KOHC December Annual Meeting

Friday, December 13th, 2024

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health

To learn more about KOHC and become a member, please visit www.kyoralhealthcoalition.org

Kentucky Oral Health Coalition

@KYOralHealth

Thank you to our Signature Sponsors

CareQuest Institute for Oral Health®

aetna™

Aetna Better Health® of Kentucky

And Partner Sponsor

United Healthcare Community Plan

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health

To sponsor a future KOHC event, head to kyoralhealthcoalition.org

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health

Thank you to our co-hosts

Western Kentucky University: Dental Hygiene Program

WKU Dental Hygiene

Meeting Agenda

- Welcome and Introductions
- Spotlight: WKU Dental Hygiene Program
- Keynote: Trauma Informed Care in Oral Health
- Lunch
- Oral Cancer Grant Updates and Insights
- UK Early Learners Surveillance Study
- Community Water Fluoridation – Trends and Opportunities
- KOHC Policy Agenda
- Member Voting
- Closing

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health

WKU Program of Dental Hygiene

Dental Hygiene Program Numbers

- Class of 2024
  - 27 graduates all earning a BS degree in Dental Hygiene
  - 100% clinical exam pass rate on first attempt
  - 26/27 students (96.3%) written national board exam pass rate on first attempt
  - Immediate job placement
- Class of 2025
  - All 28 students completed required coursework and will be returning in Fall 2024
- Class of 2026
  - New cohort of 28 accepted into the program

Clinical Background

- The Program of Dental Hygiene continues to run a fully functioning dental hygiene clinic as it has for 52 years providing therapeutic, preventive, and educational services to members of the student body, faculty and community residents. The clinic continues to generate its own revenue.
- The WKU clinic provided approximately 1600 patient/student interactions during the clinical component of the 2023-2024 academic year.
- Treatment includes clinical exams, x-rays, cleanings, oral hygiene instruction, sealants, as well as a variety of supporting services.
  $35.00 for the general public
  $25.00 for WKU students

Program Outreach

- Students, faculty, and alumni volunteered to serve the Bowling Green community and region with dental treatment at the Remote Area Medical (RAM) event which took place last August.

- DH students throughout the academic year worked with the Bowling Green Dental Clinic, Kelly Autism Clinic, and the Buddy House of Bowling Green, and Lifeworks at WKU.

Program Outreach

- Chandler Park Assisted Living Facility-Provided information on the importance of oral health care for senior adults. Topics included: medical conditions/medicine and xerostomia, dental diseases, oral hygiene instructions, edentulism and replacement of missing teeth, alternative dental treatment including implants, and how to find affordable care in the area. Provided denture/partial denture cleaning on site with oral hygiene products provided to all participants.

Student American Dental Hygienists' Association (SADHA) Activities 2023-24

- Students partnered with the Buddy House of Bowling Green with member volunteers supporting the players during the Hardwood Heroes Basketball Classic. Students helped with greeting, check-in, concessions, and the halftime shoot off.

TEAM KENTUCKY®

CABINET FOR HEALTH AND FAMILY SERVICES

Trauma-Informed & Resilience-Oriented Approaches for Dental Hygiene Program

Diane Gruen-Kidd, LCSW
Department for Behavioral Health, Developmental & Intellectual Disabilities

December 13, 2024
Bowling Green, KY

TEAM KENTUCKY
CABINET FOR HEALTH AND FAMILY SERVICES

Roadmap

- Understanding trauma & traumatic stress responses
- Strategies to minimize traumatic stress responses for during dental appointments
- Leveraging dental care as a resilience-building experience

Self-Awareness Reminder

- Pay attention to your own needs and responses
- Take care of yourself however you need to during and following the presentation; you may be impacted even after this session
- Use coping skills that help you *metabolize* your responses to trauma
- Find a safe space in which you can process your experience using coping strategies including talking to colleagues, friends, family, or a professional provider

What is Trauma?

Event

- conveys actual or perceived threat of death, serious injury or sexual violation to one's self or someone close.

Experience

- unique, individual perception of threat to one's self or someone close

Effect

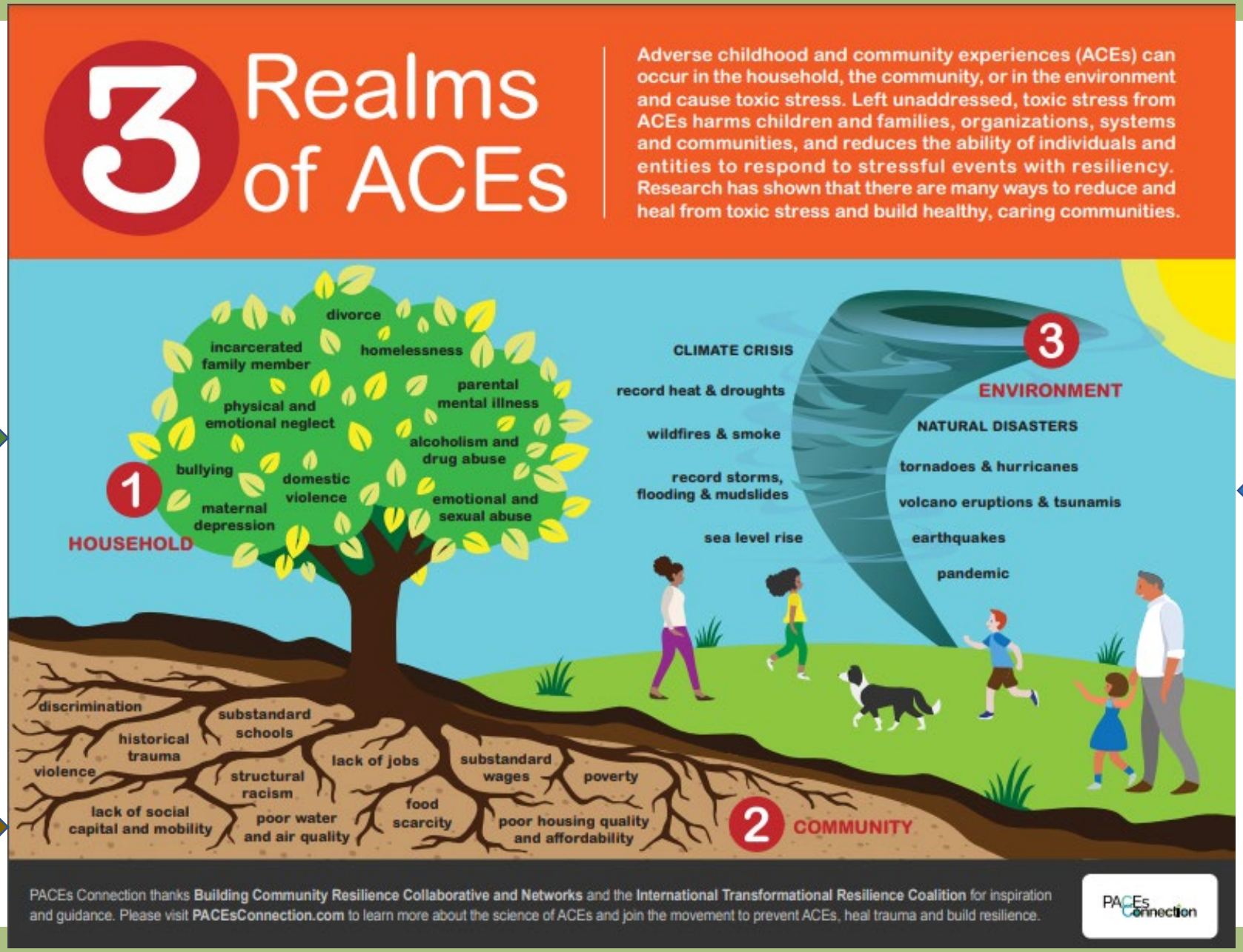
- adverse, may be long-lasting, & global: impacts social, emotional, cognitive, spiritual & physical development & functioning

Types of Trauma

TEAM KENTUCKY
CABINET FOR HEALTH AND FAMILY SERVICES

Household or Familial Traumas or Adversities

Community Traumas or Adversities, Root Causes, Social Drivers of Health & Well-Being



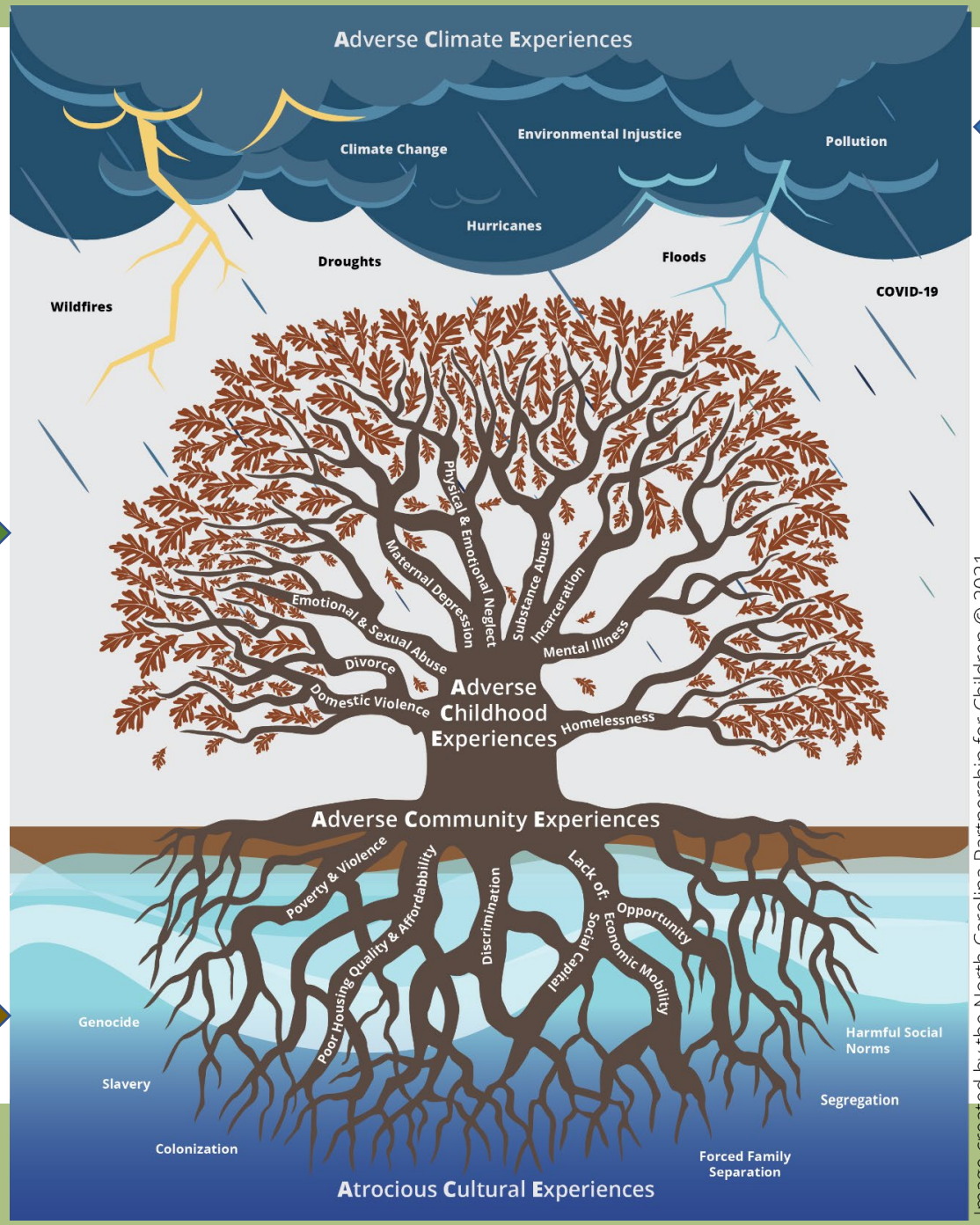
Climate & Natural Traumas or Adversities

https://www.pacesconnection.com/blog/3-realms-of-aces-updated

TEAM KENTUCKY
CABINET FOR HEALTH AND FAMILY SERVICES

Household or Familial Traumas or Adversities

Community Traumas or Adversities, Root Causes, Social Drivers of Health & Well-Being



Climate & Natural Traumas or Adversities

Cultural Traumas or Adversities

TEAM KENTUCKY
CABINET FOR HEALTH AND FAMILY SERVICES

Trauma Exposure

picture copyright washingtonpost.com

- Direct experience
- Witnessing (in person) to others
- Hearing about others' experiences
- Learning a trauma happened to a family member or friend
- Repeat or extreme exposure to aversive details (e.g. police officers repeatedly exposed to details of child abuse)

Racial Trauma

Racial trauma, or race-based traumatic stress (RBTS), refers to the mental and emotional injury caused by encounters with racial bias and ethnic discrimination, racism, and hate crimes…unlike PTSD, RBTS is not considered a mental health disorder. RBTS is a mental injury that can occur as the result of living within a racist system or experiencing events of racism. *(Mental Health America)*

Traumatic Stress: Brain & Body

Traumatic events **overwhelm a person's capacity to cope** and may elicit feelings of terror and powerlessness, and result in out-of-control physiological arousal

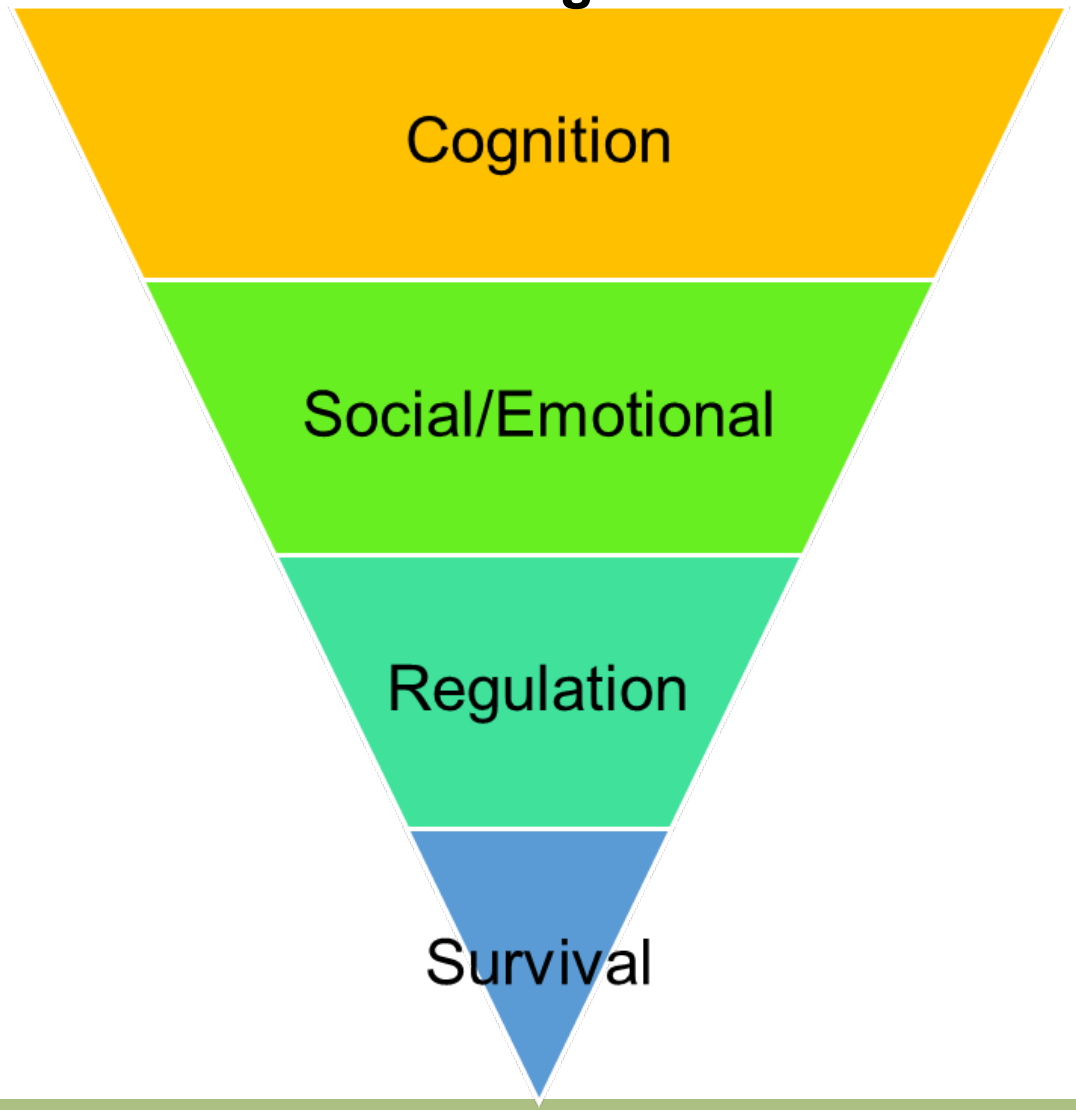
Trauma and Brain Development

FIGHT

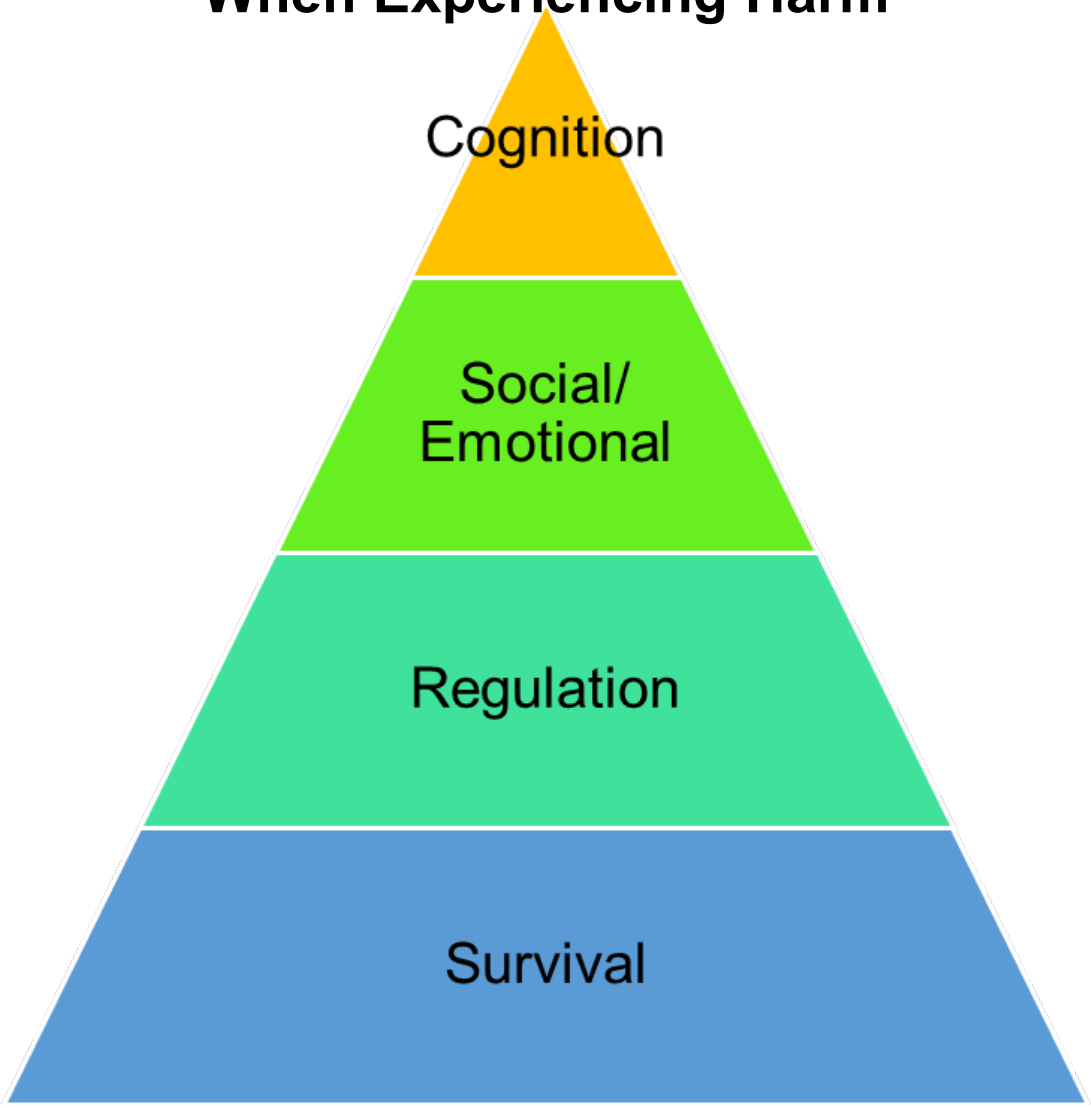
FLIGHT ahhala!

FREEZE

Brain Energy Allocation When Regulated



Brain Energy Allocation When Experiencing Harm



Adapted from Holt & Jordan, Ohio DoE based on Perry, B. (2006); Courtesy of Leora Wolf-Prusan, Pacific Southwest MHTTC

Signs and Symptoms of Traumatic Stress

Physical

- Sweating
- Aches and pain
- Dizziness
- Rapid Heartbeat

Behavioral

- Depression
- Anxiety
- Loneliness
- Use of negative coping (smoking, alcohol, or other substance abuse)

Cognitive

- Spacy-ness
- Loss of meaning
- Self-doubt
- Perfectionism
- Poor memory
- Difficulty planning

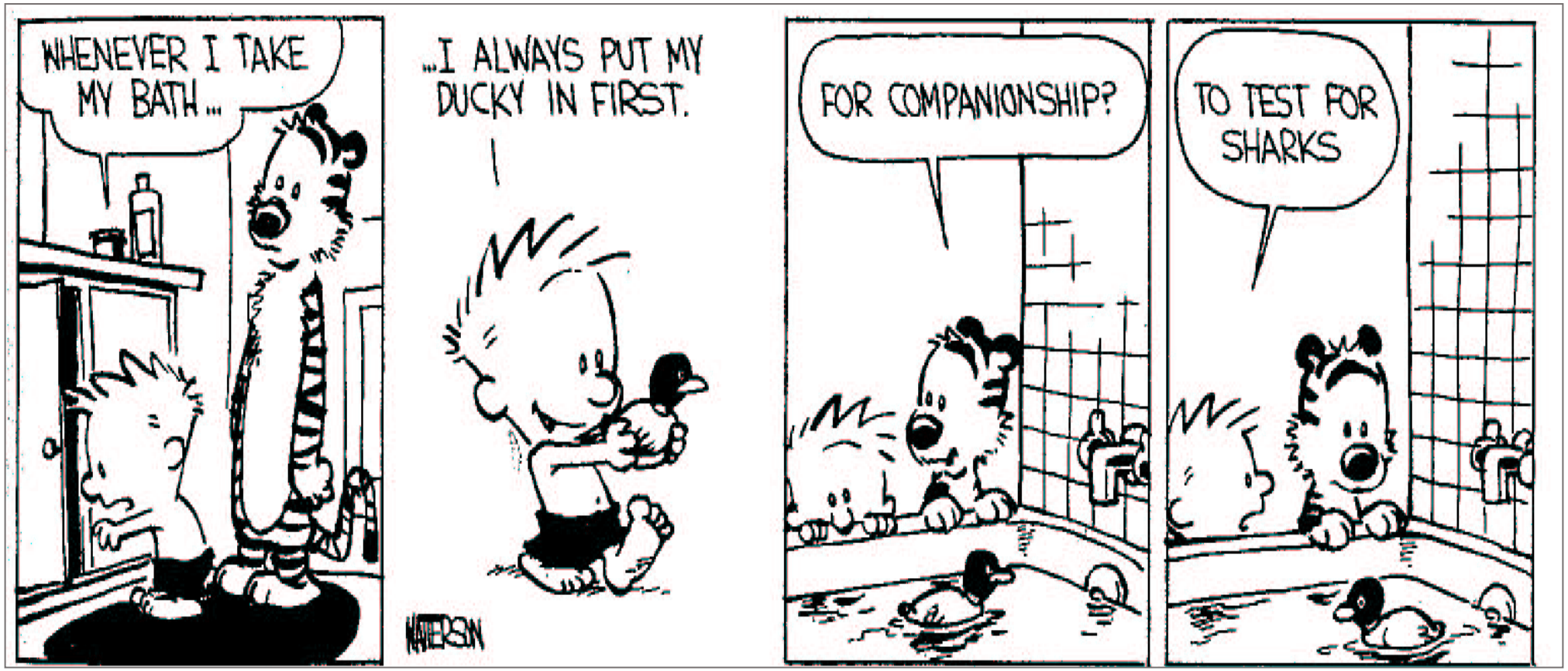
Emotional

- Anger
- Sadness
- Feeling out of control
- Guilt
- Loss of Hope

Social

- Avoidance
- Inertia
- Increased agitation
- Isolation or withdrawal
- Erratic

Trauma can change your world view



Trauma is Layered

"Trauma occurs in layers, with each layer affecting every other layer. Current trauma is one layer. Former traumas in one's life are more fundamental layers. Underlying one's own individual trauma history is one's group identity or identities and the historical trauma with which they are associated."

