

Preventing HPV Cancers with Rural Communities: Updates and Opportunities

Quarterly Updates Meeting

August 21, 2024

11:00 am – 12:00 pm Central Time



**HPV Cancer
Prevention
Program**

PATH →
to prevention



PATH →
to prevention

Welcome

Heather M. Brandt, PhD
Director, HPV Cancer Prevention
Program



**HPV Cancer
Prevention
Program**



AGENDA

- Welcome
- Progress on Priority Action Steps to Increase HPV Vaccination Coverage with Rural Communities
- The Rural Burden of HPV-Attributed Cancer
- Supporting Pediatricians to Increase HPV Vaccination Rates
- Discussion
- Next meetings

Progress on Priority Action Steps to Increase HPV Vaccination Coverage with Rural Communities

Cristobal Valdebenito, MA, MPH
Program Coordinator
HPV Cancer Prevention Program



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Rural HPV Vaccination Priorities



Start at Age 9

Promote starting HPV vaccination at age 9 in rural communities.



Existing Resources

Compile and share existing resources for addressing HPV vaccination with rural communities.



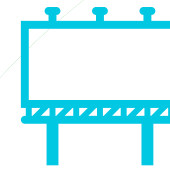
Training Providers

Develop or adapt health care provider and health care professional HPV vaccination training resources for those serving rural communities.



Advocacy and Policy

Explore policy influences on HPV vaccination in rural areas.



Communication

Develop, test, and disseminate easy-to-use messages for rural audiences.



Data

Review and update existing resources and data on HPV vaccination and HPV cancers in rural communities.

Rural Priority Action Steps: Start at Age 9

9

Start at Age 9

- “Nine is Fine”: Preventing Cancer with Earlier HPV Vaccination:
 - South Boston Community Health Center and MetroHealth—
 - Goal: ↑ HPV vax rates, especially through promoting HPV vaccination at age 9
 - Strategies: Added reminders in Epic, trained clinicians, and simplified ordering and scheduling
 - Results: HPV vax ↑ by up to 50%
 - <https://www.epicshare.org/share-and-learn/multi-site-hpv-vaccines-2>
 - **Calls to Action:**
 - Check out the EpicShare article for more information
 - Reach out to Epic partner to implement similar approach
 - Access technical guide (“how to guide”) for Epic community members

Promote starting HPV vaccination at age 9 in rural communities.

EpicShare



MetroHealth - OH



South Boston Community Health Center

Rural Priority Action Steps: Existing Resources and Training Providers

- Goal: Assess and feature on St. Jude rural webpage and in rural communications
- Search Online: Identify resources for improving HPV vaccination with rural communities
- Encourage Partnership Sharing: Organizational partners to share relevant resources
- Assess Suitability: Evaluate existing resources for relevance and applicability
- Online Access: Create a hub for accessing suitable materials
- Promote Materials: Integrate suitable resources into rural HPV vaccination programming.
- **Call to Action:**
 - Do you have HPV Vaccination resources for rural U.S. communities?
 - Email us at PreventHPV@stjude.org



Send email to
PreventHPV@StJude.org



Existing
Resources

Compile and share existing resources for addressing HPV vaccination with rural communities.



Training
Providers

Develop or adapt health care provider and health care professional HPV vaccination training resources for those serving rural communities.

Rural Priority Action Steps: Existing Resources & Training Providers

- Search Process:

- Utilized various databases to gather existing resources
- Resources reviewed and assessed based on relevance and publication year



Existing
Resources

Compile and share existing resources for addressing HPV vaccination with rural communities.



Training
Providers

Develop or adapt health care provider and health care professional HPV vaccination training resources for those serving rural communities.

Criteria Description
Addresses HPV vax in rural communities
HPV vax but not rural specific
General vax in rural communities

Publication Years
2017 - 2024

Rural Priority Action Steps: Training Evaluation Example



Resource Title: Steps for Increasing HPV Vaccination in Practice An Action Guide to Implement Evidence-Based Strategies for Clinicians

Relevance: Addresses HPV vax in clinical setting

Publication Year: 2021

Possible relevance to rural HPV vaccination:

- Train healthcare providers: distribute the guide in rural clinics. Include training on step-by-step implementation.
- Encourage rural schools to integrate the guide's recommendations into their health programs.

<https://www.cancer.org/content/dam/cancer-org/online-documents/en/pdf/flyers/steps-for-increasing-hpv-vaccination-in-practice.pdf>

Steps for Increasing HPV Vaccination in Practice
An Action Guide to Implement Evidence-based Strategies for Clinicians*

Increasing HPV Vaccination: An Overview

Step 1 Assemble a Team	Step 2 Make a Plan	Step 3 Engage and Prepare All Staff	Step 4 Get Your Patients Vaccinated by Their 13th Birthday
Identify an HPV vaccination champion.	Identify opportunities to increase HPV vaccination.	Engage all clinical and non-clinical staff in your efforts.	Make an effective recommendation.
Form a quality improvement team for HPV vaccination.	Determine baseline vaccination rates.	Prepare the clinic system.	Prompt the health care provider.
Identify external organizations and resources like ACS to support your efforts.	Design your clinic's HPV vaccination strategy and/or consider implementing new evidence-based interventions.	Prepare the parent and patient.	Increase access.
Your clinic system may not initially tackle every step.	Prepare the clinicians.	Track series completion and follow-up.	Measure and improve performance.

