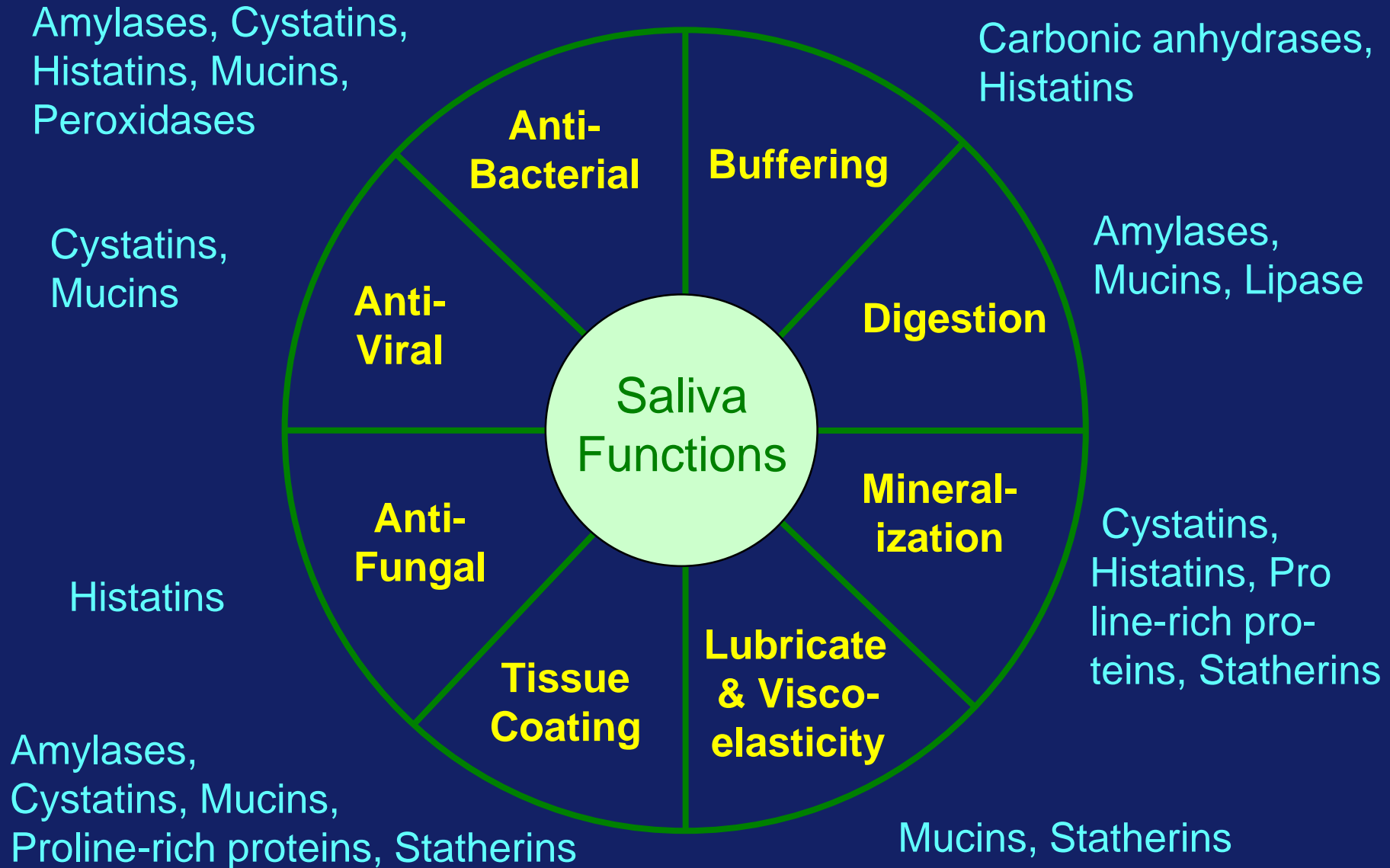


# During CA Treatment - 1

- ✓ Monitor mucositis
- ✓ Monitor infection – viral, bacterial & fungal
- ✓ Salivary gland function
- ✓ Soft tissue changes – bleeding
- ✓ Enamel deterioration / osteonecrosis
- ✓ Monitor trismus
- ✓ Advise against wearing removable appliances during treatment
- ✓ Identify taste changes / Nutritional support
- ✓ Neurotoxicity