Bonnie Burstow (2003),
Toward a Radical Understanding of Trauma and Trauma Work

Trauma Reminders, Cues & Sparks

External trauma cues:

People

Places

Loud voices, yelling

Weather, time of day

Sensory stimuli e.g. smells, touch, temperature, light

Holidays, anniversaries, birthdays

Internal trauma cues:

Emotions e.g. anxiety, fear, **shame, humiliation,** guilt, loneliness

Thoughts e.g. failure, hopelessness, futility, powerlessness

Memories

Physiological sensations: hot, cold, tired, sweaty, sexual attraction, tense

Six Principles of Trauma-Informed Systems

- Safety
- Trustworthiness & Transparency
- Peer Support
- Collaboration & Mutuality
- Empowerment, Voice & Choice
- Equity

(SAMHSA, 2017, *SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach,* based on Fallot & Harris, 2009)

Integrating the 6 Elements in Care Settings

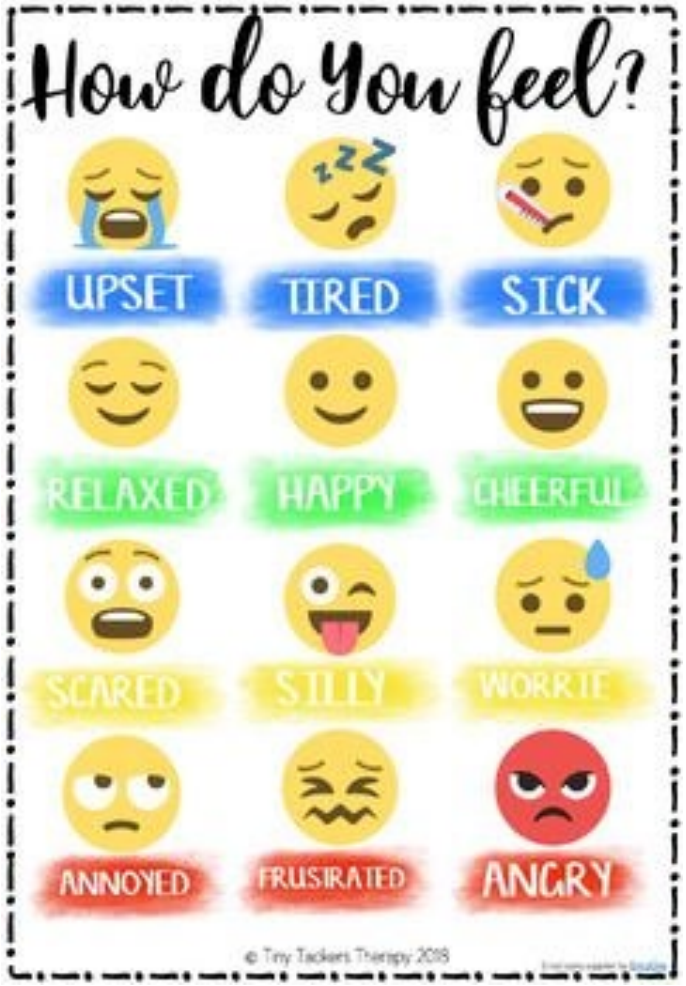
Safety	• Minimize sudden & intimidating actions • Create a friendly office/clinic climate
Trustworthiness & Transparency	• Explain things before they happen • Tell the whole truth
Peer Support	• Give examples of people like the patient • Feature examples that look like your patients

Integrating the 6 Elements in Care Settings

Collaboration & Mutuality	• Ask & listen • Co-create solutions with patients
Empowerment, Voice, Choice	• Allow patients to share their story & concerns • Provide choices when possible
Equity	• Practice with cultural humility • Check your own bias


Behaviors
Fighting
Stomping
Talking back
Withdrawing
Thoughts
I'm no good
Everyone's out to get me
I can't do anything right
No one cares about me
No point in trying
Everyone hates me
Feelings
Depression
Anxiety
Shame
Loneliness
Loss of hope

Name It to Tame it



TYPE

of emotion

+

intensity

of emotion

https://mindfulness.com/mindful-living/name-it-to-tame-it;
https://www.youtube.com/watch?v=ZcDLzppD4Jc

TEAM KENTUCKY
CABINET FOR HEALTH AND FAMILY SERVICES

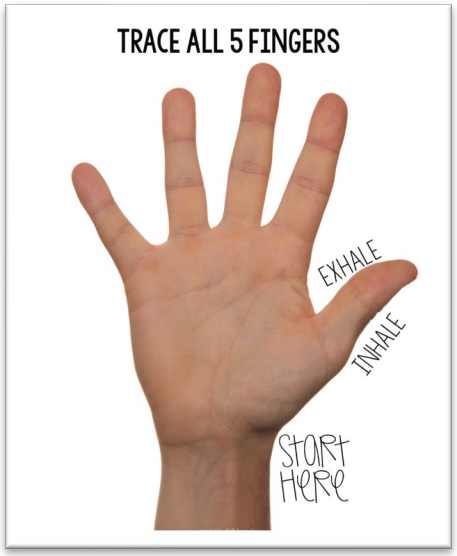
Coping Skills Toolbox/ Calm Down Kit

- A box/kit with tools youth can access when feeling stressed, anxious, angry or worried
- Place in waiting room & exam rooms
- Practice using the tools with youth prior to the dental care starting

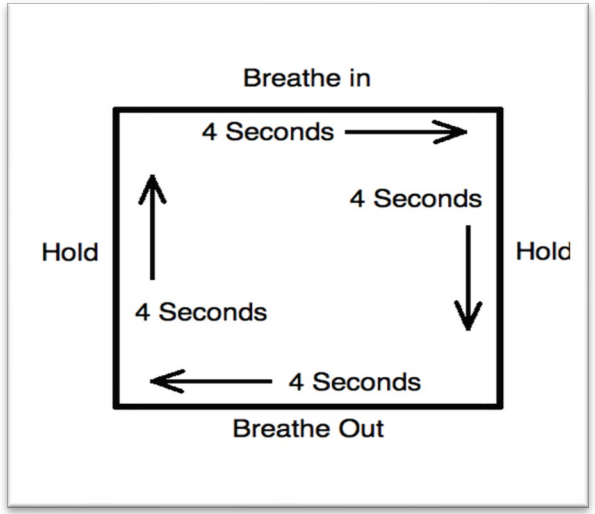
Deep Breathing

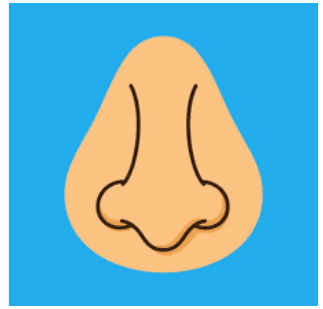
Basic Deep Breathing:
Inhale to count of 4; exhale to count of 5

5 Finger Breathing:
Trace your fingers with your inhale & exhale

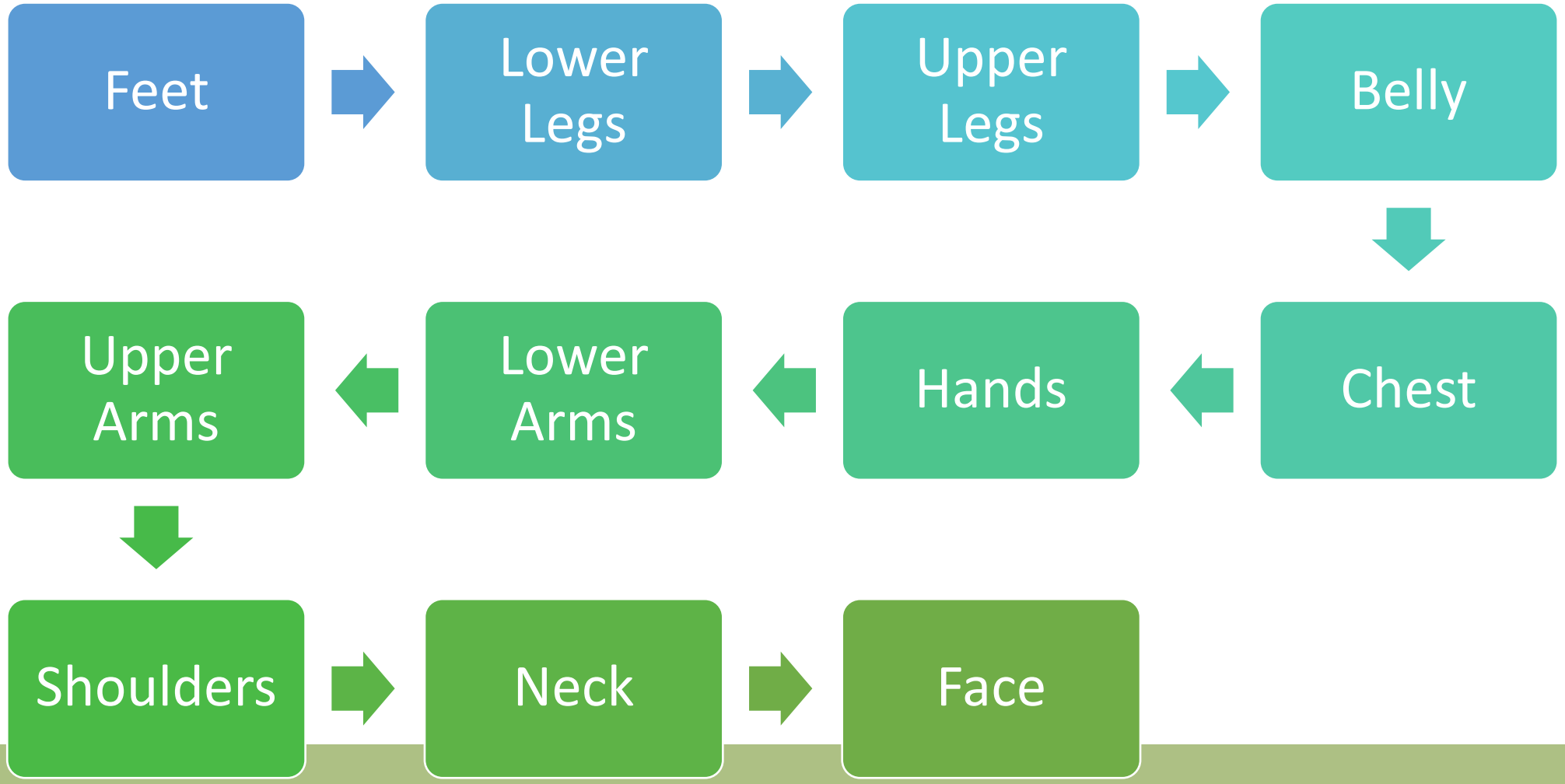


Box Breathing:
Trace the outline of the box in the air as you breathe





Progressive Muscle Relaxation



TEAM KENTUCKY
CABINET FOR HEALTH AND FAMILY SERVICES

Push-Pull-Dangle

- Push down on your chair for 5-10 seconds
- Pull up on your chair for 5-10 seconds
- Dangle in your chair for 5-10 seconds

Resilience

- "…the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress."

  APA, "Building Your Resilience" 2020

- The ability to survive and recover from adversity, to "bounce back" or "bounce forward"*
- Requires flexibility, adaptability, persistence, grit
- Dynamic interaction between individual, family, community & system level resilience

**Dr. Connie White, Kentucky Department of Public Health*

Resilience

"Resilience is not a thing or an attribute, but a flow. It moves through the body, and between multiple bodies when they are harmonized."

-- Resmaa Menakem (2017)

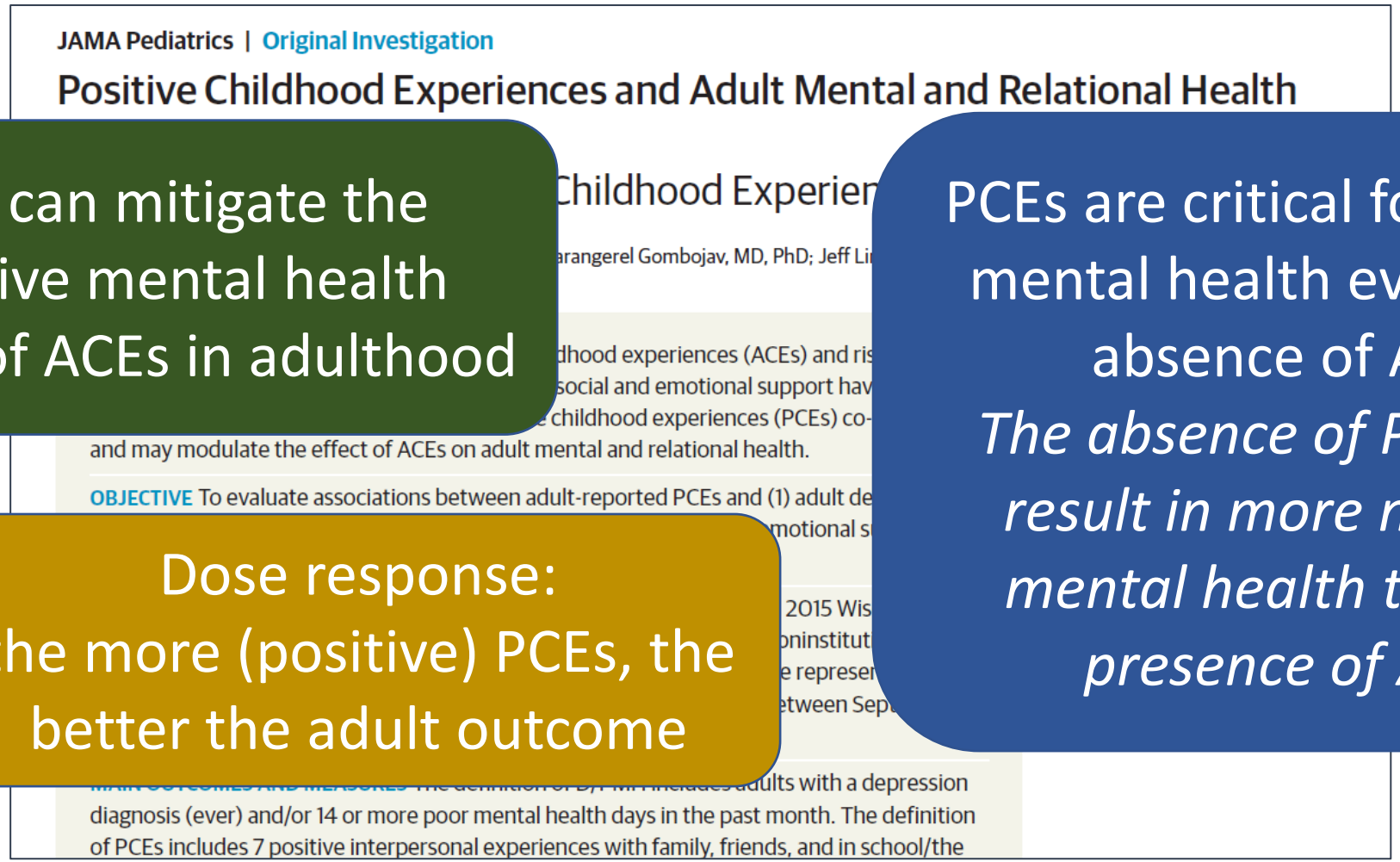
"[T]he resilience of a child is distributed. It's not just in the child. It's distributed in their relationships with the many other people who make up their world."

-- Ann Masten (2014)

"Resilience is my ability to stay related to my challenges."

-- Thomas Hubl (2021)

Positive Childhood Experiences Study:



JAMA Pediatrics | Original Investigation

Positive Childhood Experiences and Adult Mental and Relational Health

Childhood Experien

arangerel Gombojav, MD, PhD; Jeff Li

dhood experiences (ACEs) and ris
social and emotional support hav
childhood experiences (PCEs) co-
and may modulate the effect of ACEs on adult mental and relational health.

OBJECTIVE To evaluate associations between adult-reported PCEs and (1) adult de
motional s

2015 Wis
oninstitut
e represen
etween Sep

adults with a depression diagnosis (ever) and/or 14 or more poor mental health days in the past month. The definition of PCEs includes 7 positive interpersonal experiences with family, friends, and in school/the

PCEs can mitigate the negative mental health impact of ACEs in adulthood

Dose response:
the more (positive) PCEs, the better the adult outcome

PCEs are critical for positive mental health even in the absence of ACEs
The absence of PCEs may result in more negative mental health than the presence of ACEs

Bethell, Jones, Gombojav, Linkenbach, Sege (2019) *Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels:* https://jamanetwork.com/journals/jamapediatrics/fullarticle/2749336

TEAM KENTUCKY
CABINET FOR HEALTH AND FAMILY SERVICES

How Do People Build Resilience?

Connection

- Prioritize Relationships
- Join a Group
- Accept Help

Wellness

- Care for the Physical Body
- Mindfulness
- Avoid Negative Outlets

Healthy Thinking

- Keep Perspective
- Accept Change
- Optimistic Outlook
- Learn from the Past

Meaning

- Self-Discovery
- Help Others
- Be Proactive
- Make and Work Toward Goals

American Psychological Association, "Building Your Resilience," 2020

Resources

- Substance Abuse and Mental Health Services Administration Guidance for Trauma-Informed Approach: https://ncsacw.samhsa.gov/userfiles/files/SAMHSA_Trauma.pdf
- Healthy Outcomes from Positive Experiences https://positiveexperience.org/
- Center for Disease Control and Prevention ACEs https://www.cdc.gov/violenceprevention/aces/
- Center on the Developing Child at Harvard University http://developingchild.harvard.edu
- Child Welfare Information Gateway https://www.childwelfare.gov
- National Child Traumatic Stress Network: https://www.nctsn.org/
- Kentucky Strengthening Families: https://chfs.ky.gov/agencies/dph/dmch/ecdb/Pages/kysf.aspx

PaRK

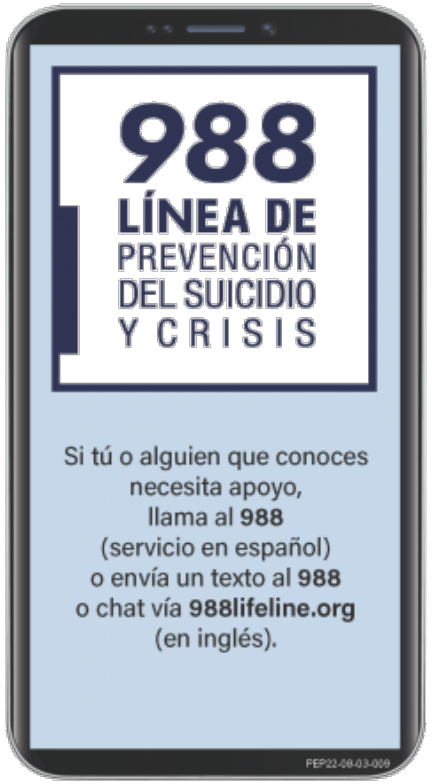
PARTNERSHIP FOR A RESILIENT KENTUCKY

Partnership for a Resilient Kentucky (PaRK) is a network of organizations and individuals to promote positive childhood experiences and resilience across the lifespan and to address the impact of adversity and trauma on individuals, families and communities. PaRK will develop a sustainable path to disseminate and support integration of science and best practices across the commonwealth.

https://www.resilient-ky.org/

TEAM KENTUCKY

CABINET FOR HEALTH AND FAMILY SERVICES



findhelpnow.org

988 SUICIDE & CRISIS LIFELINE

24/7 CALL, TEXT, CHAT

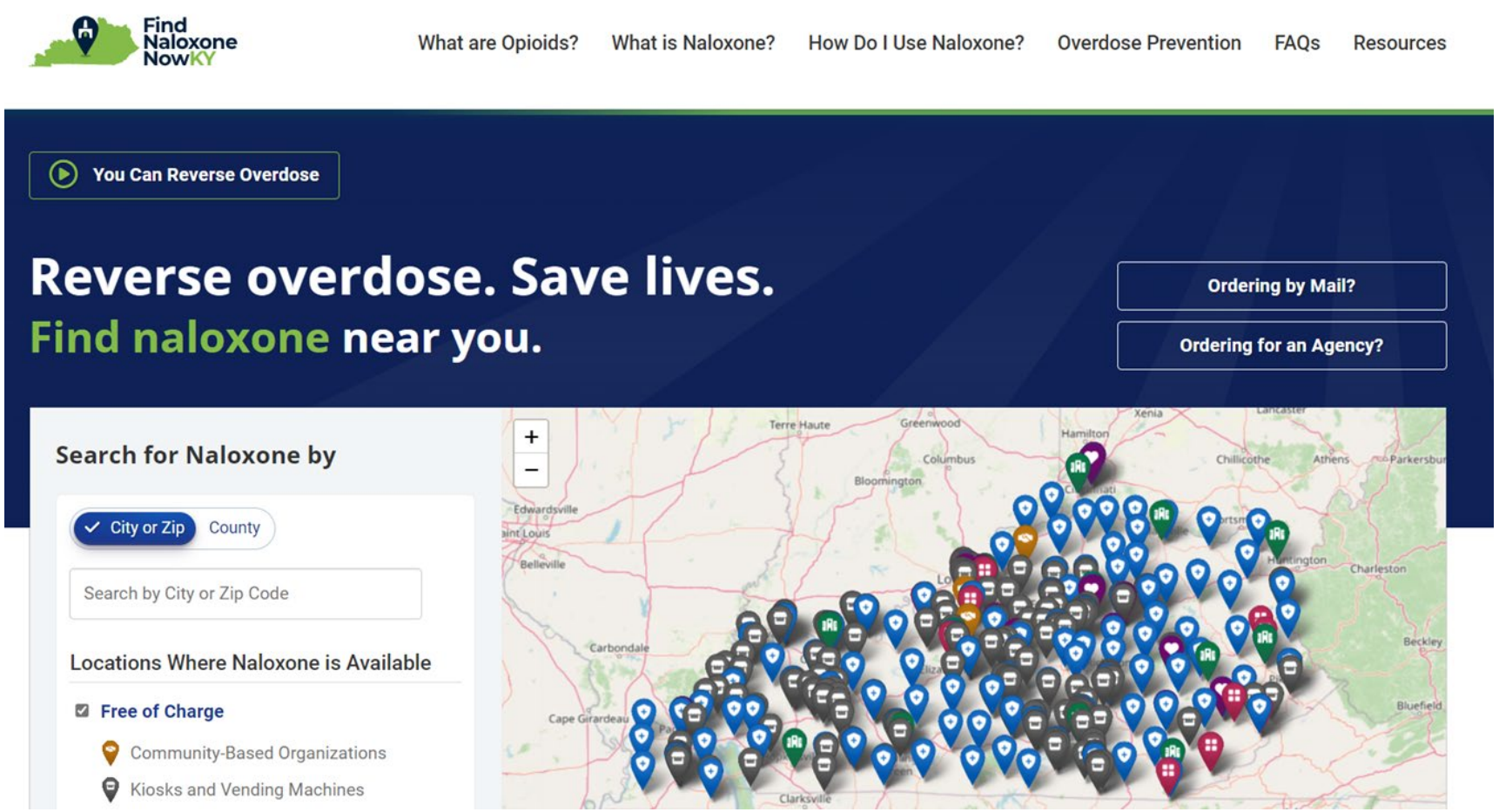
Disaster Distress Helpline:
Call or Text
1-800-985-5990

Deaf & Hard of Healing
ASL Callers supported by
videophone.

https://www.samhsa.gov/find-help/988 and https://www.samhsa.gov/find-help/disaster-distress-helpline and https://findhelpnow.org/ky

TEAM KENTUCKY
CABINET FOR HEALTH AND FAMILY SERVICES

FindNaloxoneNowKY.org



Find Naloxone NowKY

Support & Helpline Resources

- Kentucky Child Abuse Hotline: 1-877-597-2331
- National Human Trafficking Hotline: 1-888-373-7888/ text: BeFree (233733); https://humantraffickinghotline.org/
- Kentucky Association of Sexual Assault Programs: 1-800-656-HOPE; https://www.kasap.org/
- Kentucky Coalition Against Domestic Violence: 1-800-799-SAFE; https://kcadv.org/
- Kentucky's Regional Community Mental Health Centers: http://dbhdid.ky.gov/cmhc/default.aspx

Diane Gruen-Kidd, LCSW
Diane.Gruen-Kidd@ky.gov

Brittany Barber, M.Ed.
BrittanyA.Barber@ky.gov

Department for Behavioral Health, Developmental & Intellectual Disabilities

DBHDID Mission: *Promote health and well-being by facilitating recovery for people whose lives have been affected by mental illness and substance use; supporting people with intellectual or other developmental disabilities; and building resilience for all.*

DBHDID Vision: *All Kentuckians have access to quality services and supports to live full and healthy lives.*

DBHDID Values: *Choice, Respect, Equity, Excellence, Advocacy, Trauma-Informed & Resilience-Oriented Approaches*

Lunch Break

Ask us how you can become a KOHC member and earn CEUs for this meeting!

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health

Kentucky Oral Health Coalition

@KYOralHealth

NOW ACCEPTING PROPOSALS!

KOHC is excited to offer funding support for new or ongoing oral health projects that reach underserved populations in Kentucky.

Proposals due by January 10th, 2025

KOHC

Eradicating Oral Cancer in Eastern Kentucky

Grant funded by the United Health Foundation

Pam Stein, DMD, MPH

Professor, University of Kentucky College of Dentistry

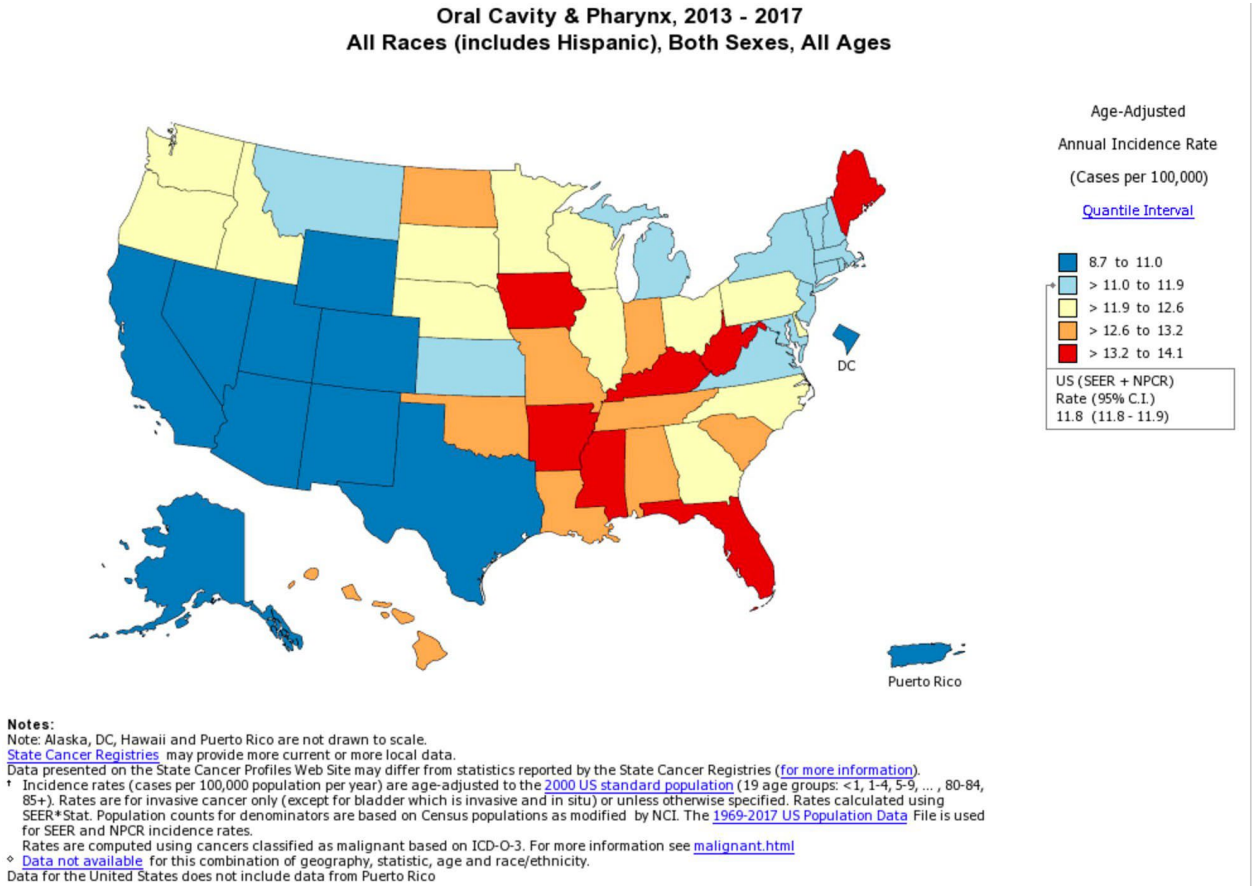
This information was made available by the University of Kentucky College of Dentistry, through its "Eradicate Oral Cancer in Eastern Kentucky" project sponsored by the United Health Foundation (UHF).