*Includes pediatricians, family physician, obstetrician-gynecologists, nurse practitioners, nurses, medical assistants, office managers.

Rural Priority Action Steps: Training Evaluation Example



Resource Title: You Are the Key to HPV Cancer Prevention - Centers for Disease Control and Prevention

Relevance: Addresses HPV vax in clinical setting

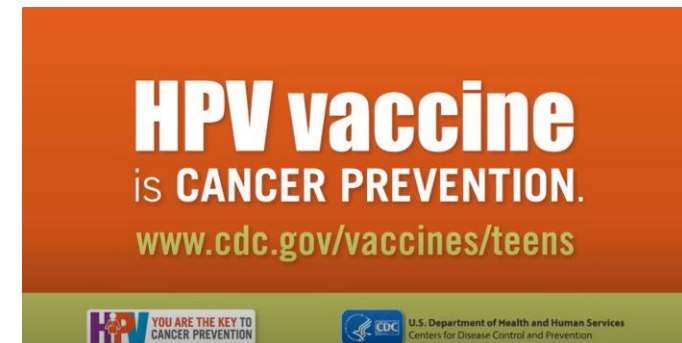
Publication Year: first introduced 10+ years, 2022 update

Possible relevance to rural HPV vaccination:

- Encourage dissemination using social media platforms that are popular in rural areas
- Play the video in the waiting rooms of rural clinics as a passive educational tool

<https://www.youtube.com/watch?v=E36aShFIEYo&t=317s>

https://www2.cdc.gov/vaccines/ed/hpv_key/yatk.asp



Ongoing Training and New Collaborations



Training
Providers

- ACS and ACS National HPV Vaccination Roundtable training program for rural-serving health care providers – March – December 2024.

The American Cancer Society (ACS) and The National HPV Vaccination Roundtable (HPVVRT) are seeking rural healthcare partners to join a learning community focused on improving HPV vaccination among 9-12-year-olds.

Through a series of virtual sessions and peer-based learning, the rural disparities HPV vaccination learning community will use quality improvement (QI) and evidence-based interventions to increase vaccine rates. This no-cost, practical how-to learning community will serve as a forum for health partners to gain knowledge, exchange promising practices, and take through challenges to increasing HPV vaccinations in rural settings.

Why Prioritize HPV?

- Most patients will be exposed to HPV:** HPV is extremely common. The HPV vaccine provides protection from these infections and six types of cancer.
- Pandemic impact:** Nationally 9.4 million doses have been missed, leaving many children unprotected from future cancers. The impact on publicly insured children has been significant.
- Population health management:** Rural communities lag 10% behind the national average for HPV vaccination. HPV underperforms compared to other ACIP recommended vaccines, including Tdap and MenKVW.
- Improve HEDIS IMA/CHIP metrics:** Payors may tie incentives to performance improvements on adolescent immunization measures.

Why partner with ACS?

- History of success:** Since 2014, ACS has partnered on 300+ HPV QI projects. Partners have rate improvements of 3-5%. Review our 2022-2023 HPV Impact Report to learn more.
- Trusted global organization:** ACS is a leader in the HPV vaccination space. Participation includes access to thought leaders and experts.
- Mission HPV Cancer Free:** ACS set a goal to increase HPV vaccination rates and seeks to eliminate vaccine preventable HPV cancers, as a public health problem starting with cervical cancer.
- Cancer prevention in action:** Attendees will learn and apply QI tools and best practices to increase vaccine delivery.

Participation Benefits:

- Access to ACS & HPVVRT resources and materials
- Co-training opportunities
- Data utilization best practices
- Networking with peer organizations
- Practical implementation tips
- Opportunity to showcase success
- QI coaching & support
- Learning from subject matter experts
- Social media toolkit (patient-facing)
- Preventing HPV-related cancers and pre-cancers

1.800.227.2345 | 1.30.2024

Learning Outcomes

- Increase on-time HPV vaccination rates
- Expand knowledge around HPV infection, related-cancers, and vaccination rates
- Build awareness around the importance of HPV vaccination data
- Explore evidence-based interventions to increase HPV vaccinations in your community
- Discuss best practices and challenges increasing HPV vaccinations in rural settings