# Importance Of Saliva



# During CA Treatment - 1

Dry Mouth (xerostomia), Radiation Caries



Source: TUSDM



Source: TUSDM



# During CA Treatment - 1

## Radiation-Induced Oral Mucositis, Infection and Treatment

(RT) Radiation therapy



Source: TUSDM

One week post RT



Source: TUSDM

Two weeks post RT



Source: TUSDM

Three weeks post RT



# Medical Information For Dental Appointment

- ✓ Dentist familiar w/, and/or able, to manage cancer patient with complex medical conditions?
- ✓ Conditions that may alter dental treatment:
  - Immunosuppression
  - Thrombocytopenia
  - Low white blood cell count
  - Need for antibiotic prophylaxis (+/-)
  - Receiving(ed) intravenous bisphosphonate
  - Oral complications (graft-versus host disease\*)
  - Monitor for additional malignancies

(+/-) verify need for abx

\* Oral effects from non-oral therapy



# Graft-Versus Host Disease



**Treatment:** topical corticosteroid therapy to manage oral manifestations of chronic graft-versus-host disease

# Oral Hygiene Recommendations - 1

- ✓ **Brush:** teeth, gums & tongue gently w/ extra-soft brush & fluoride toothpaste after every meal and at bedtime (if brushing hurts, soften the bristles in warm water)
- ✓ **Floss:** gently every day (if your gums bleed & hurt, avoid bleeding or sore areas but keep flossing other teeth)
- ✓ **Fluoride gel:** follow applications instructions
- ✓ **Mouthwash:** avoid containing alcohol
- ✓ **Rinse:** mouth several times/day w/ baking soda & salt solution, followed by a plain water rinse. Use ¼ teaspoon each of baking soda and salt in 1 quart of warm water. Omit salt during mucositis

# Oral Hygiene Recommendations - 2

- ✓ Xerostomia:
  - Sip water frequently.
  - Suck ice chips /use sugar-free gum or candy
  - Saliva substitute spray or gel
  - Saliva stimulant, prescribed (if appropriate)
- ✓ Exercise: jaw muscles T.I.D. to prevent & treat jaw stiffness from radiation treatment
- ✓ Avoid: candy, gum, and soda unless they are sugar-free
- ✓ Avoid: spicy or acidic foods, toothpicks, tobacco & alcohol

## Head and Neck Cancer Program

[Meet Our Team](#)

[Support Services](#)

[Learn More About Your Cancer](#)

[Patient Services & Navigation](#)

[Support Group](#)

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[Advanced Treatment Options](#)

[Clinical Trials](#)

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[beneath the surFACE](#)



## Head and Neck Cancer Program

The Upstate Cancer Center has the area's only comprehensive head and neck cancer program. Experts in otolaryngology, medical oncology, radiation

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## Head and Neck Cancer Support Group of CNY

The Head and Neck Cancer Support Group of CNY offers community education and support for patients, survivors and caregivers coping with head and neck cancer. The monthly meetings focus on self-help and group support. The free monthly meetings are organized where speakers and participants learn and share information about head and neck cancer, treatment, side effects, and how to cope with head and neck cancer and its treatment.

The group also supports outreach and education with the goal of educating the community about the causes and prevention of head and neck cancer. Participation in fundraising efforts is also available with the goal to provide assistance and resources for patients in need.

- When: the third Wednesday of each month from 5:30-6:30
- Where: Upstate Cancer Center Conference Room 1076  
750 East Adams Street,  
Syracuse, NY
- Free parking is offered to group members
- Call 315 464-5819 for more information

This group is affiliated with Upstate University Hospital. Patients from all area hospitals are welcome.





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## Support Services

The Upstate Cancer Center offers support services beyond the treatment of disease required for successful recovery, including:

- interventional radiology
- speech pathology
- therapy to maintain/improve swallow function during treatment
- physical therapy
- audiology
- nutrition
- social work
- smoking cessation
- hyperbaric oxygen therapy

Learn more about our [support services](#) available at the Upstate Cancer Center.



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## Learn More About Your Cancer

If you or a loved one has been diagnosed with cancer, understanding what to expect and learning about your options is important in making decisions. To help you be informed, we have put together information and links to resources for each of the cancers we treat.

- [Laryngeal cancer](#)
- [Thyroid cancer](#)
- [Throat cancer](#)
- [Tongue cancer](#)

If you have any questions, please call Upstate Connect at 315 464-HOPE (4673).

CONNECT WITH A  
**HEALTH  
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# Questions?







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