Oral/Pharyngeal Cancer Incidence

States with the highest incidence rates of oral/pharyngeal cancer

1. Kentucky 14.1
2. Arkansas 13.8
3. West Virginia 13.7
3. Florida 13.7

U.S. average 11.8 per 100,000



University of Kentucky
College of Dentistry

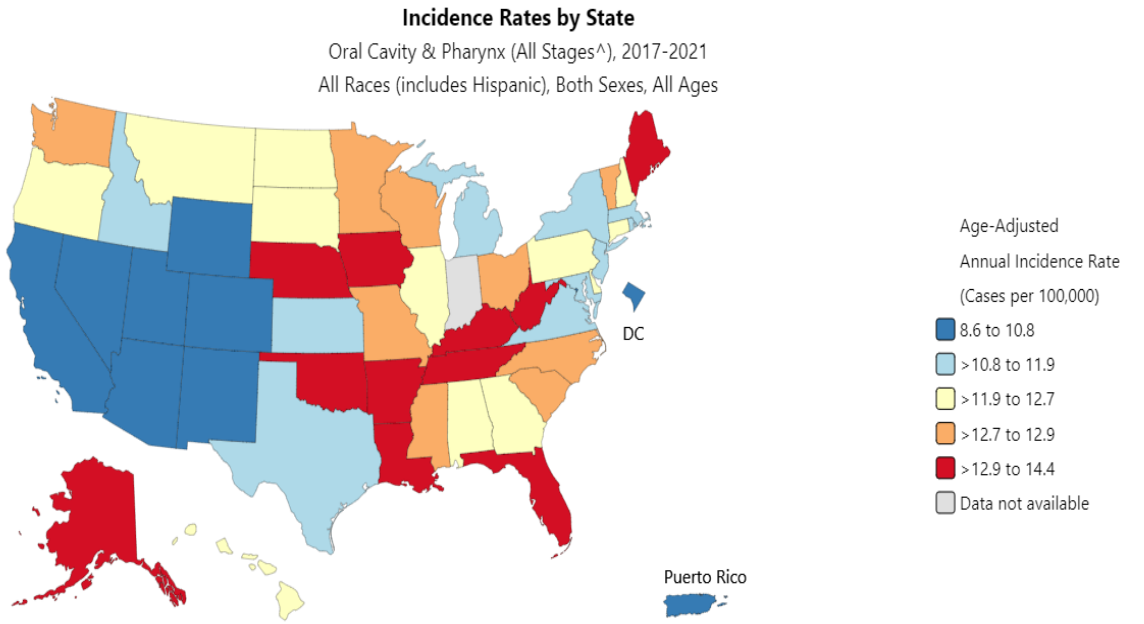
U.S. Cancer Statistics Working Group. U.S. Cancer Statistics Data Visualizations Tool, based on November 2018 submission data (1999-2016): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; www.cdc.gov/cancer/dataviz, June 2019

Oral/Pharyngeal Cancer Incidence

States with the highest incidence rates of oral/pharyngeal cancer (per 100,000 people).

1. Iowa 14.4
2. West VA 14.4
3. Florida 14.2
4. Maine 14.1
5. Kentucky 14.0

U.S. average 11.8 per 100,000



Created by statecancerprofiles.cancer.gov on 11/18/2024 3:21 pm.

State Cancer Registries may provide more current or more local data.

† Incidence rates (cases per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ... , 80-84, 85+). Rates are for invasive cancer only (except for bladder cancer which is invasive and in situ) or unless otherwise specified. Rates calculated using SEER*Stat. Population counts for denominators are based on Census populations as modified by NCI. The US Population Data File is used for SEER and NPCR incidence rates.

‡ Incidence data come from different sources. The Average Annual Percent Change (AAPC) is based on the APCs calculated by Joinpoint. Due to data availability issues, the time period used in the calculation of the joinpoint regression model may differ for selected counties.

Comparing Oral/Pharyngeal Cancer Incidence

Highest incidence 2013-2017

1.	Kentucky	14.1
2.	Arkansas	13.8
3.	West Virginia	13.7
3.	Florida	13.7

Highest incidence 2017-2021

1.	Iowa	14.4
2.	West VA	14.4
3.	Florida	14.2
4.	Maine	14.1
5.	Kentucky	14.0

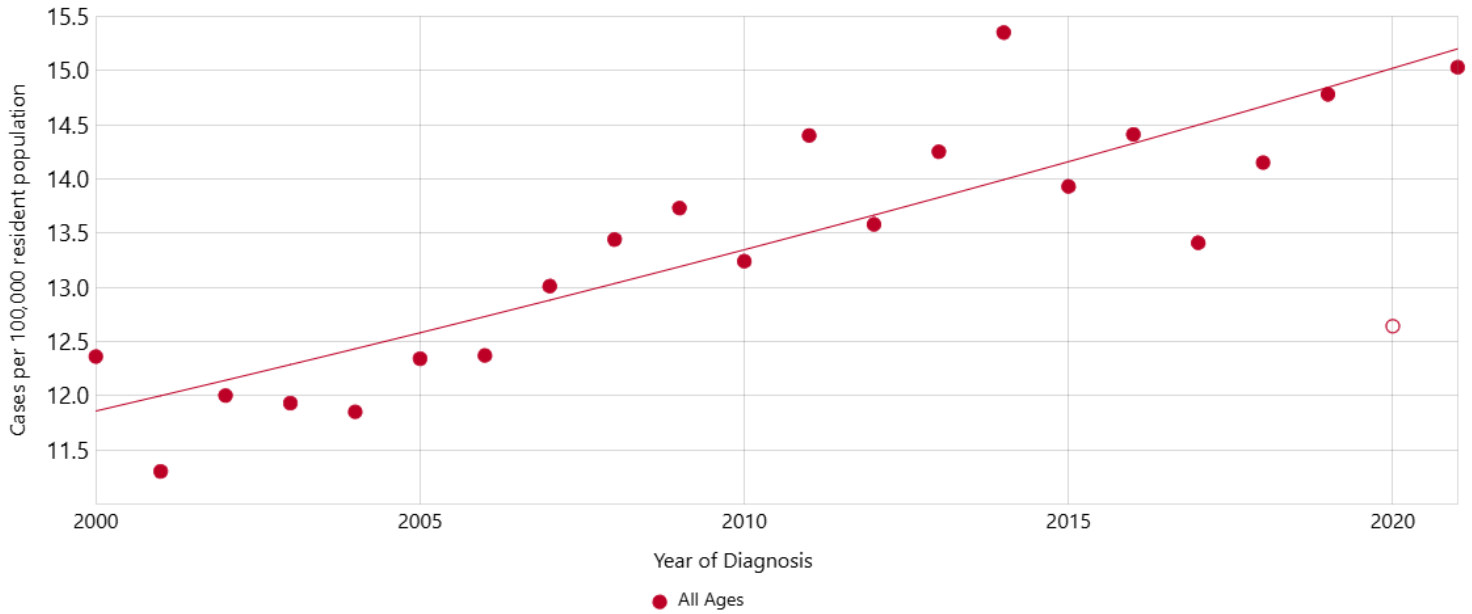
University of Kentucky
College of Dentistry

Historical Trends

Incidence, Kentucky

Oral Cavity & Pharynx, All Races (incl Hisp)

Both Sexes, All Ages



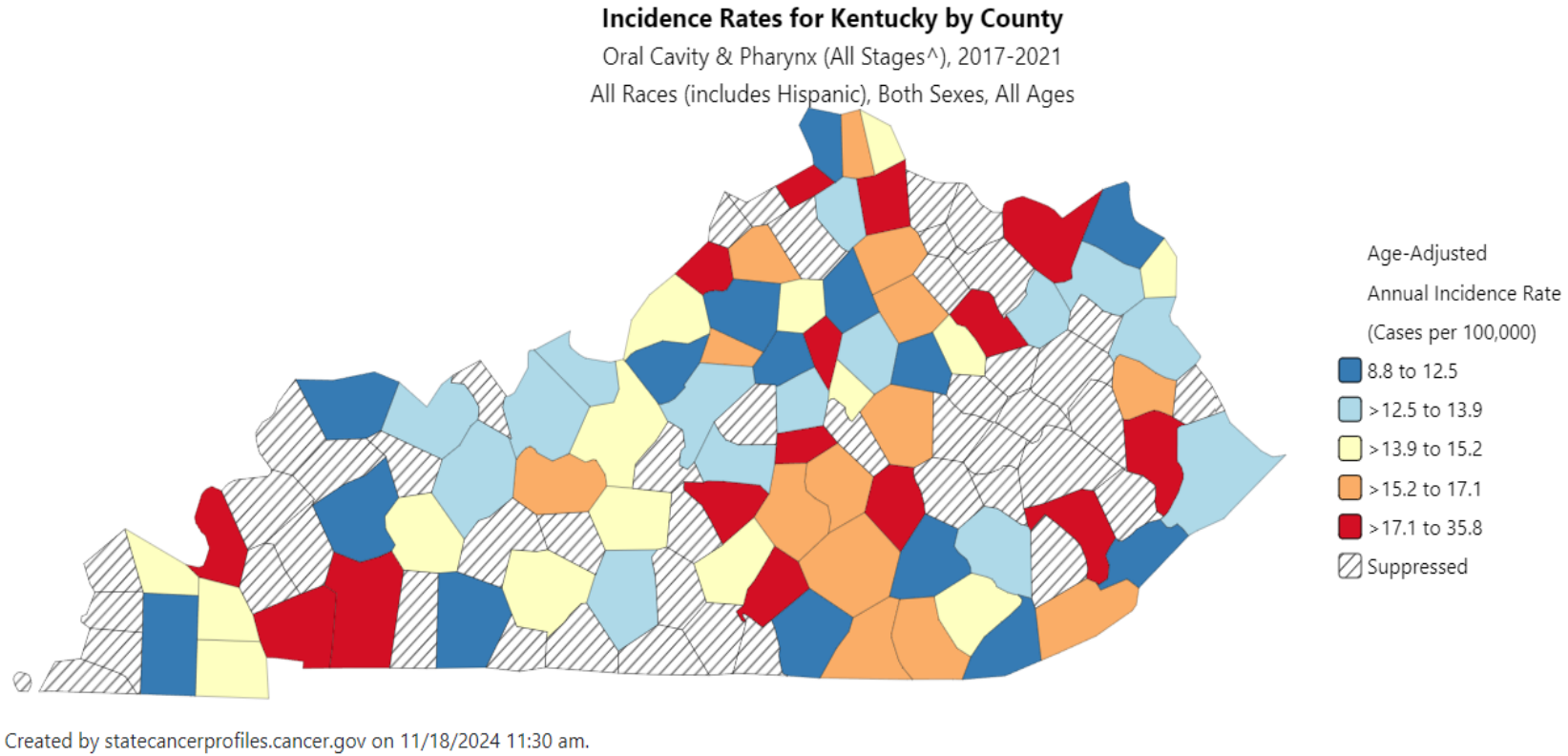
Notes:
Created by statecancerprofiles.cancer.gov on 12/06/2024 2:35 pm.
Regression lines calculated using the Joinpoint Regression Program (Version 5.1)

The 2020 incidence rate is displayed but not used in the fit of the trend line(s). Impact of COVID on SEER Cancer Incidence 2020 data.
Source: Incidence data provided by the SEER Program.
Rates calculated by the National Cancer Institute using SEER*Stat. Rates are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ... , 80-84, 85+). Rates are for invasive cancer only (except for bladder cancer which is invasive and in situ) or unless otherwise specified. Population counts for denominators are based on Census populations as modified by NCI. The US populations included with the data release have been adjusted for the population shifts due to hurricanes Katrina and Rita for 62 counties and parishes in Alabama, Mississippi, Louisiana, and Texas. The US Population Data File is used with SEER data. Rates and trends in this graph are computed using the same standard for malignancy. For more information see malignant.html
Due to data availability issues, the time period used in the calculation of the joinpoint regression model may differ for selected racial groups or counties.

County Rankings Both Sexes, All Ages, All Races (per 100,000 people)

1.	Gallatin	35.8
2.	Livingston	24.3
3.	Lewis	23.6
4.	Bath	21.7
5.	Pendleton	21.0

KY Incidence Rate = 14.0



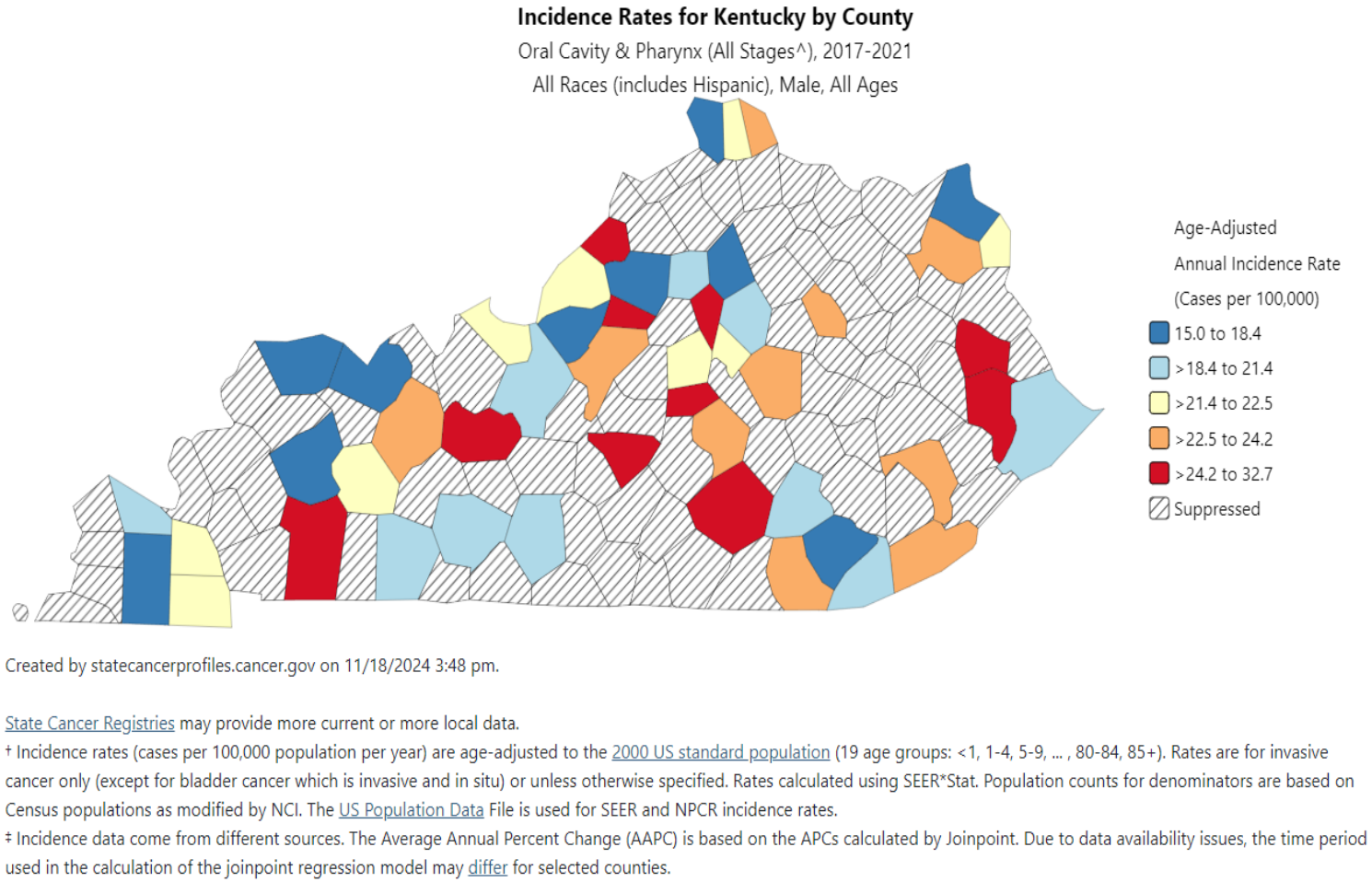
https://statecancerprofiles.cancer.gov/map/map.withimage.php?21&county&001&003&00&0&01&0&1&4&0#results

County Rankings Males All Ages

(per 100,000 people)

1. Woodford	32.7
2. Taylor	32.3
3. Spencer	29.7
4. Boyle	28.9
5. Christian	28.7

KY Incidence Rate = 14.0



Created by statecancerprofiles.cancer.gov on 11/18/2024 3:48 pm.

State Cancer Registries may provide more current or more local data.

† Incidence rates (cases per 100,000 population per year) are age-adjusted to the 2000 US standard population (19 age groups: <1, 1-4, 5-9, ... , 80-84, 85+). Rates are for invasive cancer only (except for bladder cancer which is invasive and in situ) or unless otherwise specified. Rates calculated using SEER*Stat. Population counts for denominators are based on Census populations as modified by NCI. The US Population Data File is used for SEER and NPCR incidence rates.

‡ Incidence data come from different sources. The Average Annual Percent Change (AAPC) is based on the APCs calculated by Joinpoint. Due to data availability issues, the time period used in the calculation of the joinpoint regression model may differ for selected counties.

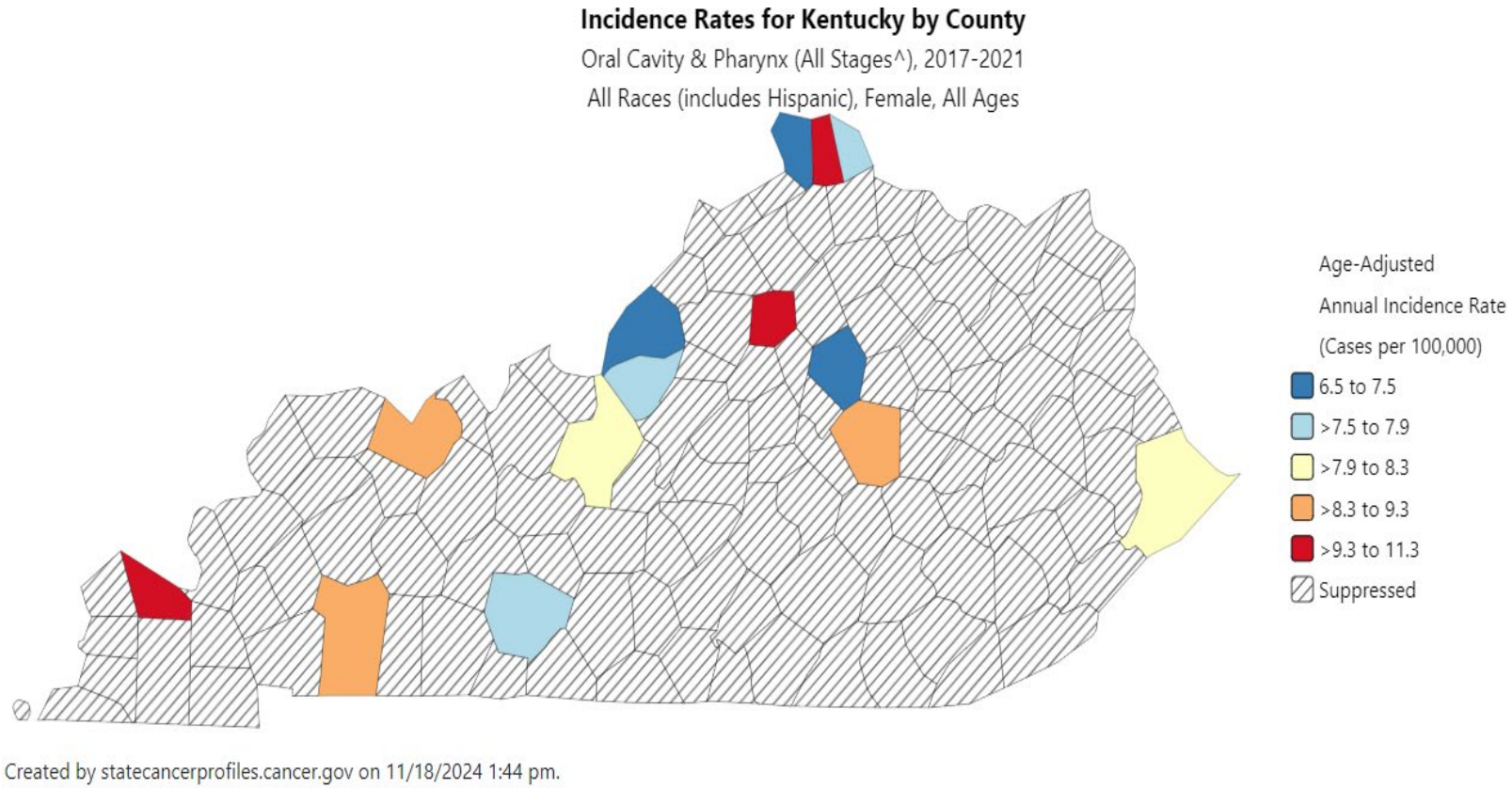
https://statecancerprofiles.cancer.gov/map/map.withimage.php

County Rankings Females All Ages

(per 100,000 people)

1. McCracken 11.3
2. Kenton 10.4
3. Franklin 9.7

KY Incidence Rate = 14.0



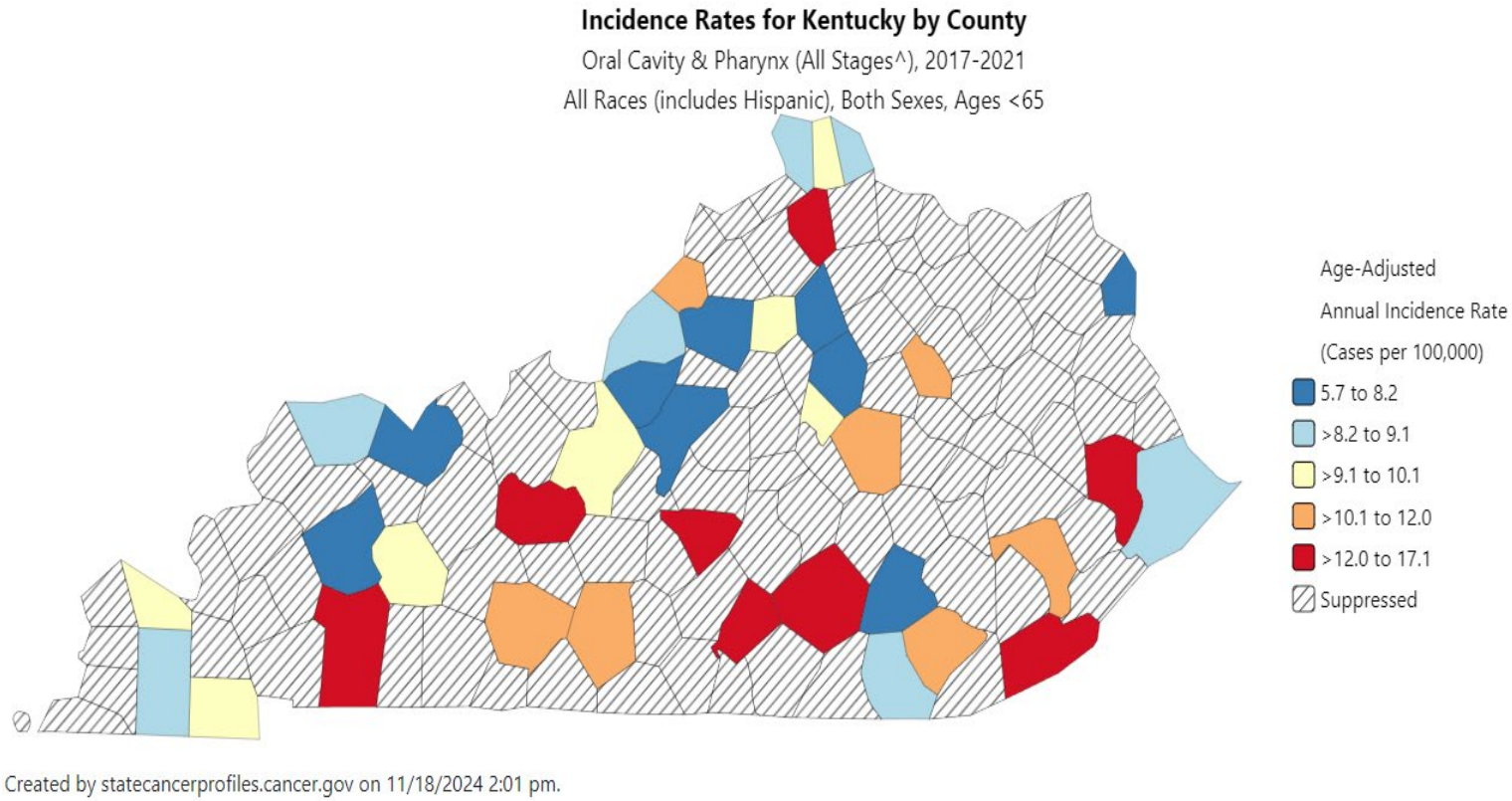
https://statecancerprofiles.cancer.gov/map/map.withimage.php?21&county&001&003&00&2&01&0&1&5&0#results

County Rankings Under Age 65

(per 100,000 people)