Learning Session Details

Dates	Topics
March 20, 2024	Setting the Stage: Networking & Orientation
April 10, 2024	A Deep Dive into HPV Vaccination Data
May 22, 2024	HPV Vaccination Starting at Age 9
June 19, 2024	The ABCs of Quality Improvement: AIM Statements & Building a Team
July 17, 2024	The ABCs of Quality Improvement: Process Mapping & Gap Analysis
August 14, 2024	Finding the Best Fit: Evidence-Based Interventions & HPV Vaccination
September 18, 2024	The ABCs of Quality Improvement: PDSA Cycle
October 16, 2024	Highlighting HPV Vaccination Best Practices
November 13, 2024	Highlighting HPV Vaccination Best Practices
December 4, 2024	Celebrating & Sustaining Success

Time: 2-3pm EST
Cost: Free to attend
Location: Virtual format via Zoom meeting

Registration Details

Registration is rolling and participants can join at any time throughout the year. Register using the following link: <https://forms.office.com/r/q8zfWncCgr> or scan the QR code.

Once registration has been completed, Zoom calendar invites will be sent for the monthly calls.

Questions? Please reach out to Ashley Lach, HPV Program Manager
Email: Ashley.Lach@cancer.org

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Develop or adapt health care provider and health care professional HPV vaccination training resources for those serving rural communities.

Register at:

<https://forms.office.com/r/q8zfWncCgr>

Questions? Contact Ashley Lach, HPV Program Manager, American Cancer Society at ashley.lach@cancer.org

- ACS: Rural Advisory Board – Discussions on rural HPV Vax Priorities and Implementation.

Upcoming Conferences and Events



- Engage with rural health partners to strengthen partnerships to improve HPV vax outreach.
- Showcase HPV Program initiatives, raising awareness about vaccination in rural communities.

- April 15 -17, 2025, Indianapolis, Indiana
- Enhance collaboration and visibility of the HPV vaccination efforts
- Share best practices, new findings, and learn from other strategies



- October 1, 2024, 2-3 pm CT
- Collaboration via webinar to strengthen outreach to providers in rural clinics
- Increase awareness and education on HPV cancer prevention in rural health

Rural Priority Action Steps: Existing Resources Example



Existing Resources

Resource Title: Top 10 Tips for HPV Vaccination Success - Centers for Disease Control and Prevention

Relevance: Addresses HPV Vax in general community settings.

Publication Year: 2018

Possible relevance to rural HPV vaccination:

- Proactive provider recommendations
- Streamlined office practices
- Education and communication

<https://www.cdc.gov/hpv/media/pdfs/2024/07/Top10-improving-practice.pdf>

Top 10 Tips for HPV Vaccination Success
Attain and Maintain High HPV Vaccination Rates

1 Appreciate the significance of achieving high HPV vaccination rates.
By boosting HPV vaccination rates among your patients, you will be preventing cancer.

2 Acknowledge the importance your recommendation has when it comes to parents choosing to get their children vaccinated.
Clinician recommendation is the number one reason parents decide to vaccinate. This is especially important for HPV vaccination.

3 Use an effective approach by bundling your vaccine recommendation.
Recommend the HPV vaccine the same day and the same way you recommend all other vaccines. For example, "Now that Danny is 11, he is due for vaccinations to help protect against meningitis, HPV cancers, and whooping cough. We'll give those shots during today's visit. Do you have any questions about these vaccines?"

4 Motivate your team and encourage their immunization conversations with parents.
Starting with your front office, ensure each team member is aware of HPV vaccine's importance and is educated on proper vaccination practices and recommendations, ready to answer parents' questions, and/or regularly remind and recall parents. Be sure staff regularly check immunization records, place calls to remind families about getting vaccines, and let you know if parents have additional questions.

5 Implement systems to ensure you never miss an opportunity to vaccinate.
Establish a policy to vaccinate at every visit. Create a system to check immunization status ahead of all visits. Before seeing the patient, staff should indicate if the patient is due for immunization, with special consideration to HPV vaccination. Use standing orders.

6 Use your local health department's resources.
Use the resources of the local health department to achieve your goals of protecting your patients.

7 Know your rates of vaccination and refusal.
Deputize your staff to assist you with knowing your actual vaccination rates and learning more about why some patients are behind on their vaccines. They can also help you facilitate solutions on how to bring these patients in and get or keep immunization rates up.

8 Maintain strong doctor-patient relationships to help with challenging immunization conversations.
It is extremely gratifying when patients who initially questioned immunization agree to get their child vaccinated on time. It's always nice to hear: "Okay, that makes sense and I trust you!"

Rural Priority Action Steps: Existing Resources Example



Existing Resources

Resource Title: Talking to Parents about HPV Vaccine - Centers for Disease Control and Prevention

Relevance: Addresses HPV Vax in clinical settings.

Publication Year: 2019

Possible relevance to rural HPV vaccination:

- Framing HPV vaccination as cancer prevention
- Addressing common concerns
- Using clear, strong recommendations

https://www.cdc.gov/hpv/media/pdfs/2024/07/talking_to_parents_HPV.pdf

Talking to Parents about HPV Vaccine **HPV VACCINE IS CANCER PREVENTION**

Recommend HPV vaccination in the **same way** and on the **same day** as all adolescent vaccines. You can say, "Now that your son is 11, he is due for vaccinations today to help protect him from meningitis, HPV cancers, and whooping cough. Do you have any questions?" Taking the time to listen and understand parents' concerns can help you respond to their concerns more effectively.

Why does my child need HPV vaccine? HPV vaccine is important because it prevents infections that can cause cancer. That's why we need to start the shot series today.

Some HPV infections can cause cancer—like cancer of the cervix or in the back of the throat—but we can protect your child from these cancers in the future by getting the first HPV shot today.

What diseases are caused by HPV?

How do you know the vaccine works? Studies continue to prove HPV vaccination works extremely well, decreasing the number of infections and HPV precancers in young people since it has been available.

HPV is a very common infection in women and men that can cause cancer. Starting the vaccine series today will help protect your child from the cancers and diseases caused by HPV.

Why do they need HPV vaccine at such a young age? Vaccines protect your child before they are exposed to a disease. That's why we give the HPV vaccine earlier rather than later to protect them long before they are ever exposed. Also, if your child gets the shot now, they will only need two doses. If you wait until your child is older, they may end up needing three shots.

Studies tell us that getting HPV vaccine doesn't make kids more likely to start having sex. I made sure my child (or grandchild, etc.) got HPV vaccine, and I recommend we give your child her first HPV shot today.

Is my child really at risk for HPV?

I'm worried my child will think that getting this vaccine makes it OK to have sex.

Why do boys need the HPV vaccine? HPV vaccination can help prevent future infections that can lead to cancers of the penis, anus, and back of the throat in men.

Yes, HPV vaccination is very safe. Like any medication, vaccines can cause side effects, including pain, swelling, or redness where the shot was given. That's normal for HPV vaccine too and should go away in a day or two. Sometimes kids faint after they get shots and they could be injured if they fall from fainting. We'll have your child stay seated after the shot to help protect him/her.

I'm worried about the safety of HPV vaccine. Do you think it's safe?

Are all of these vaccines actually required? I strongly recommend each of these vaccines and so do experts at the CDC and major medical organizations. School entry requirements are developed for public health and safety, but don't always reflect the most current medical recommendations for your child's health.

There is no evidence available to suggest that getting HPV vaccine will have an effect on future fertility. However, women who develop an HPV precancer or cancer could require treatment that would limit their ability to have children.

Can HPV vaccine cause infertility in my child?

For more information, visit [cdc.gov/vaccines/conversations](https://www.cdc.gov/vaccines/conversations)

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03/24/2019
Last updated JULY 2019

Rural Priority Action Steps: St. Jude Existing Resources



Existing
Resources



August 15, 2024

Improving Rural HPV Vaccination Coverage

In this quarterly communication about our efforts to improve HPV vaccination with rural communities in the United States, we highlight the following:

- Upcoming virtual quarterly updates meeting on August 21 featuring a presentation on the American Academy of Pediatrics rural influencer's campaign and progress on the HPV cancer rural disparities research project, register [here](#);
- Watch and download the slides from the International HPV Awareness Day seminar "Rural Reach: Accelerating HPV Vaccination Coverage," [here](#).
- Recap of the May 2024 quarterly updates meeting; watch [here](#).
- May 2024 Quarterly Communication, read [here](#).



Encouraging HPV
Vaccination among Young
Adults in the Catch-up
Age (August 2024)



Energizing and equipping
rural providers in
Washington state to
increase HPV vaccination
of preteens, ages 9-12
(July 2024)



Mountain West HPV
Vaccination Project Helps
Shape American Cancer
Society National HPV
Vaccination Program
(June 2024)

Compile and share
existing resources for
addressing HPV
vaccination with rural
communities.

Resources available at: stjude.org/HPVrural or scan:



Rural Priority Action Steps: Advocacy and Policy



Advocacy and Policy

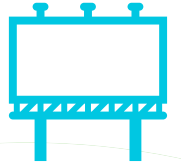
Understanding HPV vaccination reimbursement by provider type in rural and urban contexts:

- **Discrepancy by provider type:** Family physicians receive the lowest HPV vaccine reimbursement compared to all other provider types (mean=-\$259; mean net return per dose=\$3.7)
- **Rural-urban discrepancy:** Rural providers receive much lower HPV vaccination reimbursement and net return per dose than urban providers (mean=\$244 vs. \$283 and mean net return per dose= - \$11.6 vs \$27.8, respectively)
- **Discrepancy by provider type and rurality:** HPV vaccine reimbursement and net return per dose is highly negative for all provider types in rural areas, but particularly low among family physicians (mean net return per dose= -\$24.4)

Explore policy influences on HPV vaccination in rural areas.