1. Russell 17.0
2. Taylor 13.8
3. Grant 13.6
4. Floyd 13.6

KY Incidence Rate = 14.0



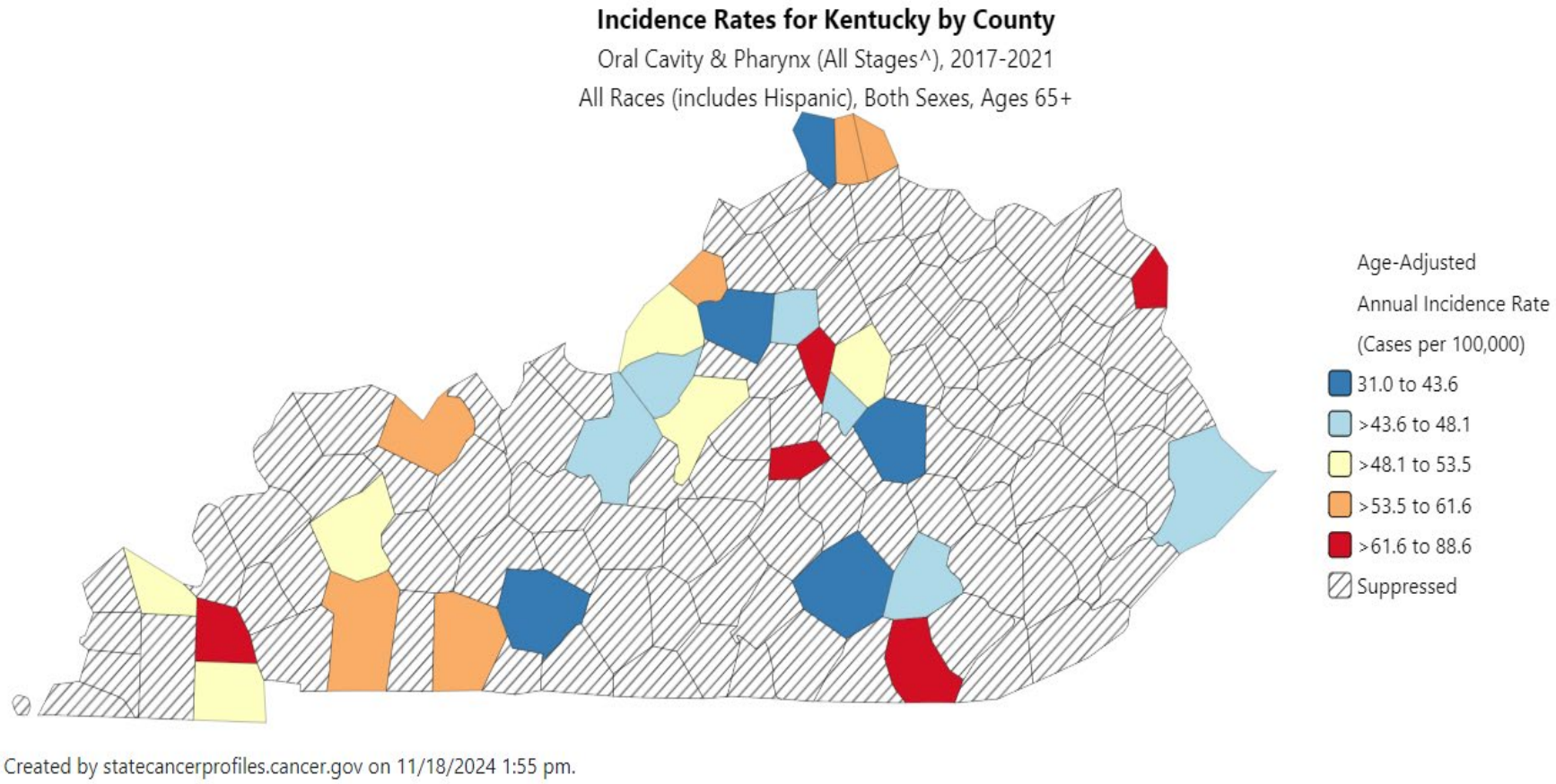
https://statecancerprofiles.cancer.gov/map/map.withimage.php?21&county&006&003&00&0&01&0&1&5&0#results

County Rankings Over Age 65

(per 100,000 people)

1. Woodford 88.6
2. Marshall 72.2
3. Boyle 67

KY Incidence Rate = 14.0

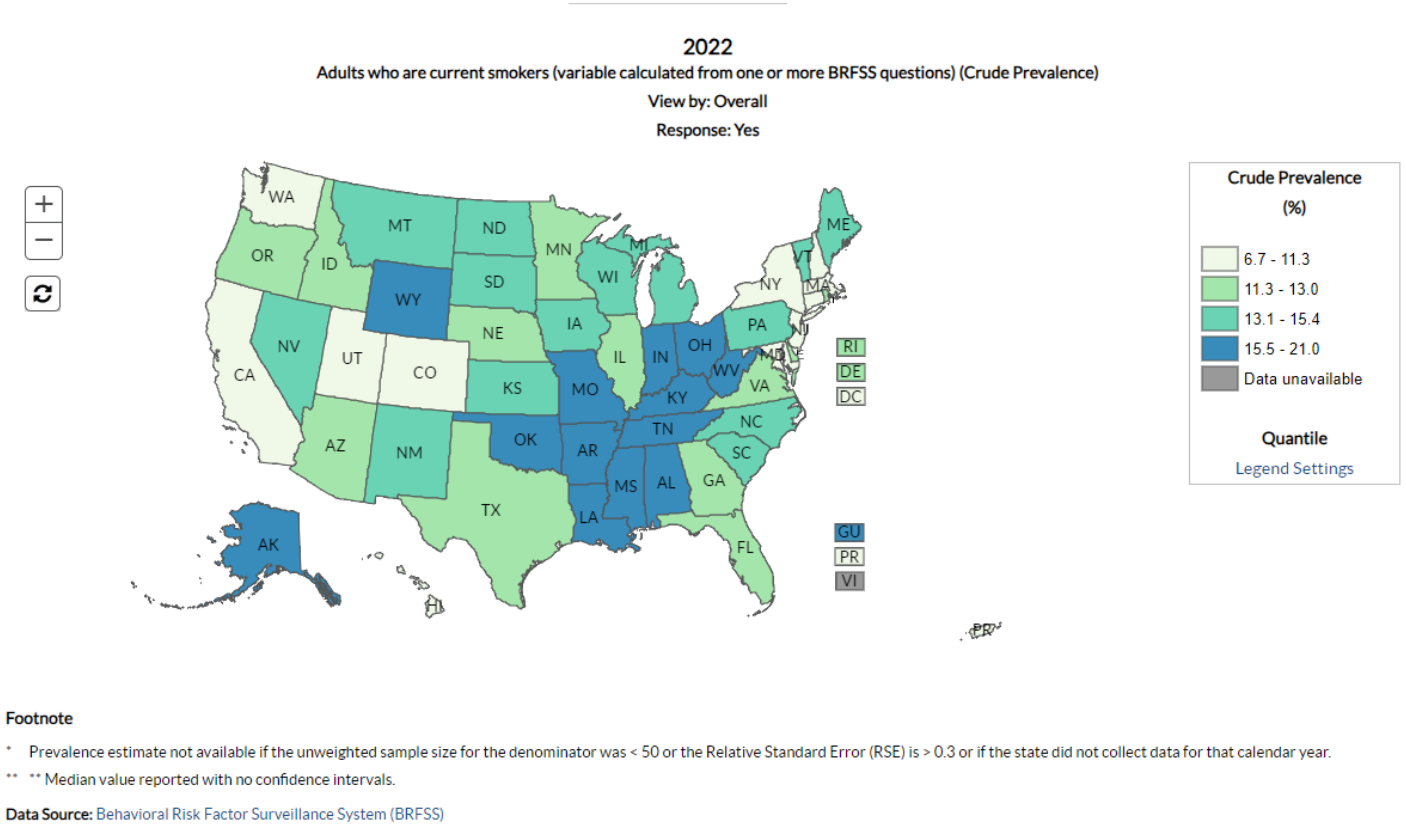


https://statecancerprofiles.cancer.gov/map/map.withimage.php?21&county&157&003&00&0&01&0&1&5&0#results

Main Risk Factors for Oral/Pharyngeal Cancer

- Tobacco (anterior oral cavity)
- Alcohol (anterior oral cavity)
- Human Papilloma Virus HPV (posterior oral cavity)

Kentucky Ranks High in Adult Smoking



Footnote

* Prevalence estimate not available if the unweighted sample size for the denominator was < 50 or the Relative Standard Error (RSE) is > 0.3 or if the state did not collect data for that calendar year.

** ** Median value reported with no confidence intervals.

Data Source: Behavioral Risk Factor Surveillance System (BRFSS)

2022 data from Behavior Risk Factor Surveillance System and CDC

% of Adult Population Who Smoke

1.	West Virginia	21%
2.	Arkansas	18.7%
3.	Tennessee	18.5%
4.	Kentucky	17.4%

Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. [accessed Nov 18, 2024]. URL: https://www.cdc.gov/brfss/brfssprevalence/.

Kentucky was Ranked Least-Healthy State for Tobacco Use among Youth in 2015 but is now 36th.

In the 2023 Kentucky Youth Behavior Survey:

Over 40% of Kentucky youth ages 15-18 had used a vaping device.

23% of 11-14 Kentucky youth had used a vaping device.

https://www.education.ky.gov/curriculum/WSCC/data/Pages/Youth-Risk-Behavior-Survey-(YRBS).aspx?utm_medium=email&utm_source=govdelivery
Accessed November 22, 2024

University of Kentucky
College of Dentistry

SAVE A LIFE IN 30 SECONDS

Kentucky has the **highest** rate of oral cancer in the nation. Most cases are found late when survival rates are low.

You can help by performing a **30-second** oral cancer screening on your patients during their appointment.

If you find a suspicious lesion, contact your local oral surgeon or Dr. Melvyn Yeoh, Director of the UK College of Dentistry's "Eradicate Oral Cancer in Eastern Kentucky" grant. Dr. Yeoh may be reached at 646-573-3411.

Scan to watch a video on how to perform an oral cancer exam.

Alcohol and Tobacco – The WORST

Alcohol and tobacco remain the greatest risk factors and in combination they increase the risk for oral cancer 15 times more than the individual risk factors of alcohol or tobacco alone.

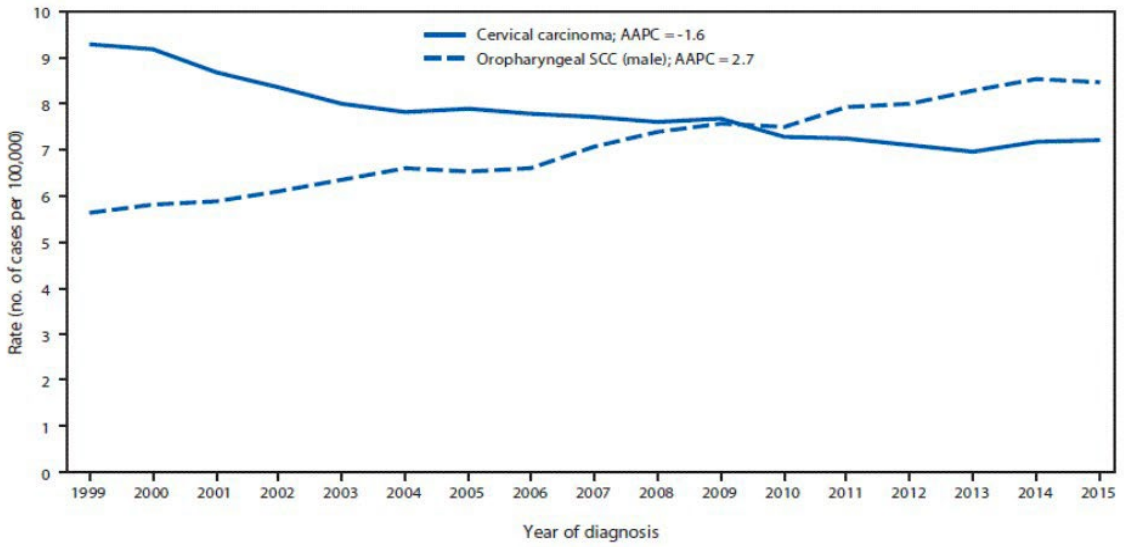
Combining the two has a synergistic - more than additive - effect

https://www.aaoms.org/media/raise-oral-cancer-awareness/fact-sheets

HPV: Human Papilloma Virus as a Risk Factor

Oropharyngeal cancer became the most common type of HPV related cancer in 2010.

Trends in age-adjusted incidence of cervical carcinoma among females and oropharyngeal SCC among men, — U.S., 1999–2015



University of Kentucky
College of Dentistry

Centers for Disease Control and Prevention. Cancers Associated with Human Papillomavirus. Centers for Disease Control and Prevention, U.S. Department of Health and Human Services; 2024.

Kentucky Has the Highest Rate of HPV Related Cancers in the U.S.

Source: KCR; NCI SEER*STAT

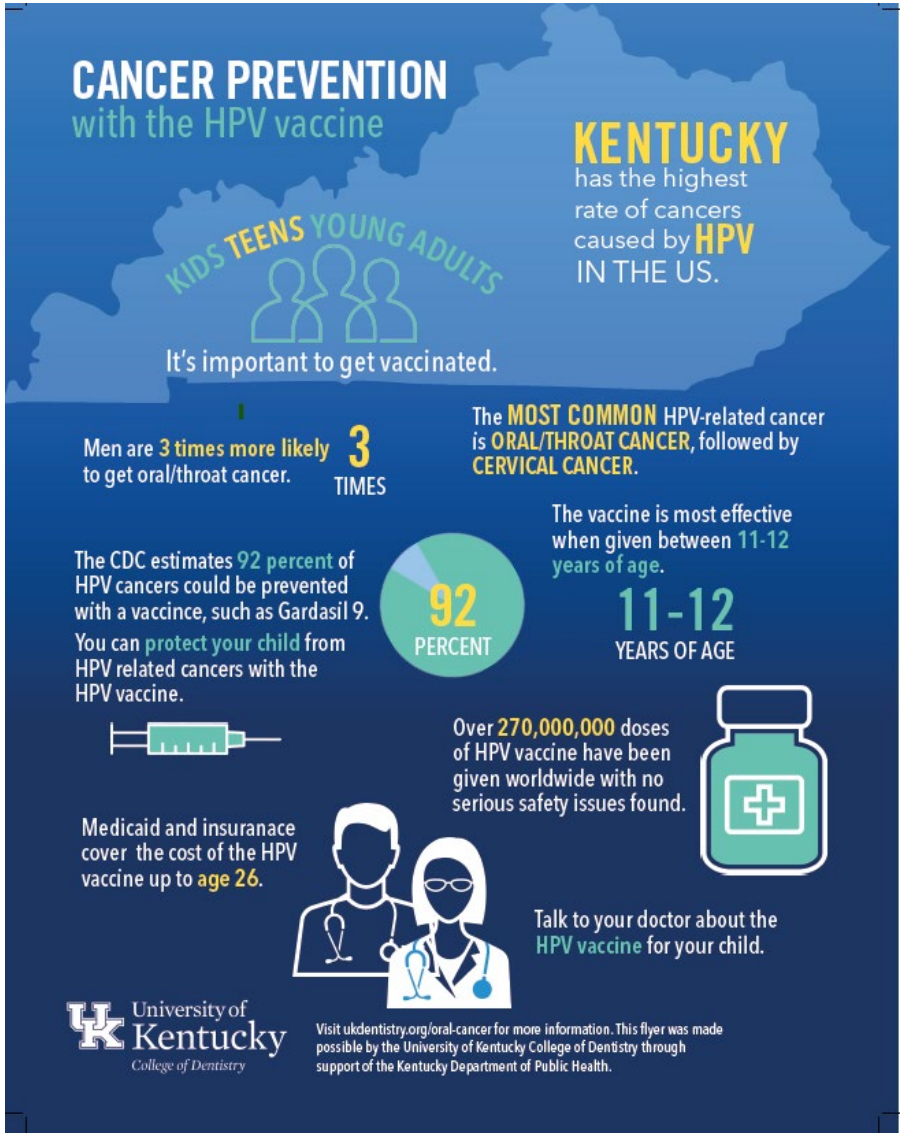
University of Kentucky
College of Dentistry

HPV Vaccine

Years of safety testing

- No serious safety concerns
- 270,000,000 vaccinated since 2006
- 92% effective
- Sustained protection

University of Kentucky
College of Dentistry



HPV Vaccine Target age 11-12

Approved for boys and girls 9 years old and older

Previously recommended for up to 21 in males and 26 in females

Now approved up to age 45

TABLE 2
HPV Vaccine Dosing Schedules Based on Age

Age (males and females)	Doses	Schedule
9-14 y*	2-dose series†	Dose 1: 0 mo Dose 2: 6-12 mo
15-26 y	3-dose series	Dose 1: 0 mo Dose 2: 1-2 mo Dose 3: 6 mo

*Populations with primary or secondary immunocompromising conditions should receive the 3-dose series regardless of age.

Source: Meites et al. MMWR Morb Mortal Wkly Rep. 2016

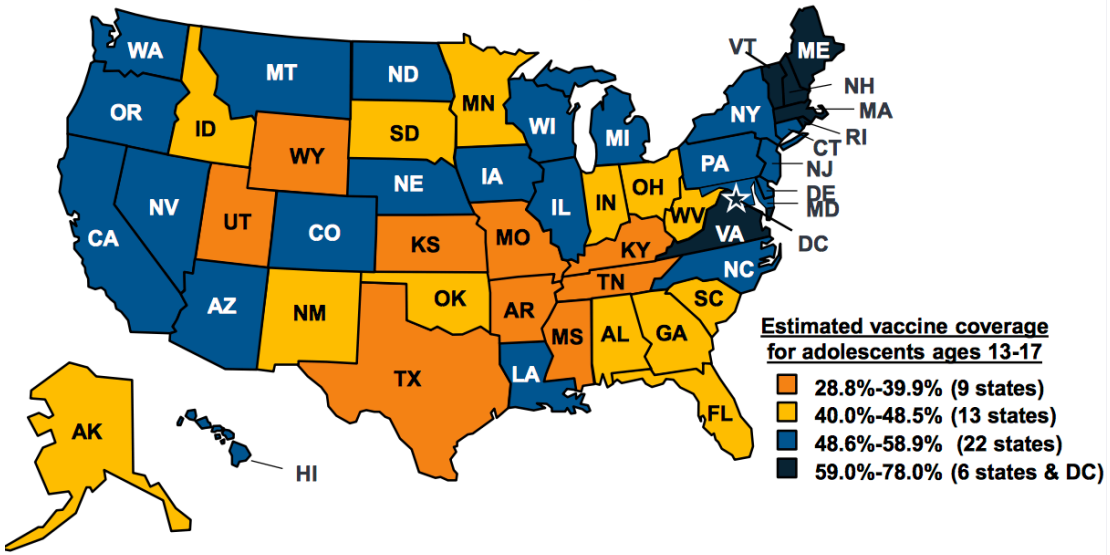
Kentucky Improves from Lowest Quartile for HPV Vaccine to Second Lowest Quartile

Figure 4

HPV Vaccination Rates of Adolescents, by State

Adolescents ages 13-17 with HPV Up-To-Date (UTD) Vaccination Series, 2017

2017 US Average = 48.6%



NOTES: HPV UTD includes those with ≥3 doses, and those with 2 doses when the first HPV Vaccine dose was initiated before age 15 years and time between the first and the second dose was at least 5 months minus 4 days.
SOURCE: CDC. (2018). National, Regional, State, Selected Local Area Vaccination Coverage Among Adolescents Aged 13-17 Years—United States, 2017. *MMRW* 67(33).

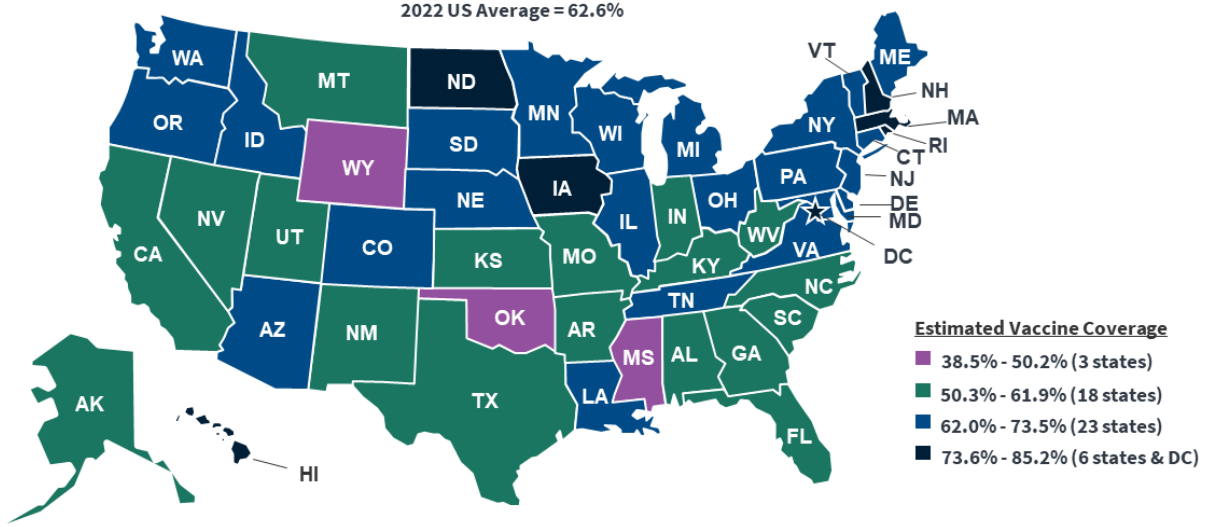
KFF

Figure 3

HPV Vaccination Rates of Adolescents by State

Adolescents Ages 13-17 with Up-to-Date (UTD) HPV Vaccination Series, 2022

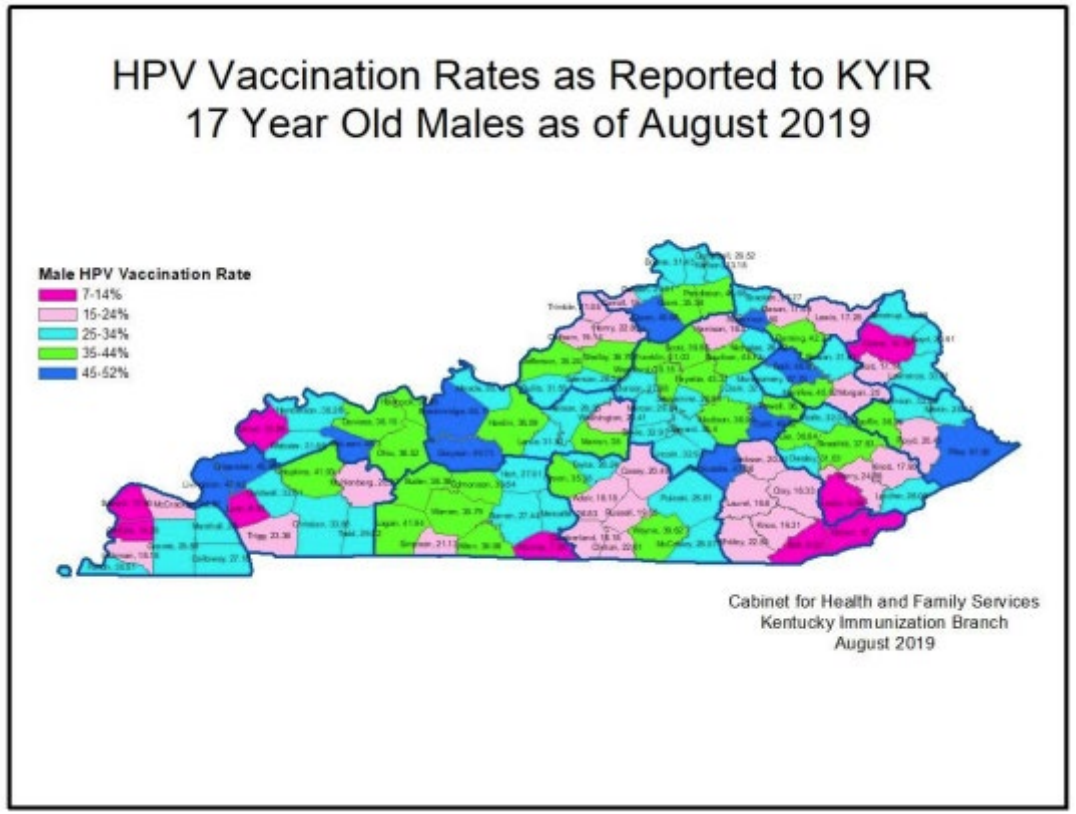
2022 US Average = 62.6%



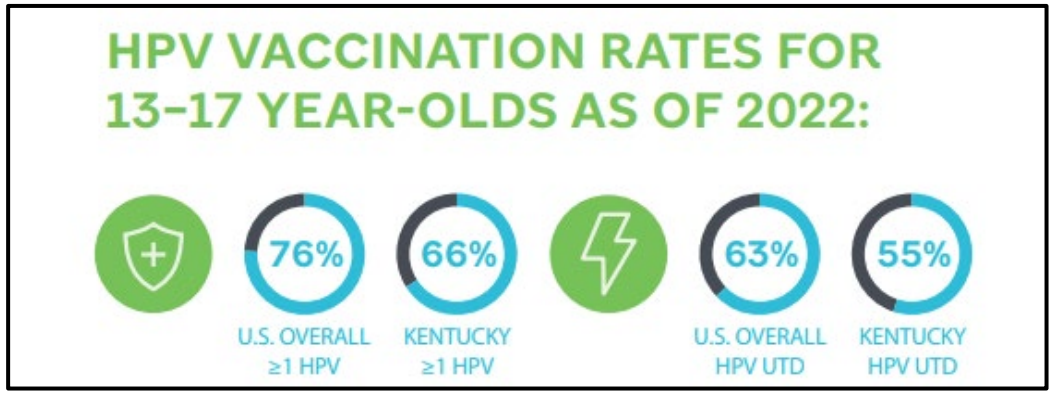
NOTE: HPV UTD includes those with ≥3 doses, and those with 2 doses when the first HPV vaccine dose was initiated before age 15 years and there was at least 5 months minus 4 days between the first and second dose.
SOURCE: CDC, Vaccination Coverage Among Adolescents Aged 13-17 Years – National Immunization Survey – Teen, United States, 2022. *MMRW* 72(34).