Access additional St. Jude HPV vaccination policy resources at stjude.org/hpv-policy-summary

2024 National Rural Health Day Campaign



Communication

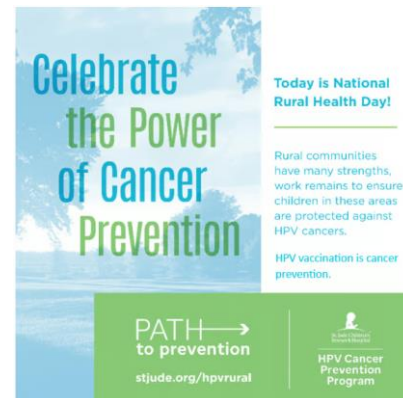
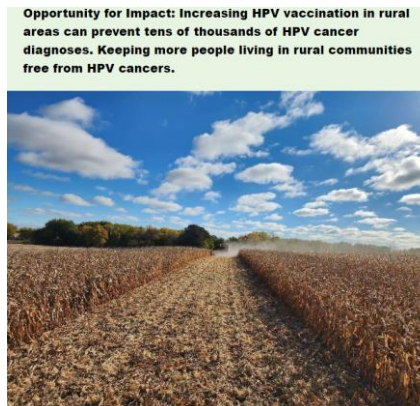
National Rural Health Day is November 21, 2024

Centered on:

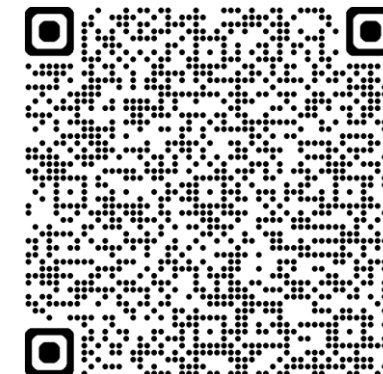
- Rural communities' resiliency and sense of community
- Importance of 60 million rural residents and ↑ HPV vax

Assets to be developed for rural HPV vaccination campaign:

- Updated rural HPV vax flyer
- Poster and postcards for rural health clinics and providers in rural areas
- Shareable HPV vax article for communications to rural communities
- Social media images and posts



2023 Campaign



Rural Priority Action Steps: Data



Data

- Update current estimates for rural HPV vaccination coverage and rural HPV cancers
 - Working with external consultant on this analysis
 - Peer-reviewed publications
 - Reports and infographics
 - Virtual seminars to review and share data/results
- Summary of findings from the last quarterly meeting
 - Rural HPV-associated cancer rates continue to surpass urban rates, widening the gap
 - Cervical cancer remains the most prevalent in females; oropharyngeal cancer incidence rates increasing fastest overall
 - HPV-associated cancer disparities are worsening, particularly in rural males with oropharyngeal cancer

Review and update existing resources and data on HPV vaccination and HPV cancers in rural communities.

2024 National Rural Cancer Control Conference



August 9, 2024.

Session: Eliminating HPV – Related Cancers: Implementation and Policy Initiatives

Moderator: Electra Paskett, PhD

Presenters:

- Deanna Kepka, PhD – Exploring New Frontiers in HPV – Related Cancer Prevention
- Cristobal Valdebenito, MA, MPH – Enhancing HPV Vaccination in Rural Communities: Strategies and Successes of the HPV Cancer Prevention Program
- Isabel Scarinci, PhD – Cervical Cancer Elimination as a Public Health Problem: The Alabama Experience

2024 National Immunization Conference

Prioritizing Actions to Improve HPV Vaccination with Rural U.S. Communities

Cristóbal Valdebenito, MA; Duha Magzoub, MPH; Julia Brown, MPH; Andrea Stubbs, MPA; Heather M. Brandt, PhD, and the Rural HPV Vaccination Think Tank

St. Jude Children's Research Hospital, HPV Cancer Prevention Program



HPV Cancer Prevention Program

PATH to prevention

Questions and to learn more: PreventHPV@stjude.org | stjude.org/HPV/rural

INTRODUCTION

- One-fifth of people in the U.S. choose rural life. Rural communities across the country are heterogeneous.
- Higher rates of HPV cancers and lower rates of HPV vaccination in rural communities are observed compared to the U.S. as a whole and metropolitan areas.
- Urgent actions are needed to reverse these trends and promote HPV cancer prevention with rural communities.
- The St. Jude HPV Cancer Prevention Program initiated efforts to convene thought leaders and subject matter experts to inform rural-facing programming to address low HPV vaccination coverage with rural communities.

METHODS

- In early 2023, St. Jude assembled a think tank of 24 subject matter experts, including representatives from national and community-based organizations, academia, non-profit organizations, and HPV cancer survivors to consider priority actions to improve HPV vaccination coverage with rural communities.
- The think tank met from March to August 2023 for dynamic discussions and debates about possible action steps to prioritize.
- Over a six-month collaborative process, informed by pre-meeting survey insights and interactive meetings, six priority action steps were identified and recommended:



Start HPV Vaccination at Age 9: Start at age 9 in rural areas to boost coverage.