KFF

http://files.kff.org/attachment/fact-sheet-the-hpv-vaccine-access-and-use-in-the-u-s



Data from Kentucky Immunization Registry Accessed November 19, 2024 at https://www.chfs.ky.gov/agencies/dph/dehp/imm/AdolescentDataAnalysisinKYIR.pdf



Data from St Judes HPV Cancer Prevention Program Accessed November 19, 2024 at pbf-kentucky-state-profile-2023.pdf

Median Age at Diagnosis is 63

BUT….

The ***fastest growing segment of the oral cancer population*** is people under the age of 50 who do not smoke.

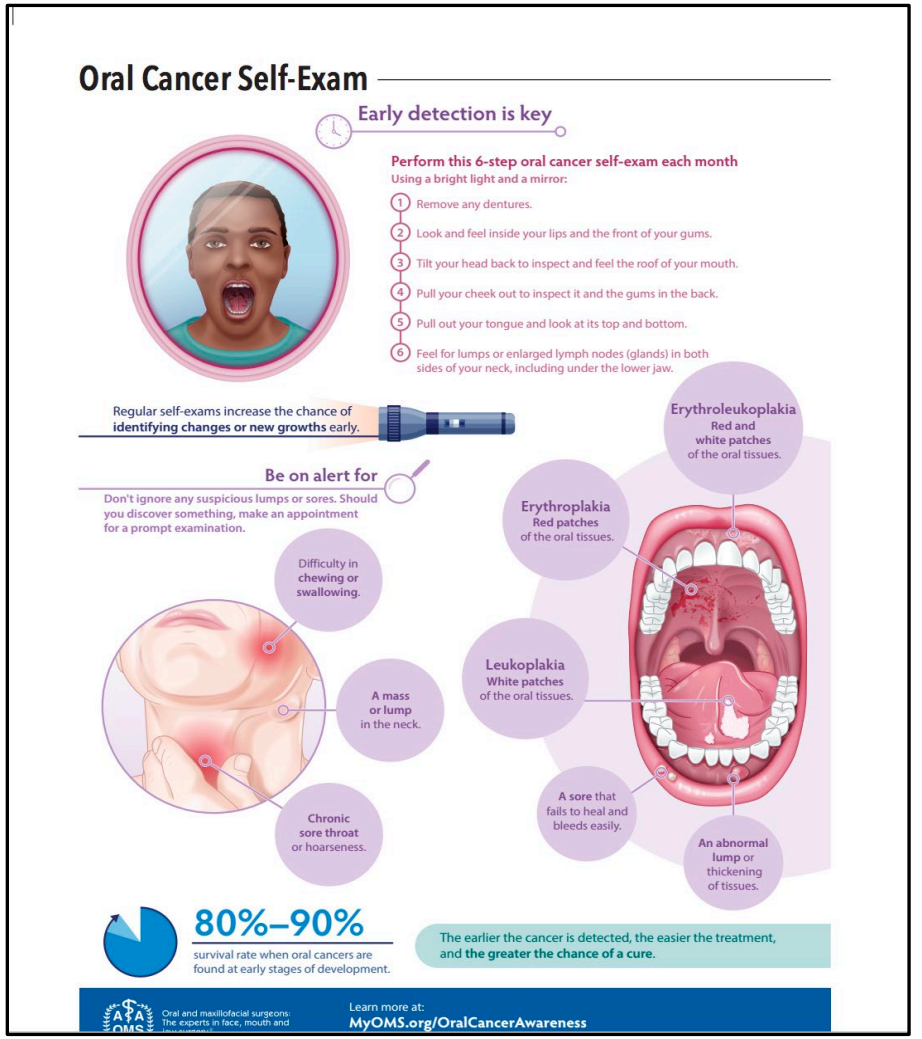
Exposure to the human papilloma virus (HPV) may explain the rise in oral cancer in younger people.

National Cancer Institute Surveillance, Epidemiology, and End Results Program www.seer.cancer.gov

Early Detection: Patient's Role

The American Association of Oral and Maxillofacial Surgeons recommends that all adults conduct an oral cancer self-exam once per month.

https://www.aaoms.org/media/raise-oral-cancer-awareness/videos



BE TOBACCO FREE
QUIT NOW
KENTUCKY

Quit Now Kentucky Fax Form

Fax to: 1-800-261-6259

PROVIDER INFORMATION (PRINT CLEARLY)

Feedback will only be sent to **HIPAA covered entities** to either the fax number or email listed below.

Provider First Name _____ **Provider Last Name** _____

Contact (if applicable): First Name _____ **Last Name** _____

Name of Health System/Hospital/Health Center/Community Organization: _____

Department or Clinic Name (if applicable): _____

Address _____ **City** _____ **State** _____ **Zip** _____

Phone (_____) _____–_____ **Email for HIPAA-covered entity:** _____

Fax for HIPAA covered entity (_____) _____–_____

Type of HIPAA covered entity: ☐ **Health care Provider** ☐ **Health Plan** ☐ **Health care Clearing House** ☐ **Not Covered Entity**

As a HIPAA covered entity you are authorized to receive personal health information for the individual being referred.

As a Not Covered Entity, personal health information will not be shared back for the individual being referred.

Provider consent is required to provide nicotine replacement therapy (NRT) to individuals who are pregnant or breast feeding.

Is the patient: ☐ **Pregn** ☐ **Breastfeeding**

(If Provider) I authorize the Quitline to send the patient over-the-counter nicotine replacement therapy.

Please sign here if patient may use NRT _____ **Date** _____

Provider signature

PATIENT INFORMATION (*Required) (PRINT CLEARLY)

***Patient Name** (First) _____ (Last) _____

Patient Zip _____ ***Date of Birth:** ____/____/____

***Phone** (_____) _____–_____ ☐ **Home** ☐ **Cell** ☐ **Work** **OK to leave message at number provided?** ☐ **Yes** ☐ **No**

***Do you require accommodation while participating in the program such as TTY, Translator or Relay Service?**

☐ **Yes, If Yes, please specify** _____ ☐ **No**

***Language?** ☐ **English** ☐ **Spanish** **Other** _____

THE VOICEMAIL MAY BE A RECORDING FROM AN AUTODIALER.

Consent of Text: ☐ **Yes** ☐ **No**

I consent to receiving text messages with motivational messages and other program events, such as appointment reminders, medication shipments, and quit anniversaries.

I, the patient (or authorized representative), give permission to release my information to Quit Now Kentucky. The purpose of this release is to request an initial phone call to discuss my interest and participation in the tobacco cessation program and allow communication with the provider identified on this form. I may revoke this authorization at any time in writing, but if I do, it will have no effect on actions taken prior to receiving the revocation.

***Patient Signature** _____ **Date** _____

If filling out form on behalf of the patient:

Authorized Representative name: (First) _____ (Last) _____

Signature _____ **Date** _____

**Participant or Authorized Representative signature required in order to place phone call to the patient.*

PLEASE FAX COMPLETED FORM TO: 1-800-261-6259

Oral Cancer Resources

Open access resources supporting oral cancer education provided by the United Health Foundation's Grant on Eradicating Oral Cancer in Eastern Kentucky

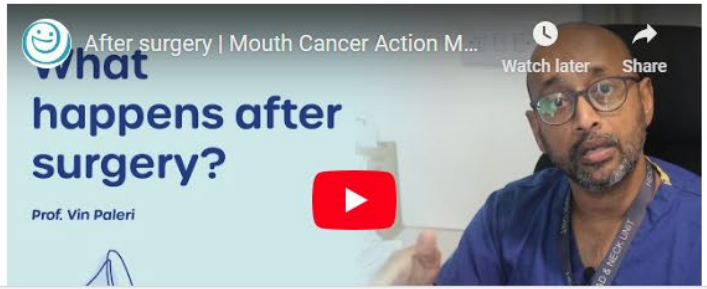
Home
Exam/Diagnosis
Prevention
Treatment
Videos
Articles
HPV
Tobacco Cessation
Patient Resources
Guidelines
Books

Navigation

Oral Cancer Treatment Videos

A video from the Cleveland Clinic where a clinical oncologist explains how oral cancer is treated.

An oral surgeon explains generally what patients can expect after surgery for mouth cancer.



Health Sciences Librarian

Rebecca Morgan

She/Her/Hers

Email Me

Schedule Appointment

Contact:

780 Rose Street
M72S Med Center Library
Willard Medical Education Building
Lexington, KY 40536
859-323-6181

Thank You!

Contact me

Pam Stein
pstei2@uky.edu

UK Dentistry

The *Other* Oral Cancers:

Metastatic Malignancies of the Oral Cavity

Jennie Ison, DMD

Diplomate, American Board of Oral and Maxillofacial Pathology

Fellow, American Academy of Oral and Maxillofacial Pathology

Division Chief and Assistant Professor, Oral Pathology

Lab Director, UKCD Oral Pathology Laboratory

Conflict of Interest: None

- Neither I, nor my immediate family, have a financial interest that would create a conflict of interest or restrict my independent judgement with regard to the content of this course.

ADA C·E·R·P® | Continuing Education Recognition Program

- "Participants should be cautioned about the potential risks of using limited knowledge when integrating new techniques into their practice."

Plan For Today:

- Provide an overview of malignancies in KY
- Discuss metastatic malignancies that occur in the oral cavity in a CPC format
- Share important takeaways that can help the lesional triage process in any practice

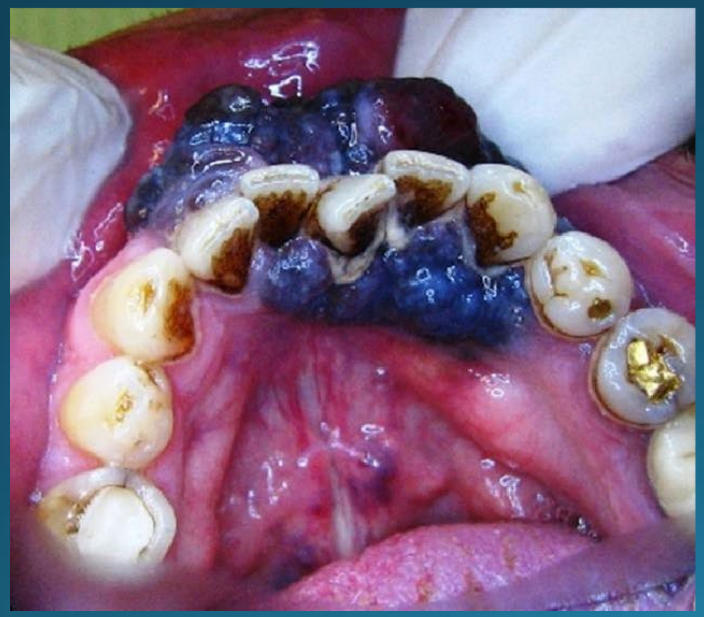
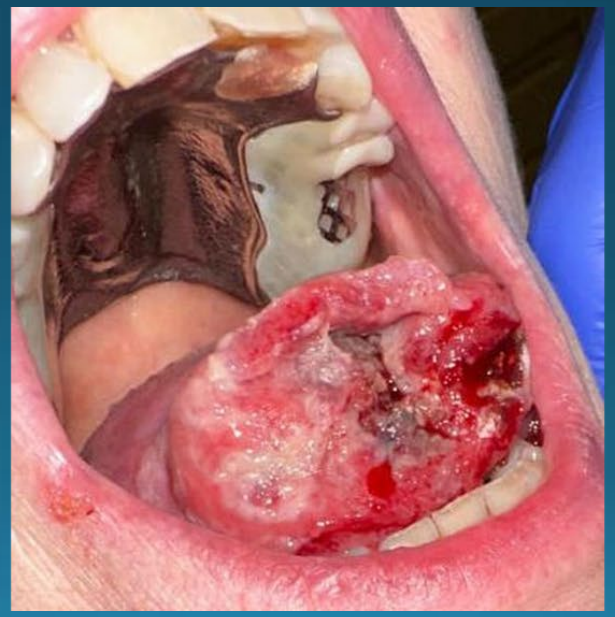
Plan For Today:

- Disclaimer 1: The sharing of these cases is not to disparage or discredit the submitting clinician in any way. They allowed me to share to help others learn.

- Disclaimer 2: I have specifically chosen cases, not to encourage anyone to practice scared, but to practice smart.

Plan For Today:

- Disclaimer 1: The sharing of these cases is not to shame or discredit the submitting clinician in any way. They allowed me to share to help others learn.
- Disclaimer 2: I have specifically chosen cases, not to encourage anyone to practice scared, but to practice smart.


"Oral Cancer"

- Statistics usually specific to squamous cell carcinoma
  - Most common, but not the only malignancy that occurs in the oral cavity
- Metastatic tumors to the oral cavity also occur (not included in the OC stats)
  - Often mimic benign or reactive lesions
- The common risk factors may or may not apply to the variety of lesions we will cover today.

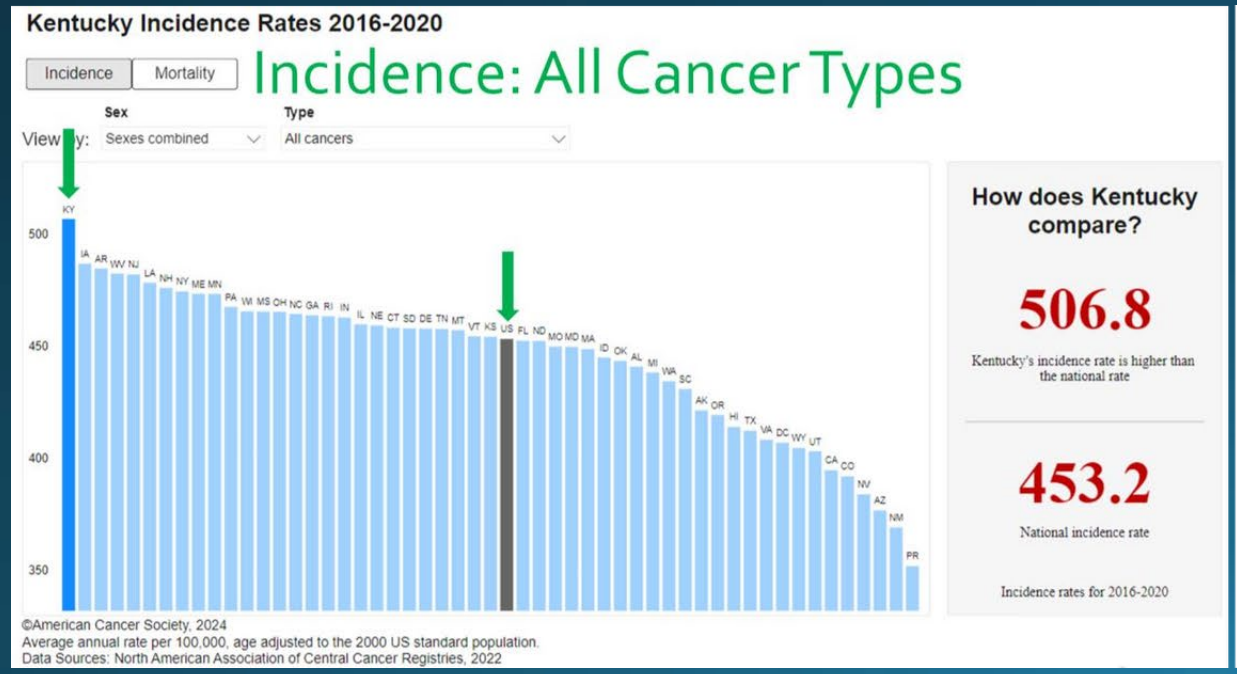
Kentucky Cancer Statistics

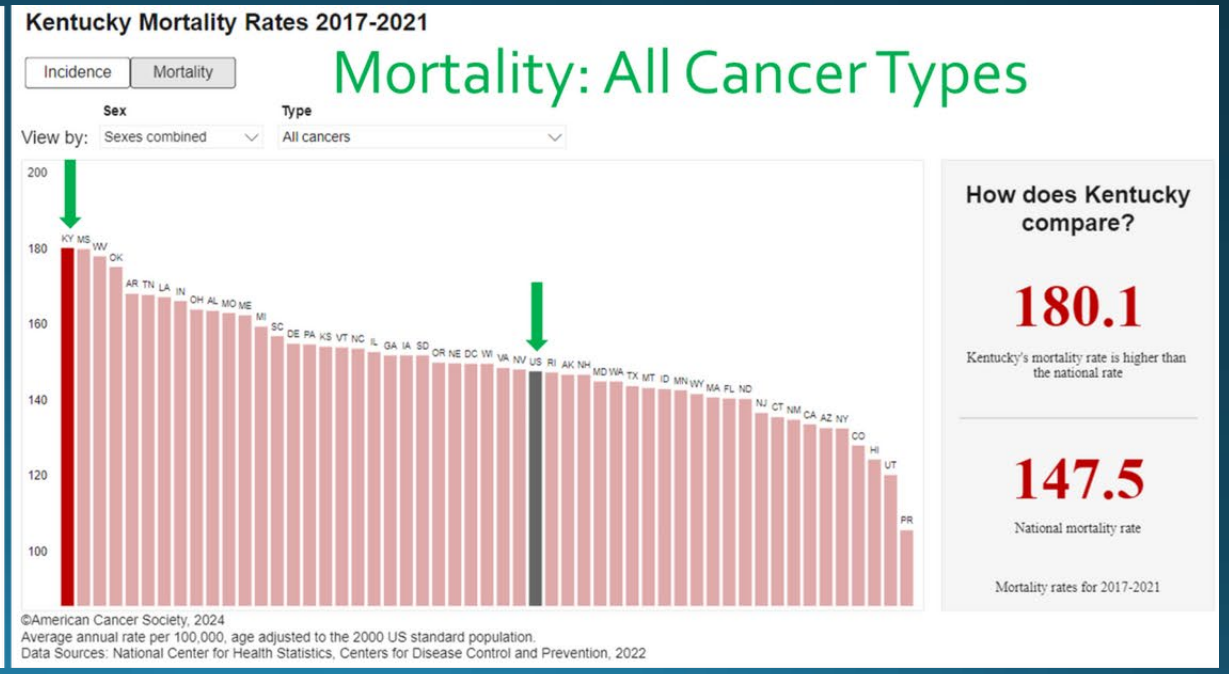
At a Glance

All Cancer Types

30,630	10,250	506.8	180.1
estimated new cases 2024	estimated deaths 2024	incidence rate 2016-2020	mortality rate 2017-2021

Average annual rate per 100,000, age-adjusted to the 2000 US standard population





Kentucky Cancer Statistics

Cancer Specific:

- Incidence:
  - #1: Laryngeal
  - #1: Lung and Bronchus
  - #2: Colorectal
  - #4: Renal
- Mortality:
  - #1: Non-Hodgkin Lymphoma
  - #1: Hodgkin Lymphoma
  - #1: Lung and Bronchus
  - #3: Colorectal
  - #3: Urinary Bladder

Metastases To The Oral Cavity

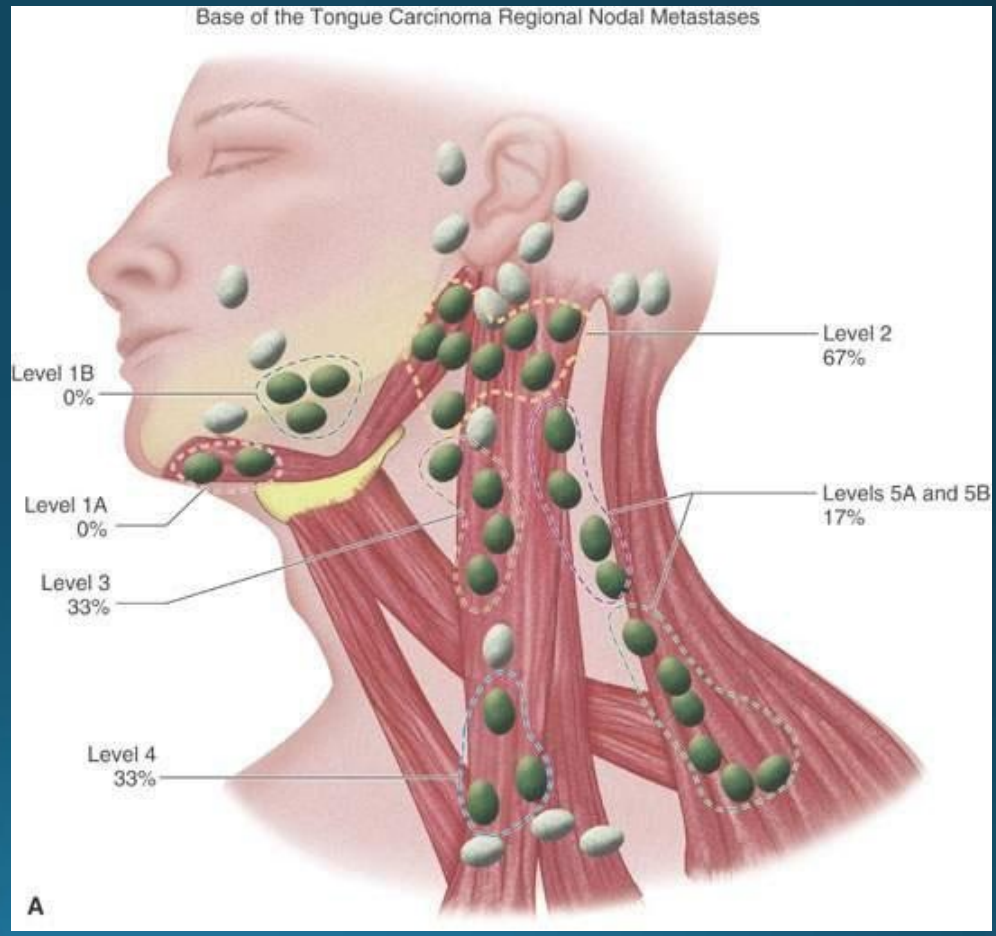
- Rare
  - ~1 to 3% of all malignant lesions in the oral cavity
- Most common primary tumor locations:
  - lung, breast, kidney and colon
- Can met to:
  - soft tissues (ANY, but esp gingiva)
  - hard tissues (particularly alveolar bone)
- Initial deposit may be in one and invade into the other

- Most common based on gender:
- Men:
  - lung, prostate, liver, renal
- Women:
  - breast, adrenal, genital organs, colorectal

- ANY area can make it to the oral cavity
- THEY LOVE TO MIMIC BENIGN or REACTIVE LESIONS

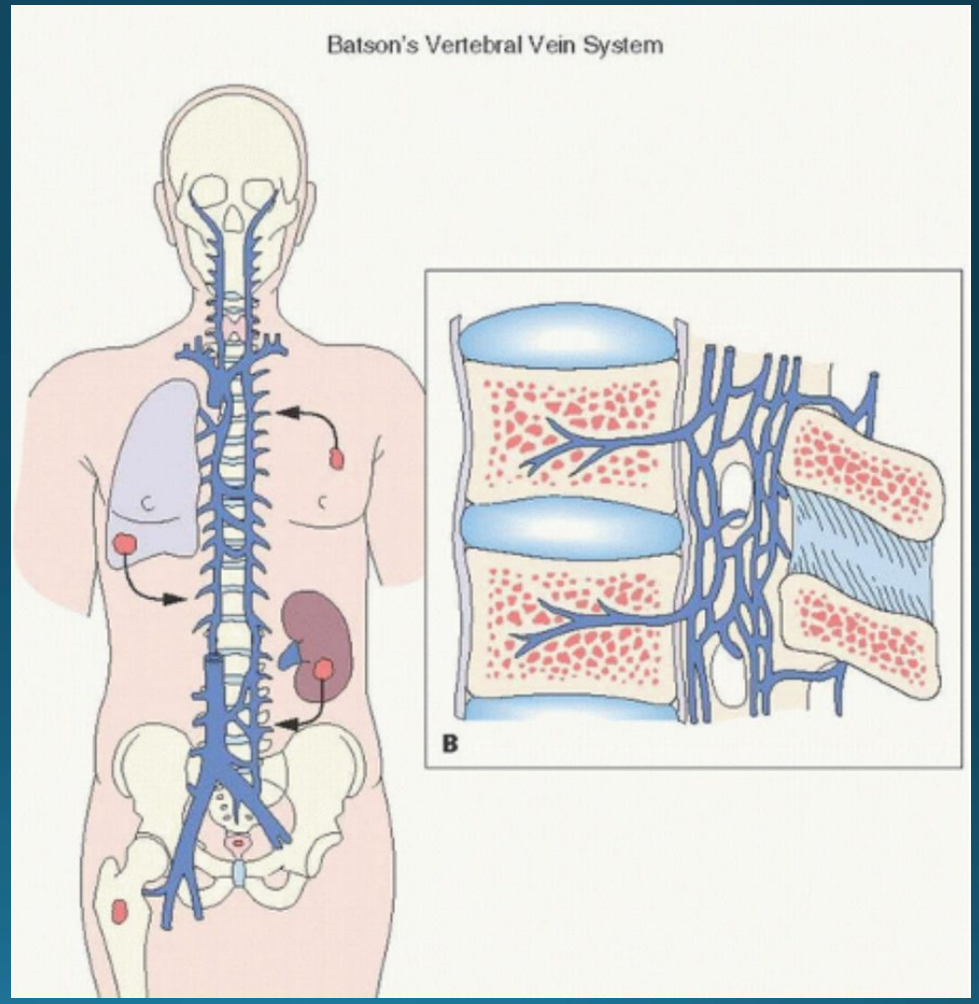
Mets to the Oral Cavity: How Do They Even Get There?

- Mechanism of tumor spread to the oral cavity is poorly understood
- Primary malignancies from immediately adjacent tissues might be able to spread by a lymphatic route
  - But this doesn't explain metastases from tumors from lower parts of the body, which are almost certainly blood-borne and should be filtered out by the lungs.



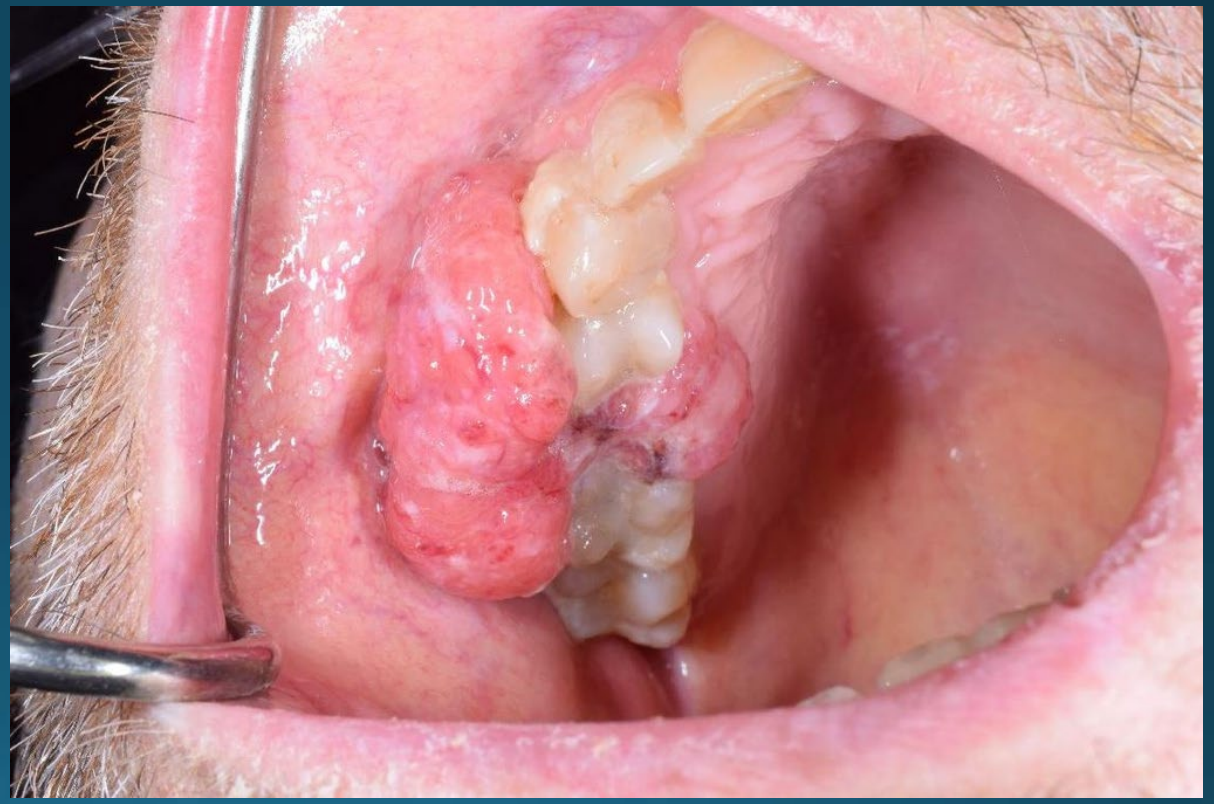
Mets to the Oral Cavity: How Do They Even Get There?

- Batson Plexus:
  - Possible explanation for blood-borne metastases to the head and neck
    - Esp in absence of pulmonary metastases
    - Valveless vertebral venous plexus that might allow retrograde spread of tumor cells, bypassing filtration through the lungs

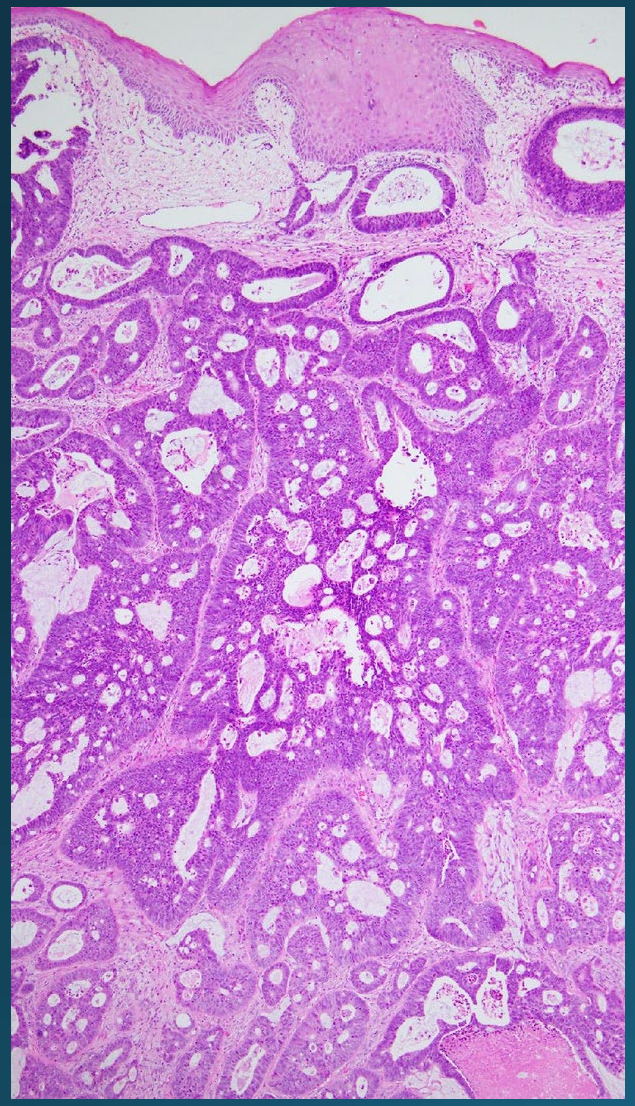


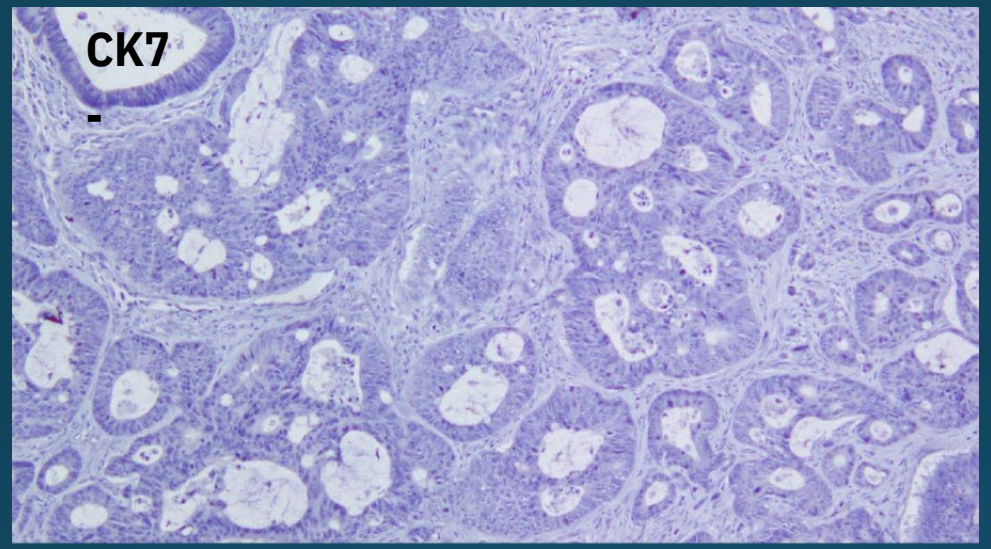
Case 1: "Pyogenic Granuloma" #1

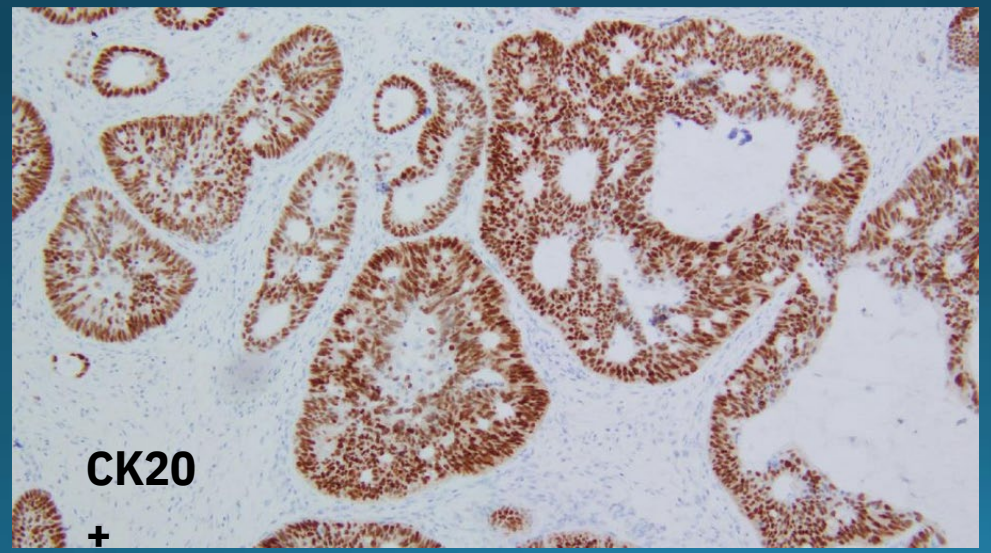
- 59 yo male
- Currently being treated for colon cancer
- Clinical dx: pyogenic granuloma
- #4 extracted previously because it was loose; then this popped up

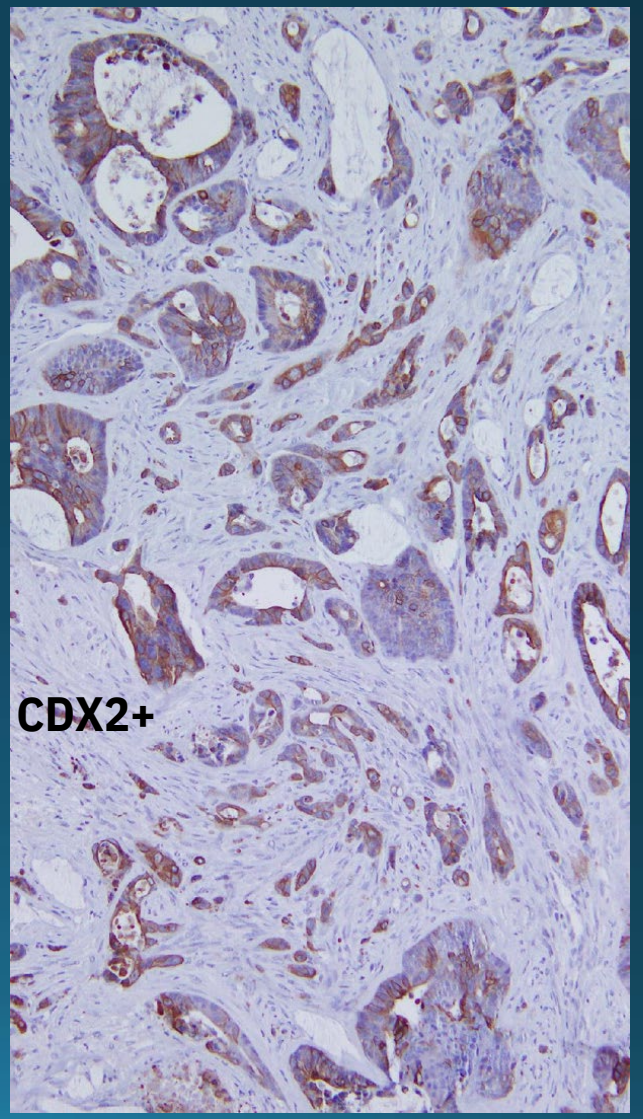


Case 1: Metastatic Colon Cancer



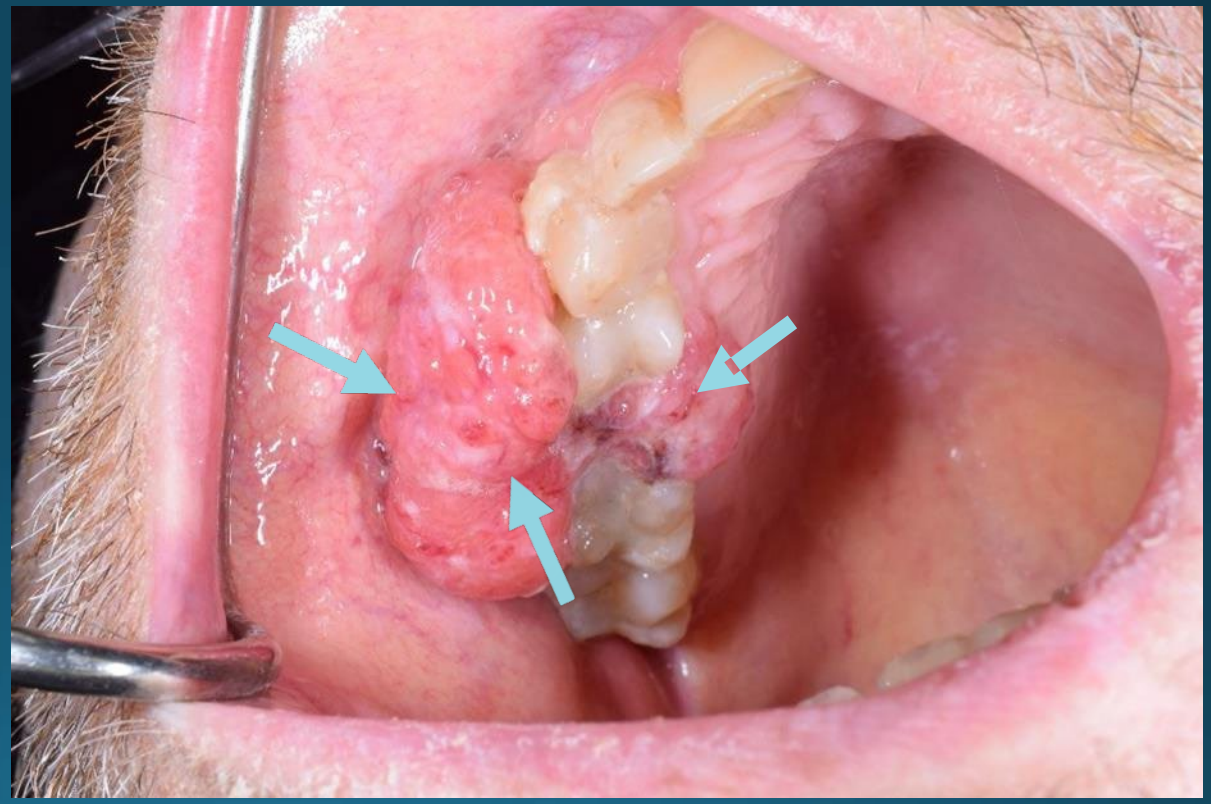






Case 1: The Takeaways

- Have a very low threshold to biopsy, especially if patient is undergoing treatment for a known cancer
- Surface telangiectasias are a warning sign of tumor angiogenesis



Case 1: The Takeaways

Our Case Surface
Telangiectasias

True Pyogenic Granuloma
Diffusely Erythematous and Hemorrhagic;
No discrete vascularity on surface

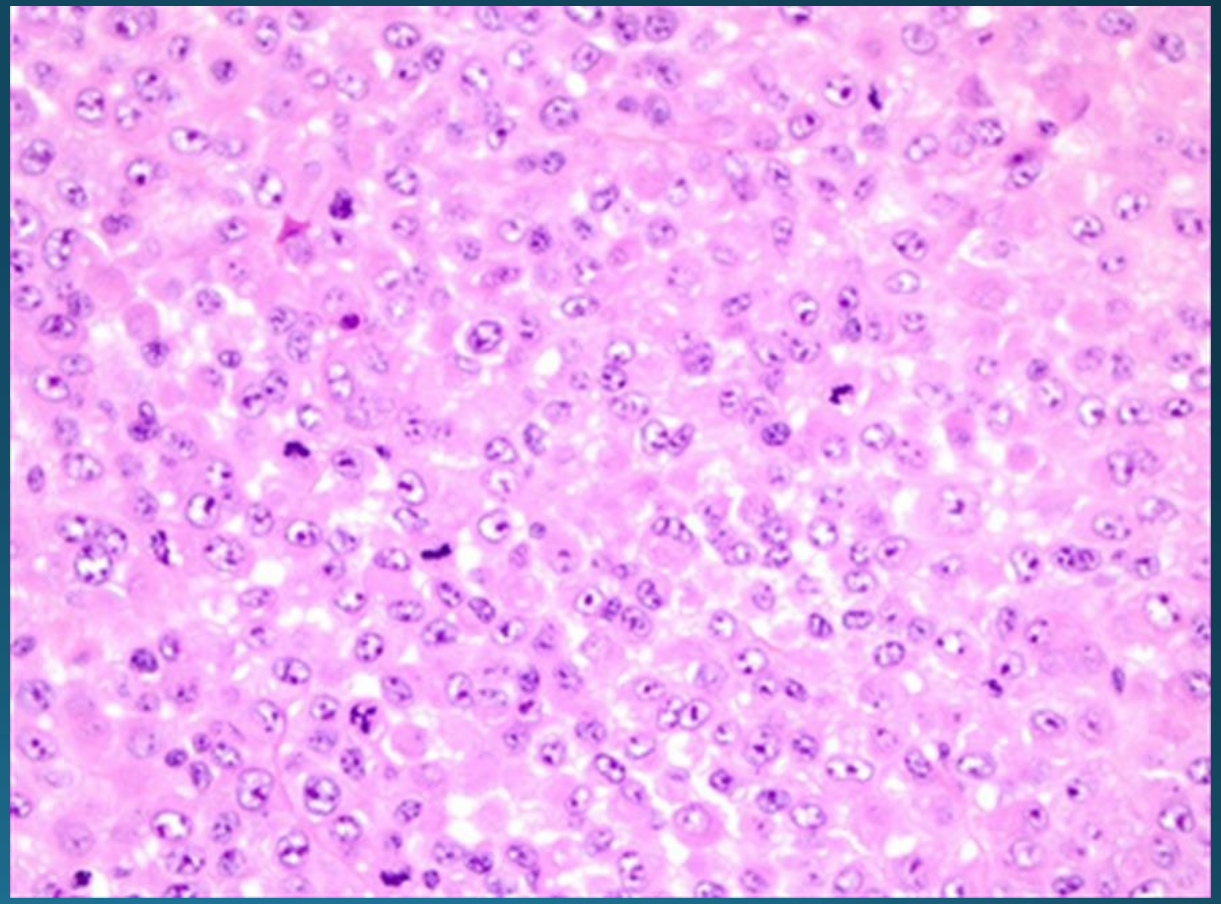
Case 2: "Pyogenic Granuloma" #2

- Considerations:
  - 1. Pyogenic granulomas:
    - Common
    - Can occur in ANY soft tissue location
  - 2. Malignancies rare on the dorsum of the tongue

Case 2: "Pyogenic Granuloma" #2

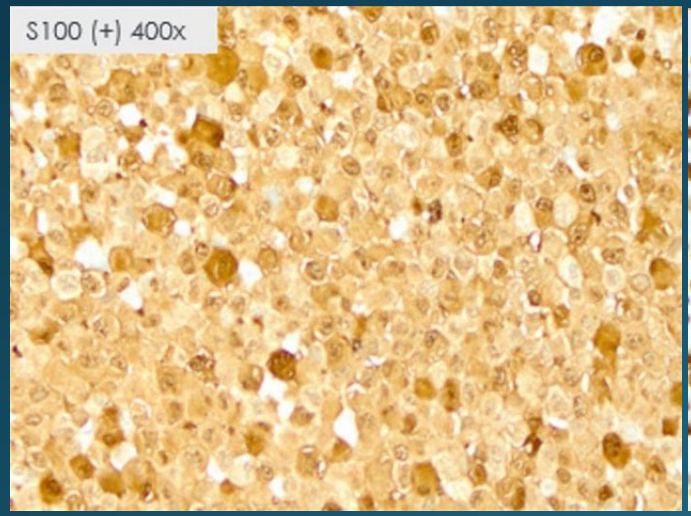
- Lots of cells/malignancies can look like this
  - Ex: rhabdomyosarcoma, plasma cell neoplasms, lymphomas, melanomas
- Increased mitotic figures

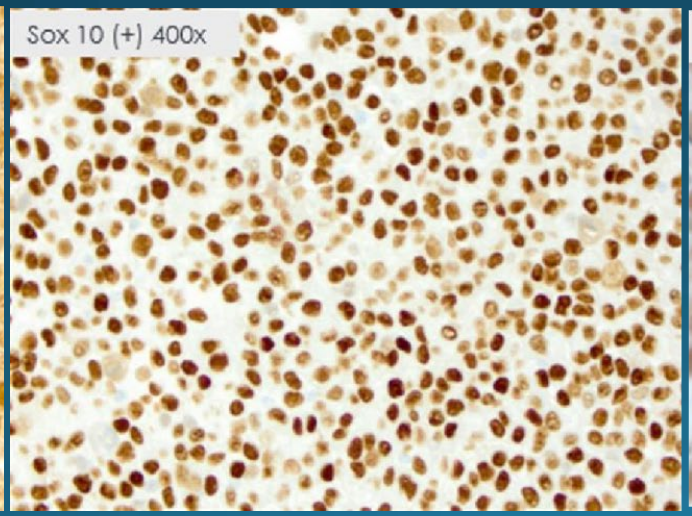
- Called clinician to request additional information to help guide stain panel; reviewed med hx; no significant findings

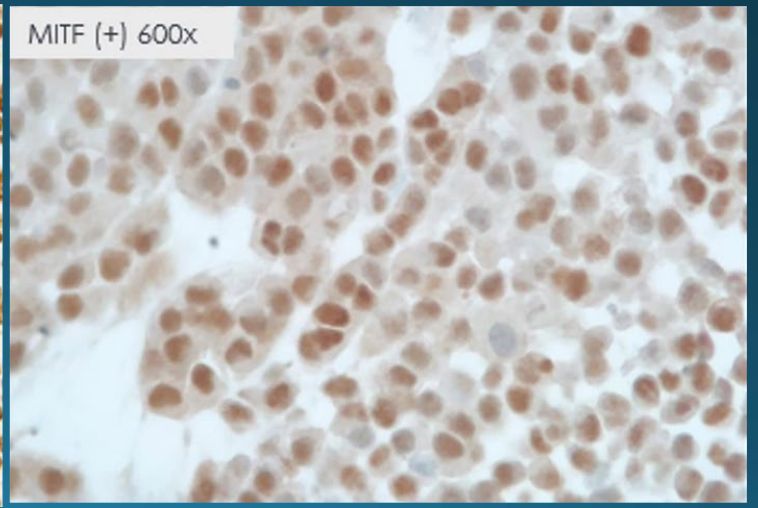


Case 2: "Pyogenic Granuloma" #2

- Typical Melanoma markers negative (Melan-A, HMB-45)
- Less common markers positive (MITF)

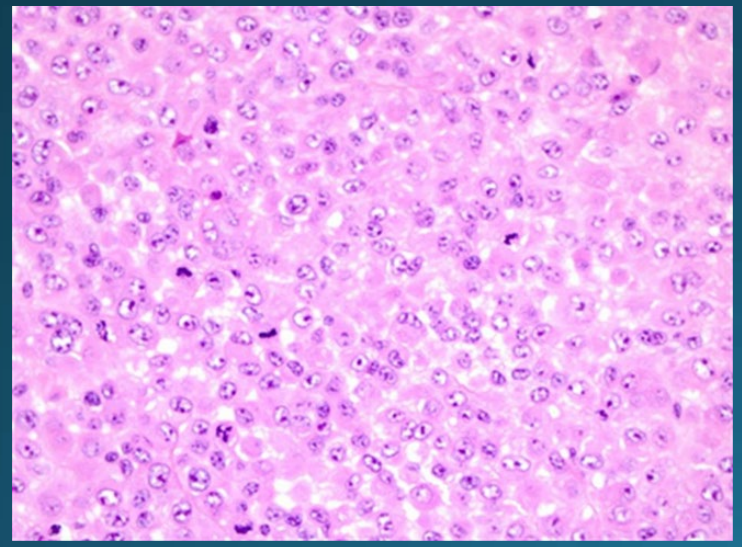






Case 2: Metastatic Cutaneous Melanoma

- Hx of Primary Cutaneous Melanoma of the thigh 10 years prior
- Not all melanoma makes pigment
  - Amelanotic Metastatic Melanoma



Case 2: Metastatic Cutaneous Melanoma

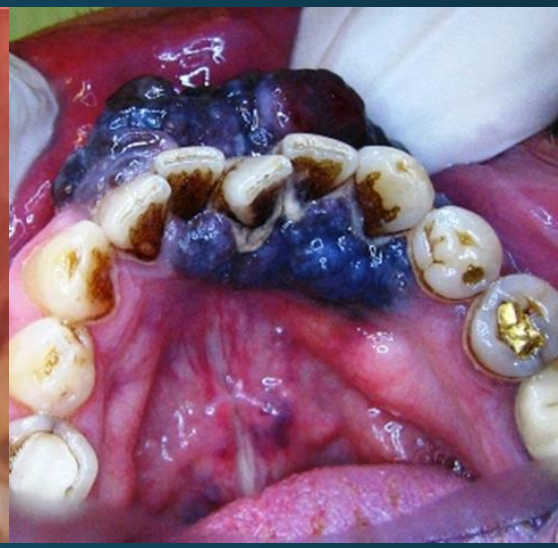
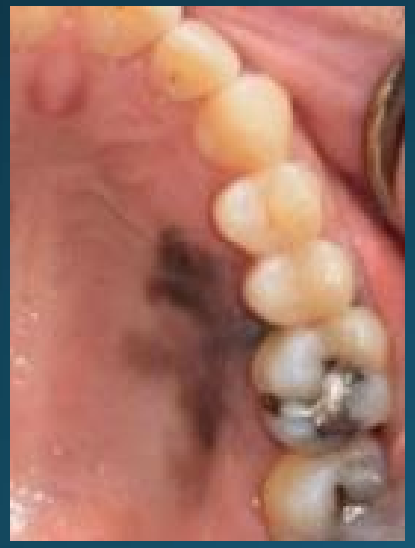
- Rare
- ~5% experience metastases to the upper aerodigestive tract
- Indicates disseminated disease
- Metastasis occurs ~2-7 years after initial cutaneous lesion

Case 2: The Takeaways

- ANY history of cancer ANYWHERE in the body, no matter HOW LONG AGO is important to:
  - 1. May have to ask pt directly
  - 2. Note
  - 3. Have a low threshold to biopsy any unexplained lump or bump
  - 4. Metastatic (and Primary) melanoma can look like anything clinically and histopathologically