Resource Sharing: Utilize and adapt existing HPV vaccination materials specific to rural needs.



Training for Healthcare Providers: Enhance and tailor HPV vaccination training for rural healthcare professionals.



Policy Exploration: Investigate the impact of policy on rural HPV vaccination and advocate for supportive measures.



Tailored Messaging: Create and distribute messages that resonate with the rural lifestyle.



Continuous Review of Data: Regularly update resources and data to track HPV vaccination and HPV cancers in rural communities.

RESOURCES

St. Jude Rural Webpage:
stjude.org/HPV/rural



Preventing HPV Cancers with Rural Communities Quarterly Updates Meeting
August 21, 2024
11:00 am – 12:00 pm CT



RESULTS

- **Engagement:** Average attendance of 106 people at rural quarterly updates meetings (November 2023; February and May 2024). These meetings align with the priority action of promoting early vaccination by fostering community engagement and sharing information.
- **Resource sharing:** Since January 2023, a monthly article series, "Wide Open Spaces," has reached 4,262 contacts each month, with 20 unique articles contributed by experts. This supports our continuous review and adaptation of resources to meet the evolving needs of rural communities.
- **Tailored Messaging:** A communication campaign for National Rural Health Day in 2023 had 1,331 opens (out of 4,396), and the February 2024 rural communication had 1,287 opens (out of 3,983). These campaigns are part of our efforts to develop, test, and disseminate messages that resonate with rural audiences.
- **Dissemination and Action:** Progress has been made through virtual seminars, webpage updates, and other dissemination methods. This aligns with the priority of compiling and sharing existing resources for addressing HPV vaccination with rural communities.
- **Policy Exploration:** We are examining reimbursement differences between provider types, a crucial aspect of understanding policy influences on HPV vaccination in rural areas. This work is still in progress and highlights our ongoing efforts to explore and advocate for supportive policies.
- **Review and Update HPV Data:** Our research indicates a growing disparity between rural and urban areas. This ongoing work is essential for regularly updating resources and data to track HPV vaccination and HPV cancers in rural communities. We invite attendees to join the next quarterly updates meeting on August 21 to learn more about our findings and progress.



Access this rural HPV vaccination fact sheet at stjude.org/HPV/rural



NEXT STEPS

- **Promote On-time Vaccination:** Expand and update resources to encourage HPV vaccinations starting at age 9 in rural communities.
- **Enhance Training Programs:** Extend training for healthcare professionals in rural areas and incorporate their feedback to develop more resources.
- **Refine Messaging Strategies:** Improve engagement through tailored messaging based on insights from previous campaigns, including various communication activities like fact sheets, newsletters, and articles.
- **Support Data Analysis:** Analyze data to understand the rural-urban disparity in HPV cancers and update resources and data regularly to track vaccination and cancer rates in rural areas.
- **National Collaboration:** Participate in the ACS National HPV Vaccination Roundtable rural working group and learning collaborative to address rural HPV vaccination coverage and support advocacy and policy efforts.



49th National Immunization Conference
Atlanta, Georgia August 12-14, 2024

Email PreventHPV@StJude.org for a copy of the poster

The Rural Burden of HPV – Attributed Cancer

Jason Semprini, PhD
Assistant Professor
College of Public Health
Des Moines University



**HPV Cancer
Prevention
Program**



The Rural Burden of HPV-Attributed Cancer

Jason Semprini, PhD, MPP

August 21, 2024

St. Jude Children's Research Hospital



Looking beyond...

Looking beyond 2020.

Looking beyond incidence.

Looking beyond rural-urban comparisons.