Case 2: The Takeaways



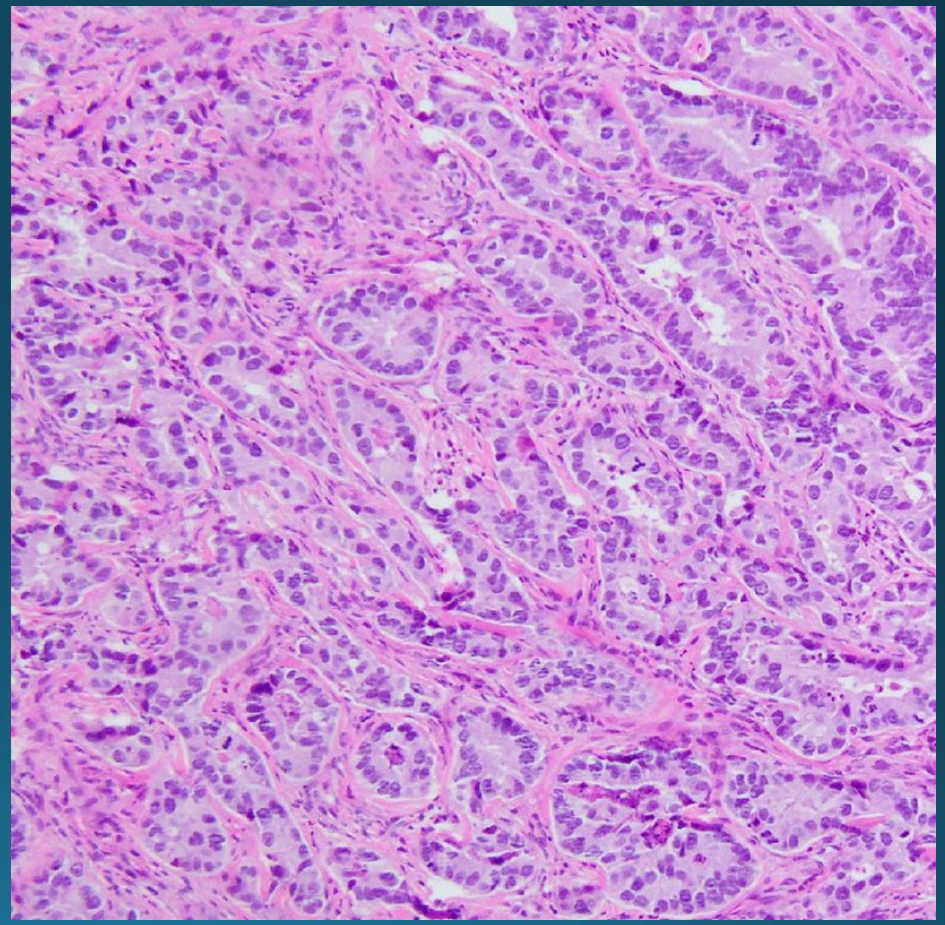





Case 3: "Abscess of Left Post. Maxilla"

- 60 yo male
- Hx of colon cancer w/mets to the liver; stated he had been cancer free for 20 yrs.
- Presented to ED with persistent throbbing pain in the area
- Tx with antibiotics; no resolution

Case 3: "Abscess of Left Post. Maxilla"

- The dilemma:
  - We KNOW he has hx of colon cancer
    - Do I need to PROVE this is the same?
    - Do I spend his health care dollars to do so?
- Mets can look diff than primary tumor



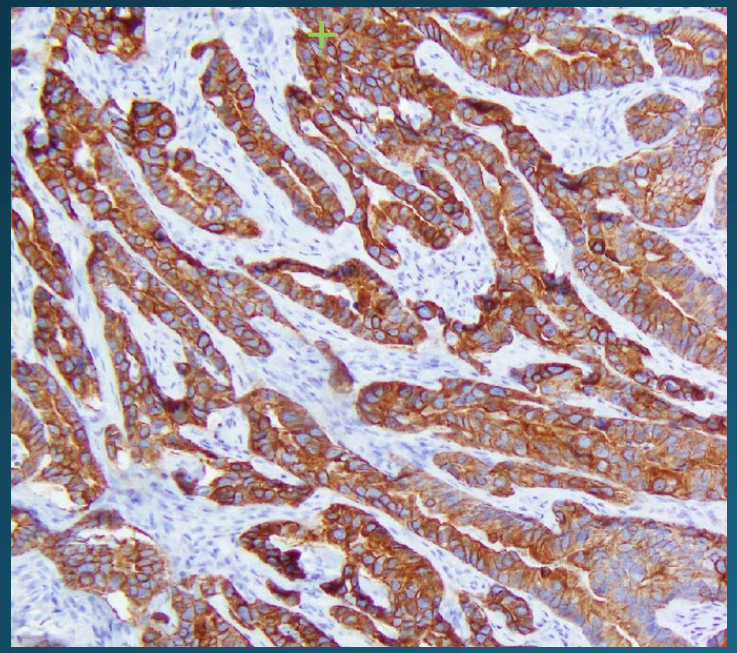
Case 3:"Abscess of Left Post. Maxilla"

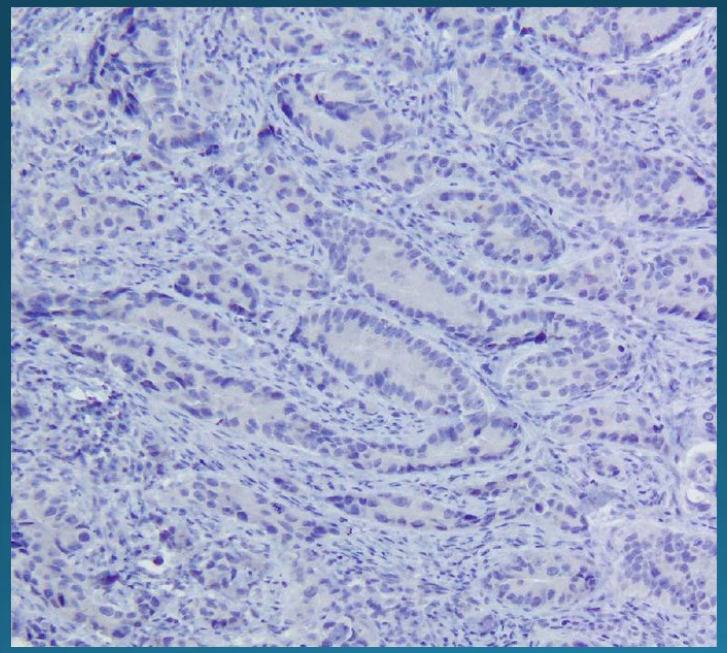
- What we expect for colon adenocarcinoma:

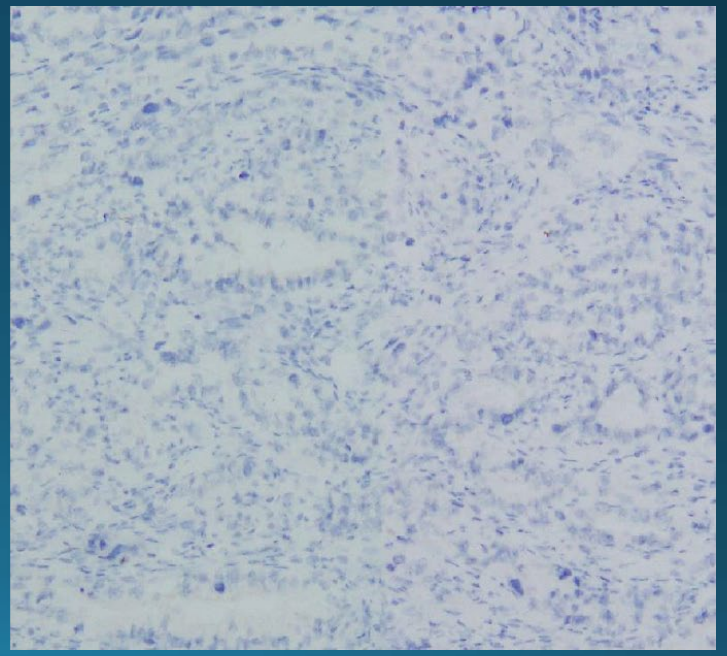
CK7 CK20+ CDx2+

- What we got:

CK7 CK20- CDx2-

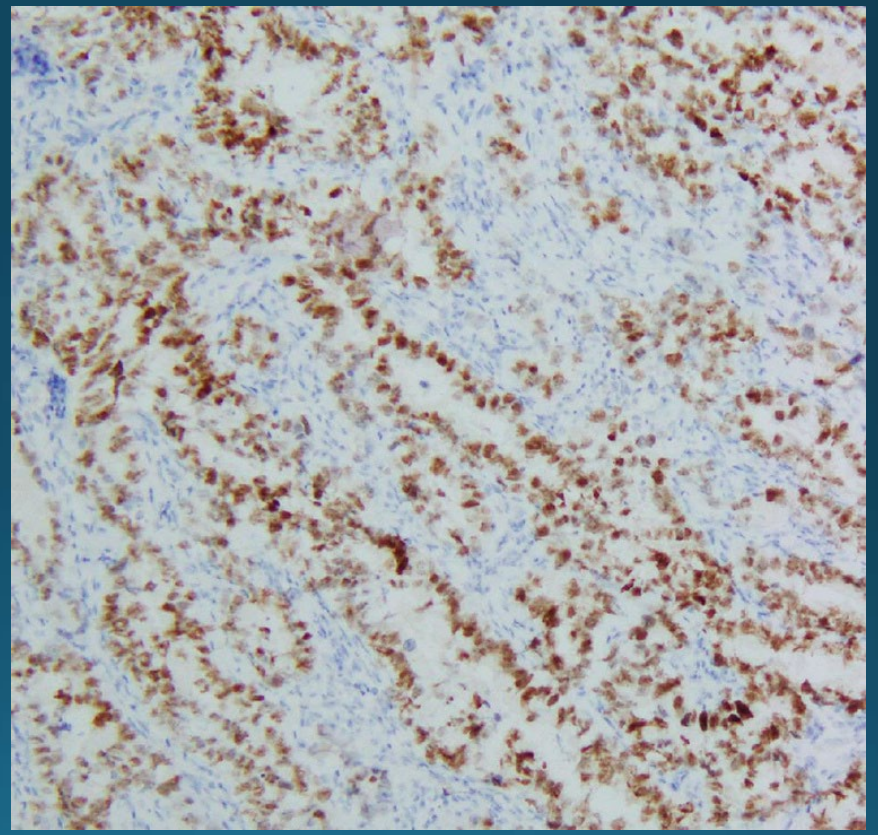






Case 3: Metastatic Lung Adenocarcinoma

- Lung metastasis with occult primary



Case 3: The Takeaways

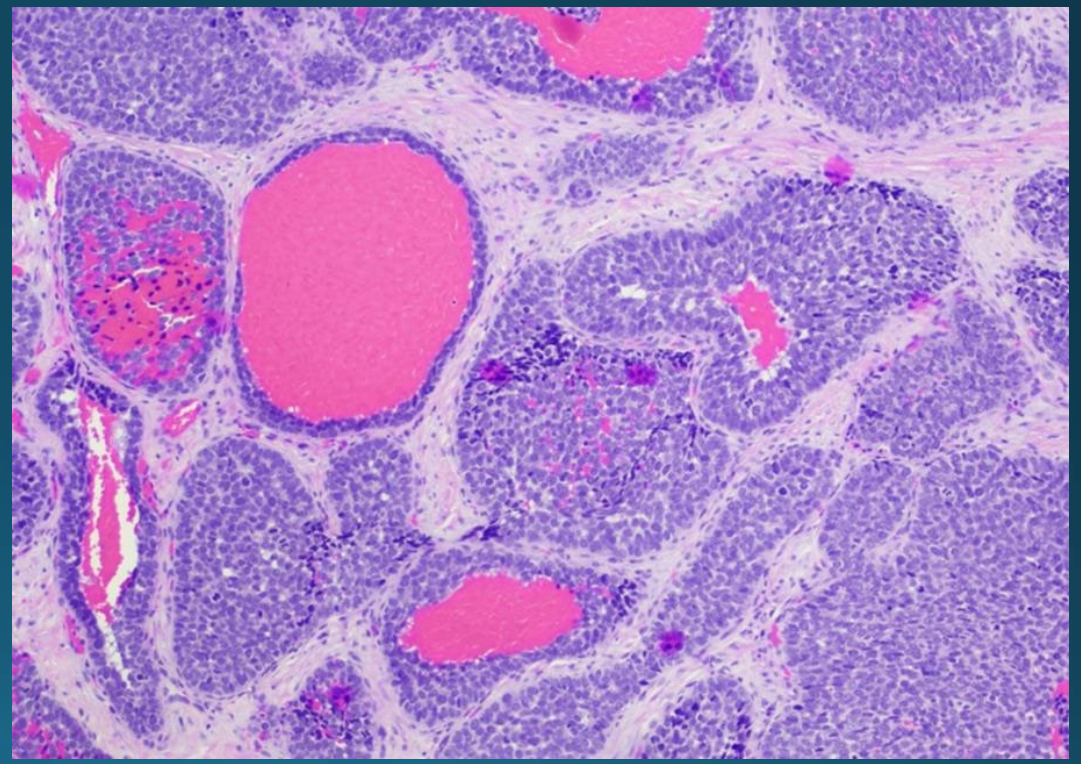
- "A patient can have as many diseases as he pleases"
- If no response to reasonable empiric therapy, biopsy indicated
  - 2 week grace period; golden rule of pathology
- Benign things usually don't have surface telangiectasias

Case 4: "Pyogenic Granuloma" #2

- 49 yo female
- CC: bump on the gum for a few months, slowly enlarging
- No radiographic changes; mild calculus; removed but lesion continued to enlarge

Case 4: Metastatic Breast (Lobular)

- Met discovered before primary tumor was known

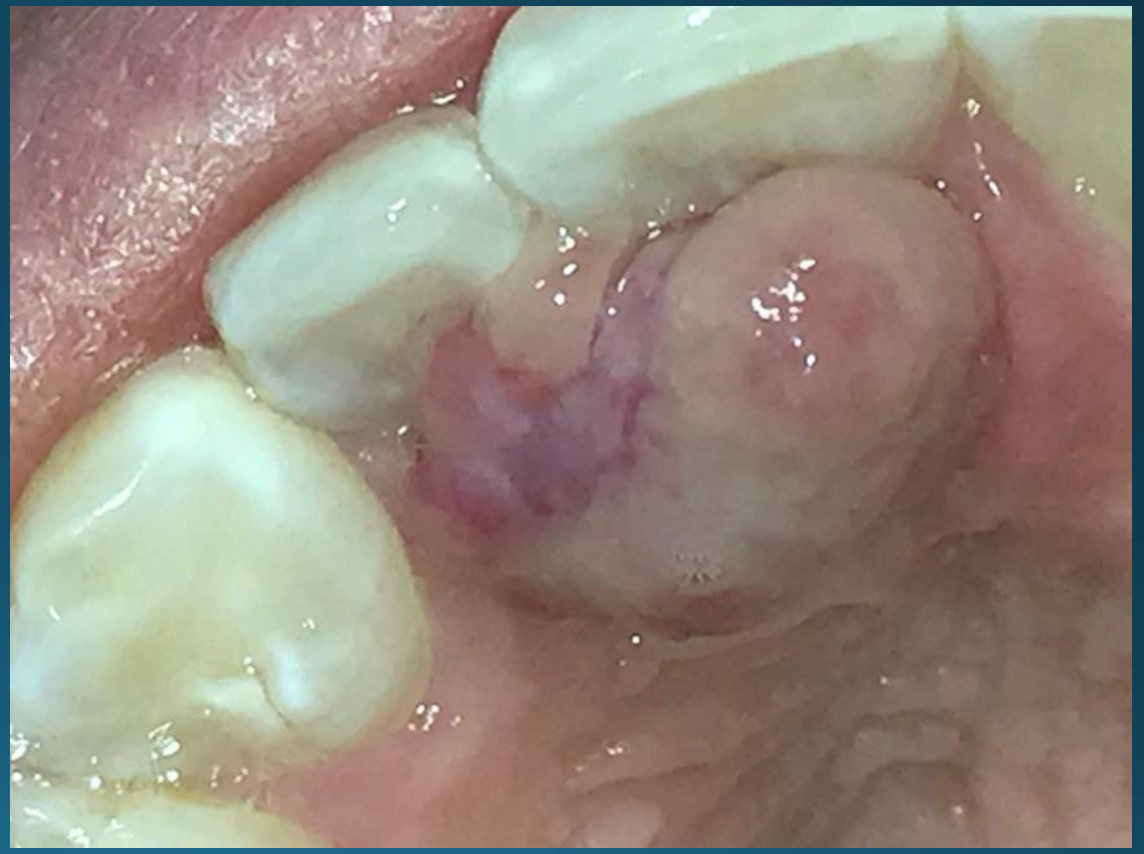


Case 4: The Takeaways

- Gingiva: 54% of oral soft tissue metastasis
- Nodular mass
  - resembles a hyperplastic or reactive growth
- Any malignancy from any body site
- Women: Metastatic breast accounts for 25%

Case 4: The Takeaways

Our Case

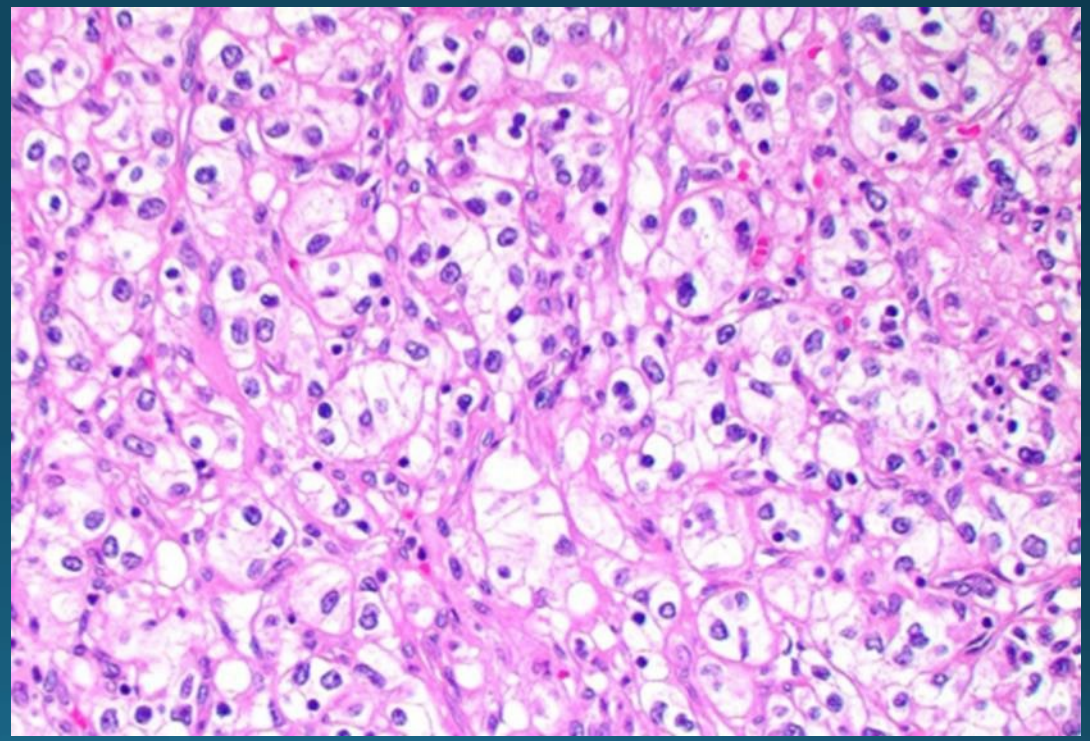


True Pyogenic Granuloma

Case 5: "Peripheral Ossifying Fibroma"

- 52 yo female
- Clinical diagnosis: 3P's: favored peripheral ossifying fibroma
- No radiographic changes
- Starting to get sore from eating
- No prior hx of malignancy

Case 5: Metastatic Renal Cell Carcinoma



Case 5: The Takeaways

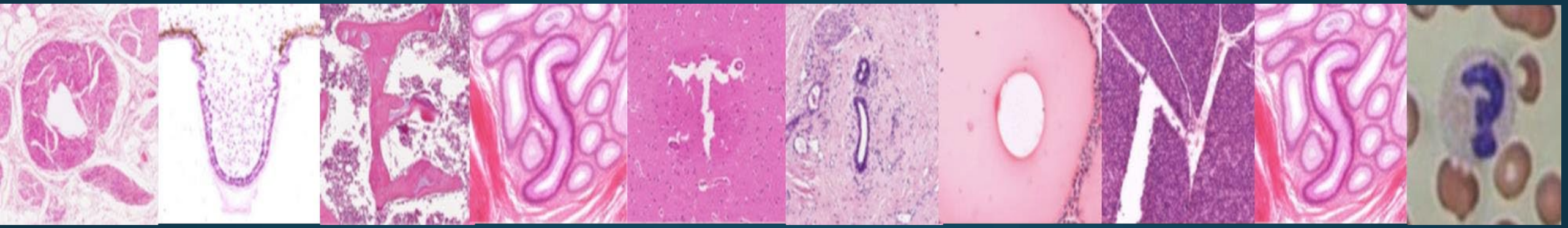
- Metastases can look like anything
- If it's weird enough to cut out, it's good enough to send in.

Case 5: Notes on Renal Cell Carcinoma

- RCC can present with a range of symptoms
- Many patients asymptomatic until disease is advanced
- At presentation, ~25% have distant mets or advanced locoregional disease

Metastases to the Oral Cavity

- Final thoughts:
  - Usually indicates disseminated disease
    - "Final stop on the metastatic train"
  - Can be in hard or soft tissue or combo
  - Often mimic benign or reactive processes
  - In the absence of widespread of regional periodontal disease (ie single tooth mobility/bone loss) additional investigation is needed



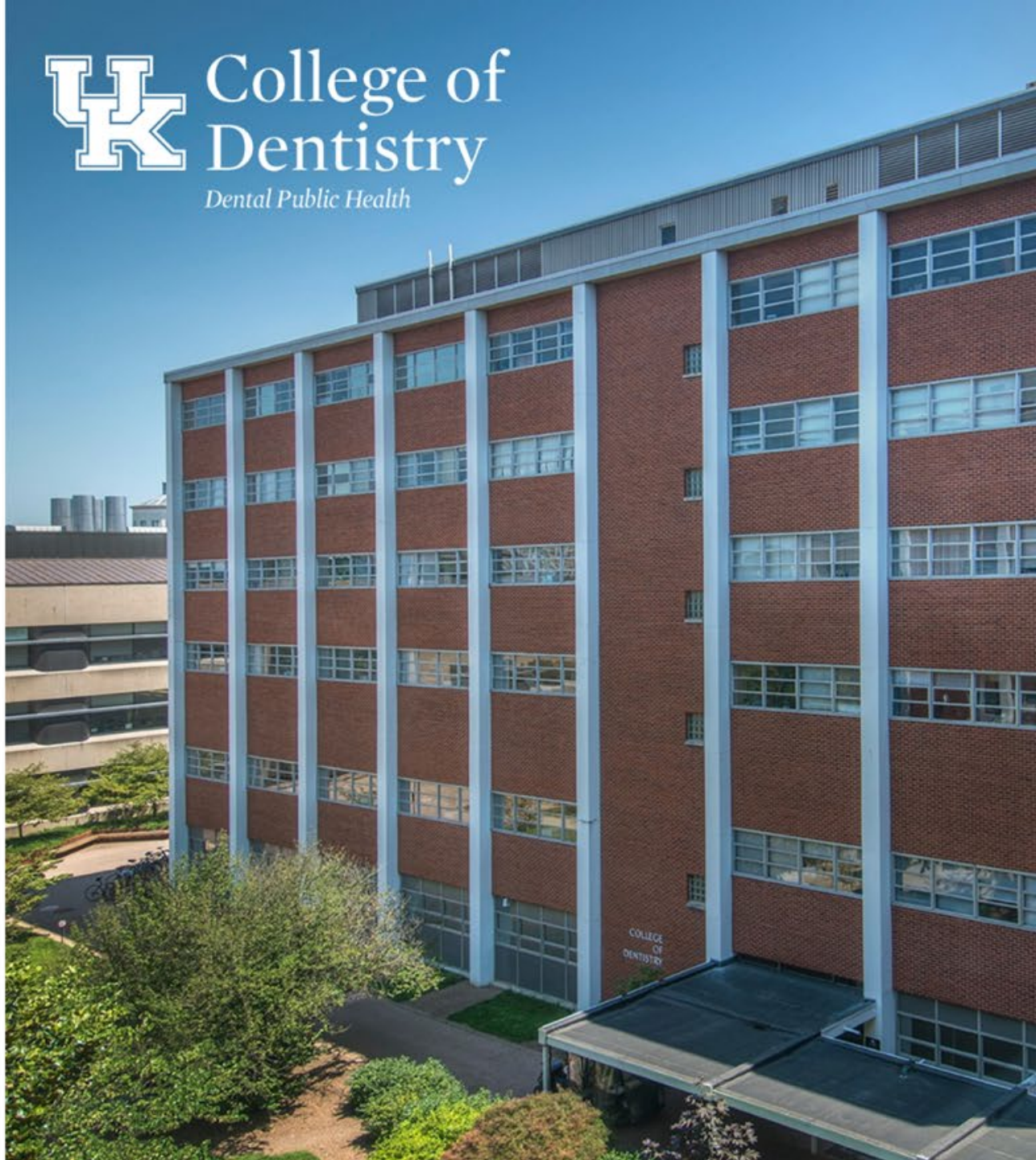
Jennie Ison, DMD

Jennie.ison@uky.edu

Cell: 606-776-2327

Kentucky Early Learners' Oral Health Surveillance Project

A partnership between
Kentucky Department for Public Health
and
University of Kentucky College of Dentistry



Kentucky Early Learners' Surveillance

Regional caries experience data was collected across Kentucky for the first time in 25 years on 2 – 5-year-olds. The data was collected by Registered Dental Hygienists using the Association for State and Territorial Dental Directors Basic Screening Survey Tool.

College of Dentistry
Dental Public Health

Methodology

- 8 Regions were determined
  - Rural vs. Urban designation
- Multi-sampling methods used in determination of sample
  - Benton Outreach Program
  - Aimed to screen children in every Kentucky county
- Population diversity achieved through screening within public and private settings
- Facility type was used as proxy for socioeconomic status

Methodology Continued

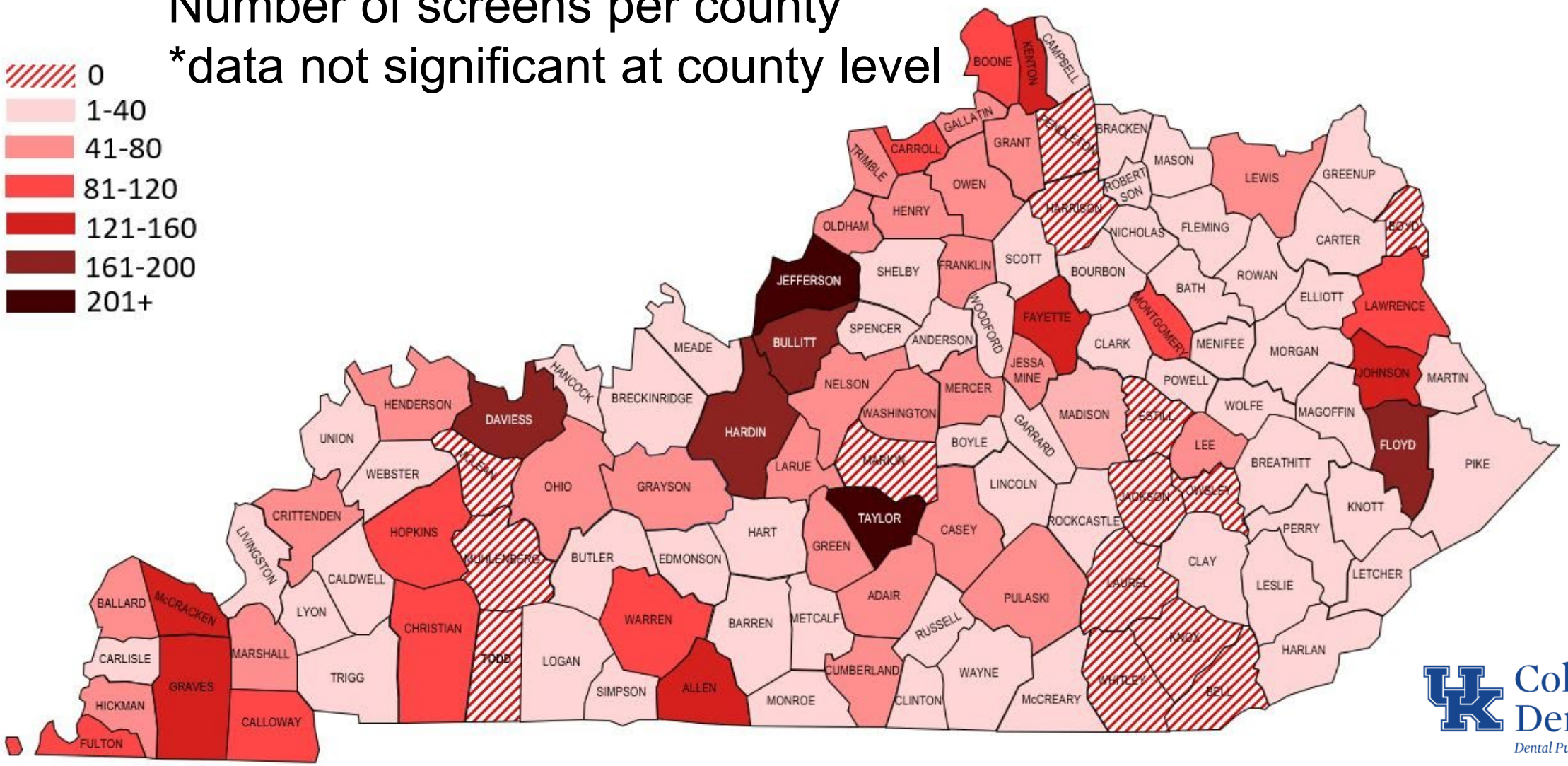
- Hygienist - screeners utilized with formal training event including calibration, December 2022

- Association for State and Territorial Dental Directors – Basic Screening Survey Tool

College of Dentistry
Dental Public Health

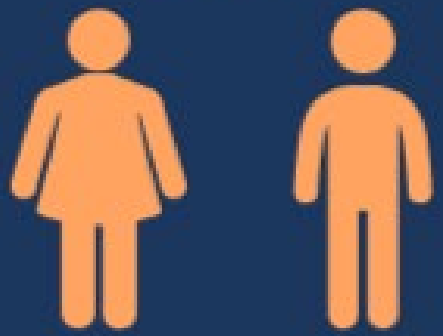
County By County

Number of screens per county
*data not significant at county level



College of Dentistry
Dental Public Health

SEX



Female
49.5%

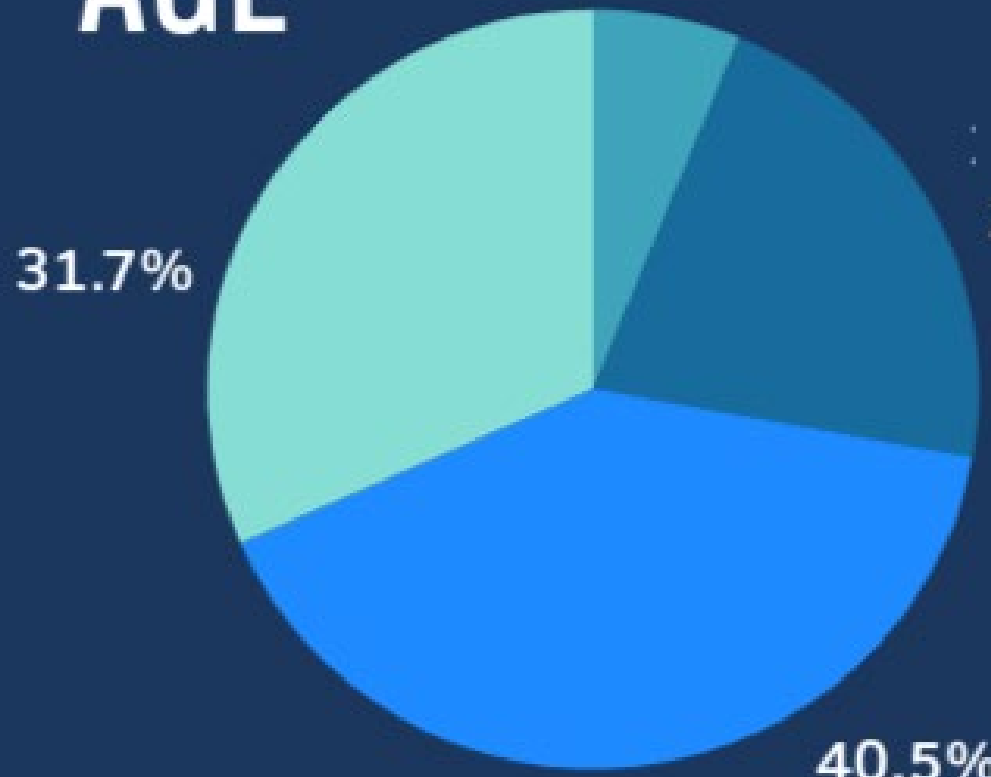
Male
50.5%

URBAN vs. RURAL

Urban
33.8%

Rural
66.2%

AGE



Age 2 Age 3 Age 4 Age 5

Basic Screening Survey Tool

- Association for State and Territorial Dental Directors (ASTDD)
  - Basic Screening Survey (BSS) Tool
    - » Non-invasive, two-part process, direct observation, series of questions
    - » BSS tool collects:
      - – Caries experience
      - – Untreated decay
      - – Treatment urgency
    - » Demographic data collected:
      - – Age
      - – Gender
      - – Race/ethnicity

What did we look at?

1. Assess the Burden of Disease:

   Determine the prevalence of dental decay among Kentucky children ages 2-5, focusing on:

   - Caries experience
   - Treated decay
   - Untreated decay
   - Treatment needs for untreated decay: none, early, urgent

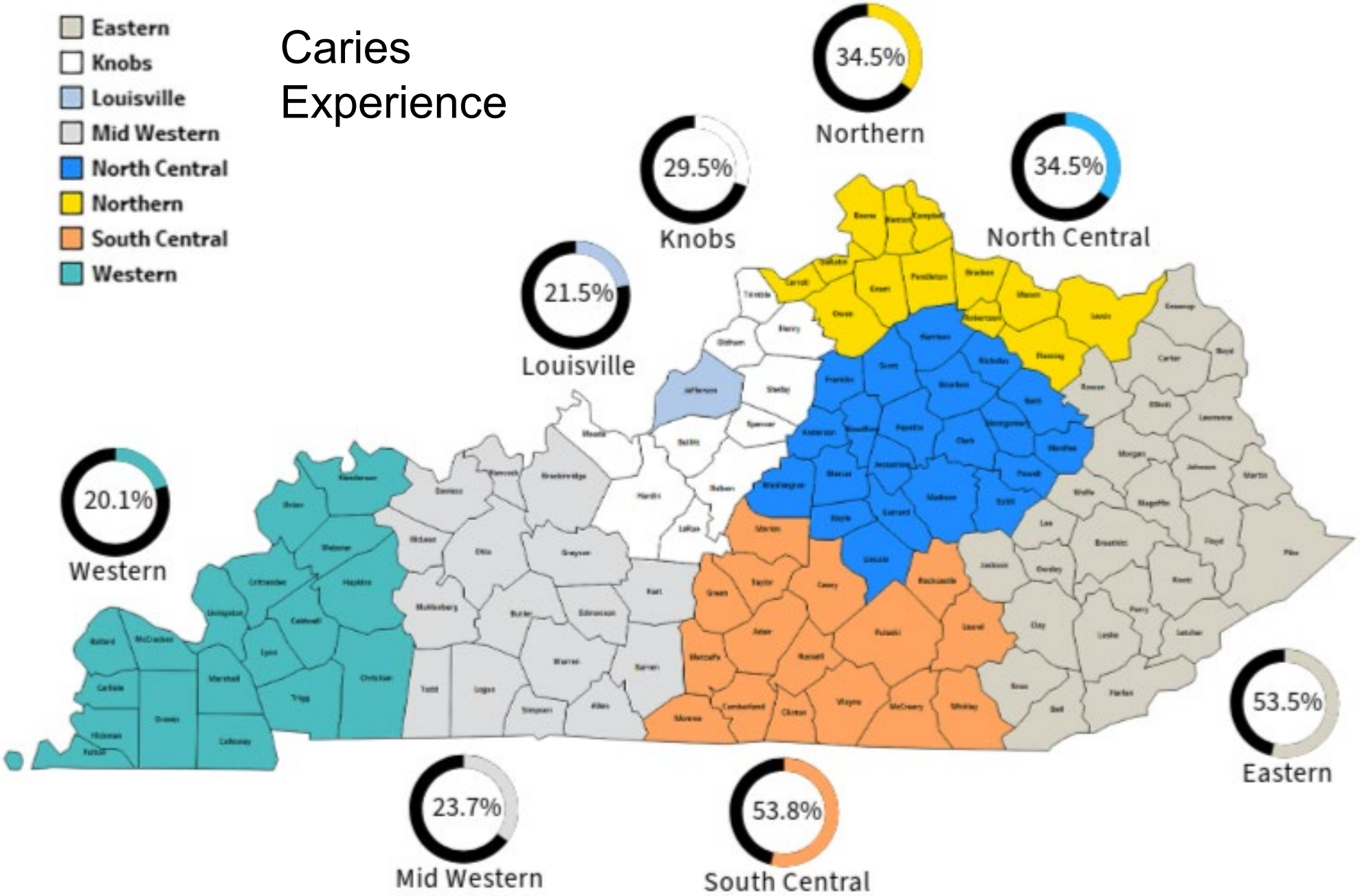
What did we find?

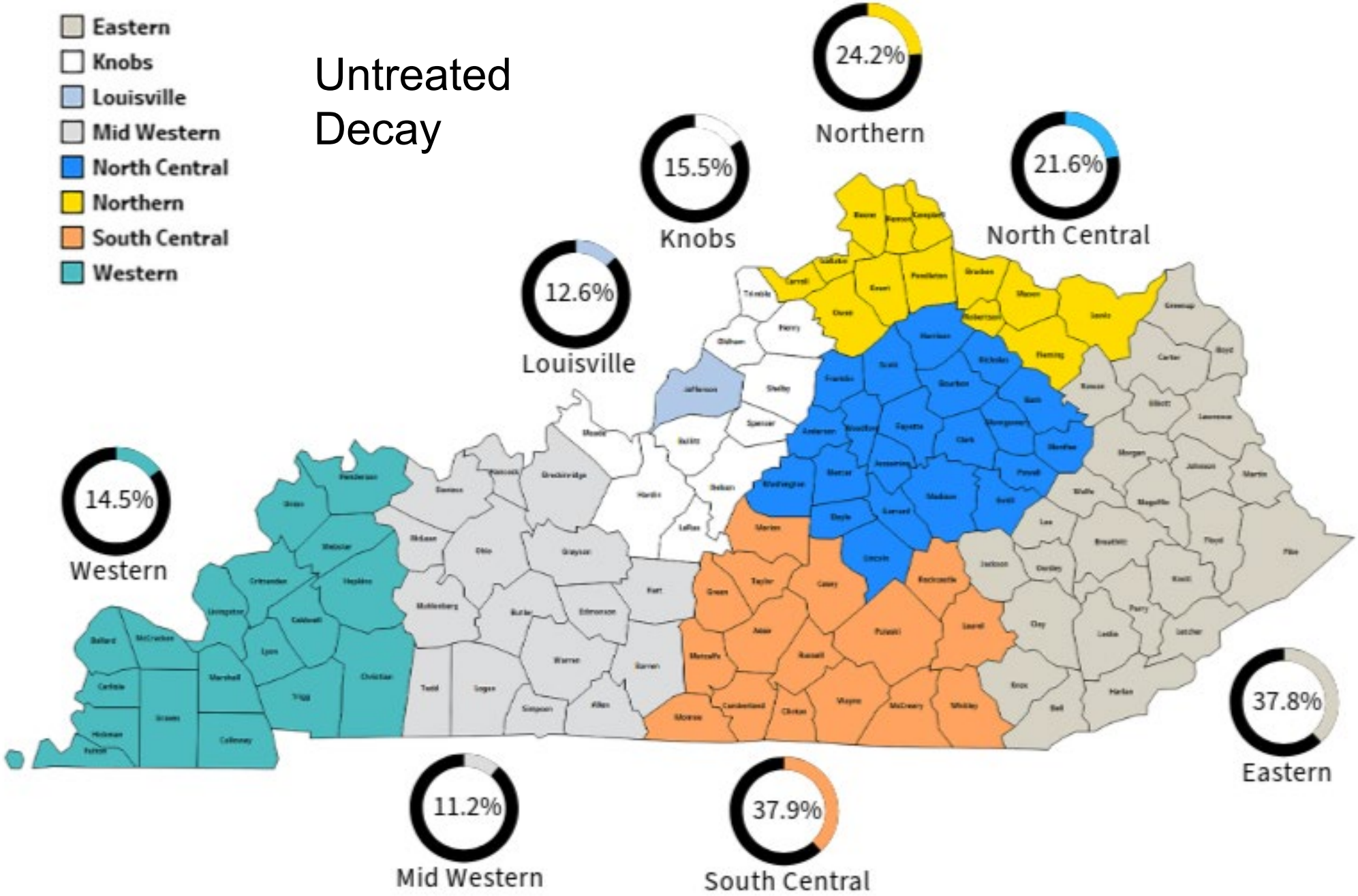
Insert Drumroll Audio

Just kidding, I don’t know how to do that.

College of Dentistry
Dental Public Health

Caries Experience




Eastern
Knobs
Louisville
Mid Western
North Central
Northern
South Central
Western
Untreated Decay
24.2%
Northern
15.5%
Knobs
21.6%
North Central
12.6%
Louisville
14.5%
Western
11.2%
Mid Western
37.9%
South Central
37.8%
Eastern

Results:

- Region is significantly associated with all types of decay even after controlling for facility type and age. South Central and Eastern regions have significantly higher prevalence rates compared to the other regions in all three decay categories
- Increased age is significantly associated with higher prevalence of all three decay categories even after controlling for regional effects and rural vs. urban location
- Black/African American race is significantly associated with higher prevalence of *caries experience* in the Louisville region, higher prevalence of *untreated decay* in the South Central region, and higher prevalence of *treated decay* in the Northern region

College of Dentistry
Dental Public Health

Results Continued:

- Hispanic/Latino ethnicity is significantly associated with higher prevalence of caries experience and untreated decay, but not treated decay, meaning that untreated decay is a major factor in this oral health disparity
- Facility type (Head Start, School Based Head Start and Other) is significantly associated with higher prevalence of all decay categories, even after controlling for age and rural vs. urban location. This is consistent with previous surveys that identified poverty as a key risk factor
- Rural location is significantly associated with higher rates of all three decay categories and seems to amplify other associations. For example, increased age is more strongly associated with all types of decay in rural locations, and Head Start and other facility types are also more strongly associated with higher rates of decay in rural locations

UK College of Dentistry
Dental Public Health

Key Findings:

The various demographic, geographic and social factors that were more strongly associated to higher rates of untreated decay differed at times from what was found for caries experience and treated decay. Drilling down into the factors associated with higher rates of untreated decay—facility types serving kids of lower socio-economic status (SES), rural location, Hispanic/Latino ethnicity and Eastern/South Central regions emerged as significantly associated with increased rates of untreated decay suggesting that they may influence access to care.

Caries Experience by Race

RACE	# OF SAMPLE	CARIES EXPERIENCE	UNTREATED DECAY	TREATED DECAY
American Indian/Alaska Native	25	28%	20%	16%
Asian	58	32.8%	24.1%	12.1%
Black/African American	861	29.2%	18.6%	13.2%
Native Hawaiian/Pacific Islanders	15	40%	26.7%	20%
White	5,105	35.5%	22.1%	19.4%
Bi - or Multi-Racial	478	34.7%	23.4%	17.2%
Other	246	37%	22%	20.3%

College of Dentistry
Dental Public Health

Zip Code Data for Louisville

- Prevalence rates of any caries experience exceeding 20% were observed in the zip codes 40272 (31.8%), 40212 (45.0%), 40258 (30.6%), 40214 (29.4%), 40216 (21.4%), 40203 (28.6%), and 40210 (29.2%).
- A significant association exists between the zip codes of children's residences and any caries experience. Significantly higher prevalence rate of any caries experience (29.8%, 48 out of 161) among children from poor neighborhoods compared to children from non-poor (19.3%, 117 out of 607) zip codes.
- These zipcodes are in West and Southwest Louisville, predominantly Black neighborhoods

Race and Oral Health Disparities

It is important to note that the disparities in predominantly black communities in West and South West Louisville are not due to coincidence, biological propensity, or personal choice. Health access issues in Louisville follow the lines of our segregated communities. Redlining from mortgage and real estate companies lead to black residents concentrating in undesirable neighborhoods, with older housing, more air pollution, and less government investment. Louisville is still deeply segregated along those lines. Additional investigation and programming is needed to work toward oral health equity.

Western Kentucky

- Western Kentucky Head Starts/School-based Head Starts from EPIC vs all other Head Starts and School-Based Head Starts (non-EPIC)
- Significant association between caries experience and children screened in non-EPIC versus EPIC facilities.
- Significantly higher in children from non-EPIC facility types (like school-based Head Start and Head Start) compared to those observed in EPIC facility types.
- Caries experience, after controlling for the age of the children, the odds of observing caries in children from non-EPIC facilities slightly decreased compared to those in EPIC facilities. For untreated caries, the odds ratio decreased slightly. Likewise, the odds ratio for untreated decay also decreased.

UK College of Dentistry
Dental Public Health

Impression of Decay Local Screeners

- It was eye opening, and often went along with the SES of the center, such as if they were they private pay or state assisted
- About what I expected. i.e. high rates of decay. Spoke with a few parents of the children and most stated that getting in for treatment is the hardest part. Most are told they have to wait months, or they aren't taking ANY new patients
- I have been a PHRDH for several years, so I was aware of the rates in my area. It is just way too high!
- Decay rates seems to depend on demographics such as income, education and access to care. No suprises.

Highlights from Participating RDHs

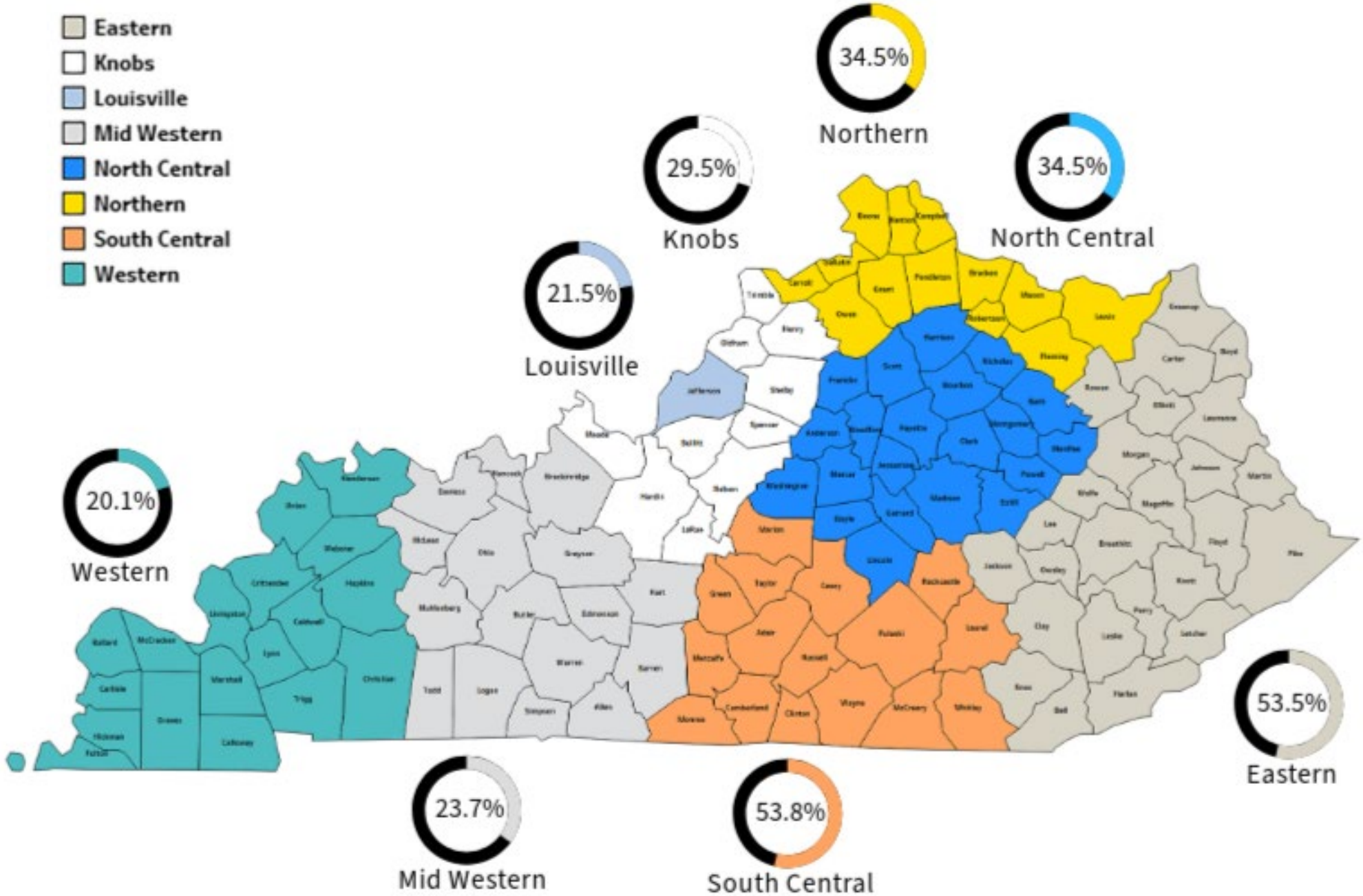
- The children
- Most kids have seen a dentist However most still had a lot of dental needs from small caries to abscesses
- I enjoyed the camaraderie, working with others that share the same passions. The children that were excited also made me feel good about participating
- The study materials are top notch and the gathering of information was fairly easy

UK College of Dentistry
Dental Public Health

Highlights Continued

- The smile and the Willingness of the children
- Being able to participate in such an important data collection project to hopefully help us better implement our preventive oral health services moving forward
- I enjoyed interviewing and bringing on board the hygiene screeners, and seeing how interested they were in the project. I liked being part of an important program that would benefit KY children in the future
- Educating the children on oral health

UK College of Dentistry
Dental Public Health


Eastern
Knobs
Louisville
Mid Western
North Central
Northern
South Central
Western
34.5%
Northern
29.5%
Knobs
34.5%
North Central
21.5%
Louisville
20.1%
Western
23.7%
Mid Western
53.8%
South Central
53.5%
Eastern

Questions and Answers

College of Dentistry
Dental Public Health


College of
Dentistry
Dental Public Health

Water Fluoridation in KY

With Dr. Julie McKee

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health

KOHC 2025 Policy Priorities

- Protect community water fluoridation programs
- Expand practice settings for public health registered dental hygienists
- Increase Medicaid reimbursement rates for dental services
- Reduce youth initiation of tobacco products, including e-cigarettes and vapes

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health

KOHC Steering Committee – New Member

- Brooke Jones, PHRDH, Gateway District Health Department

Kentucky Oral Health Coalition
KOHC
For a lifetime of oral health

Member Voting

- Any active KOHC member may participate in voting
- Organizational members may vote once per organization – designate one person to participate from your organization
- Use voting cards at your table

Kentucky Oral Health Coalition
KOHC
For a lifetime of oral health

Questions?

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health

Vote 1

- Protect community water fluoridation programs

Kentucky Oral Health Coalition
KOHC
For a lifetime of oral health

Vote 2

- Expand practice settings for public health registered dental hygienists

Kentucky Oral Health Coalition
KOHC
For a lifetime of oral health

Vote 3

- Increase Medicaid reimbursement rates for dental services

Kentucky Oral Health Coalition
KOHC
For a lifetime of oral health

Vote 4

- Reduce youth initiation of tobacco products, including e-cigarettes and vapes

Kentucky Oral Health Coalition
KOHC
For a lifetime of oral health

Vote 5

- KOHC Steering Committee new member
  - Brooke Jones

Kentucky Oral Health Coalition
KOHC
For a lifetime of oral health

Member Updates

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health

Thank you for joining!

www.kentuckyoralhealthcoaltion.org

FB: KYOralHealthCoalition X: KYOralHealth

Kentucky Oral Health Coalition

KOHC

For a lifetime of oral health