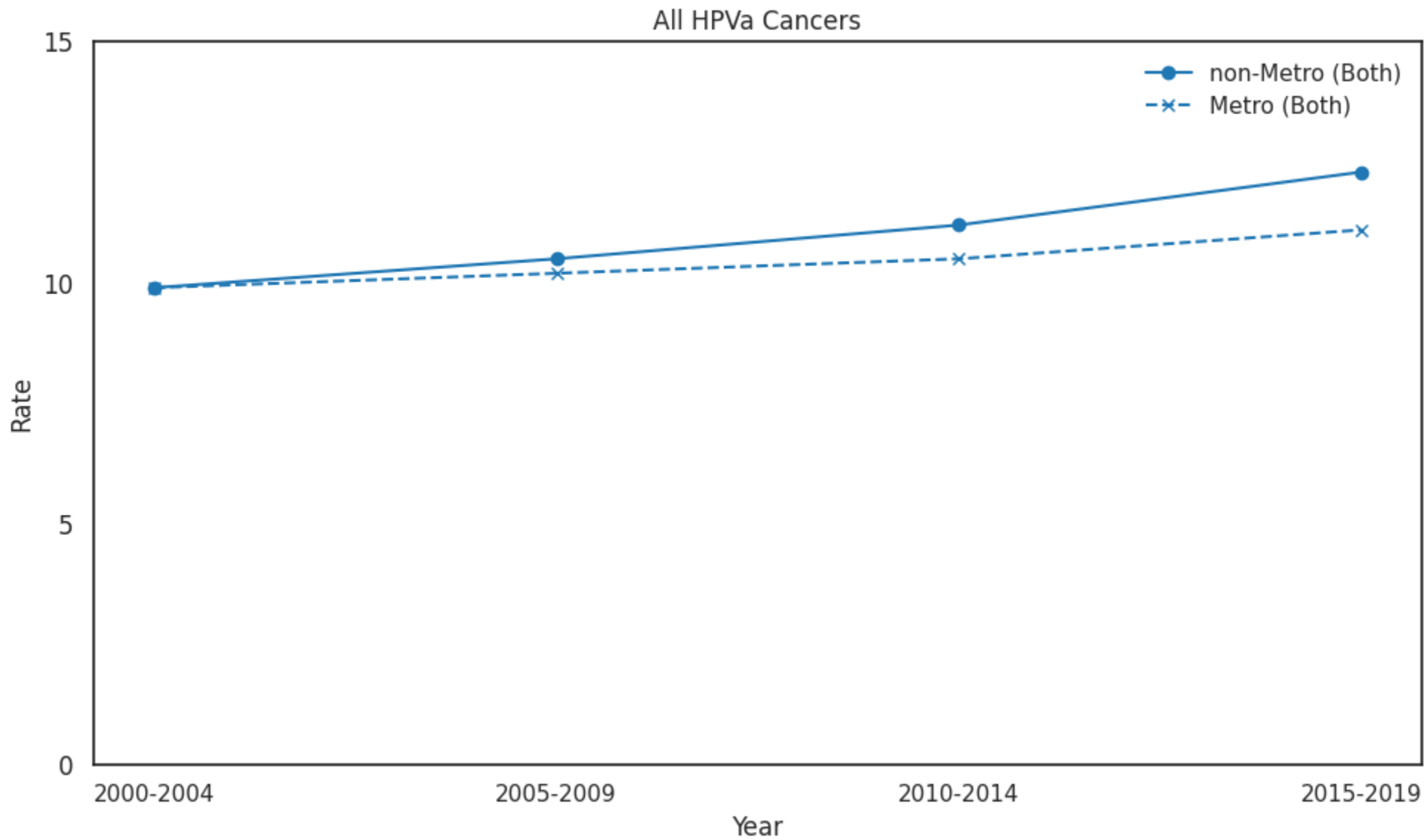
Recap

- HPV can cause certain cancers –
 - Cervix
 - female and male genital cancers (vagina, vulvar, penile)
 - anus/rectum, and
 - oropharyngeal (OPC)

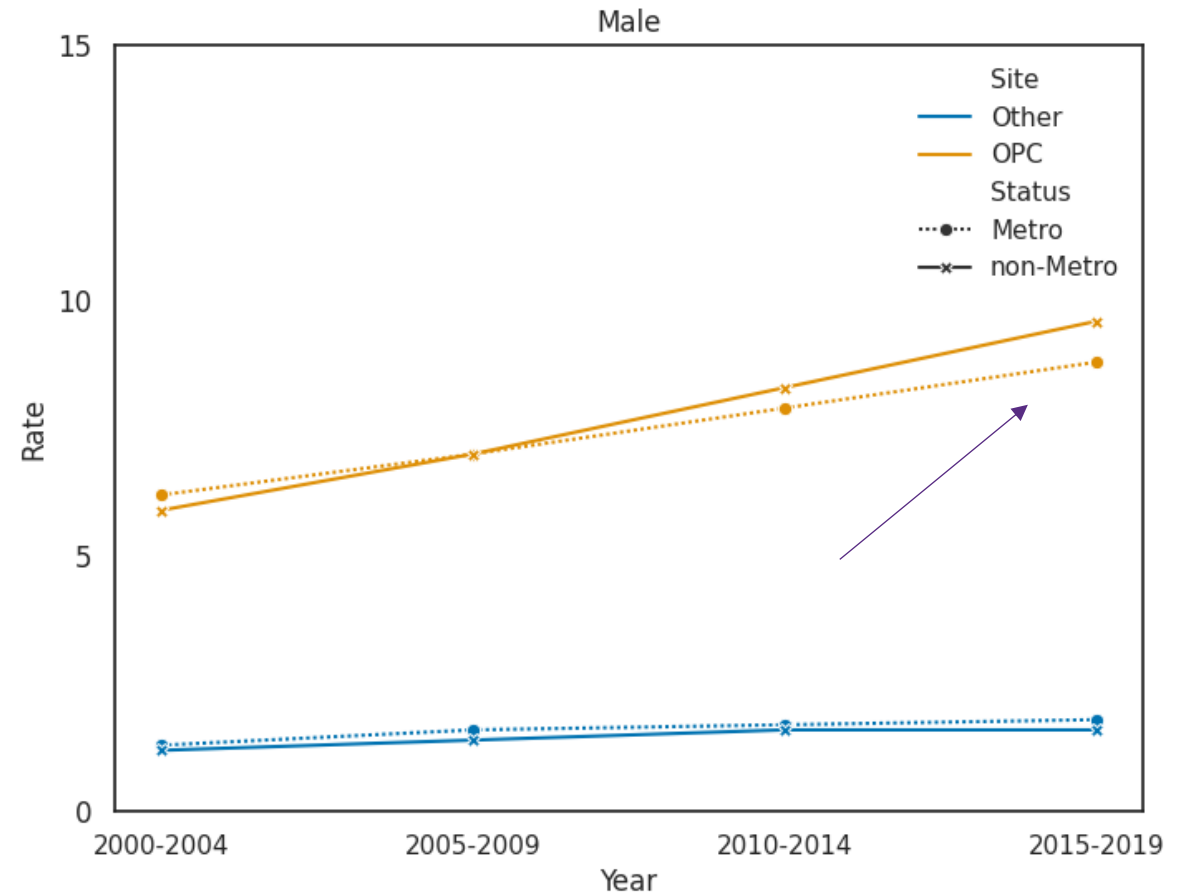
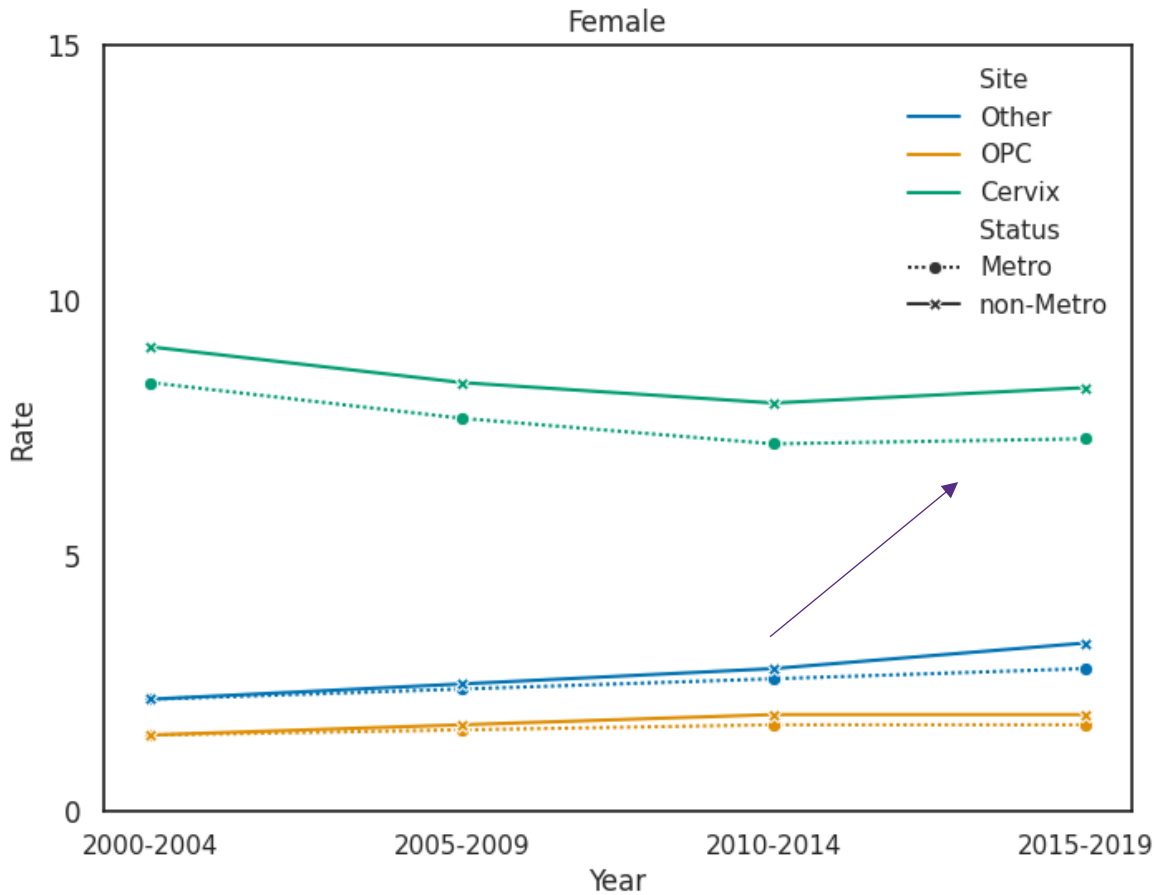
Recap

- HPV can cause certain cancers –
 - Cervix – Highest incidence of HPV-related cancers
 - female and male genital cancers (vagina, vulvar, penile)
 - anus/rectum, and
 - oropharyngeal (OPC) – Fastest growth since 2000's

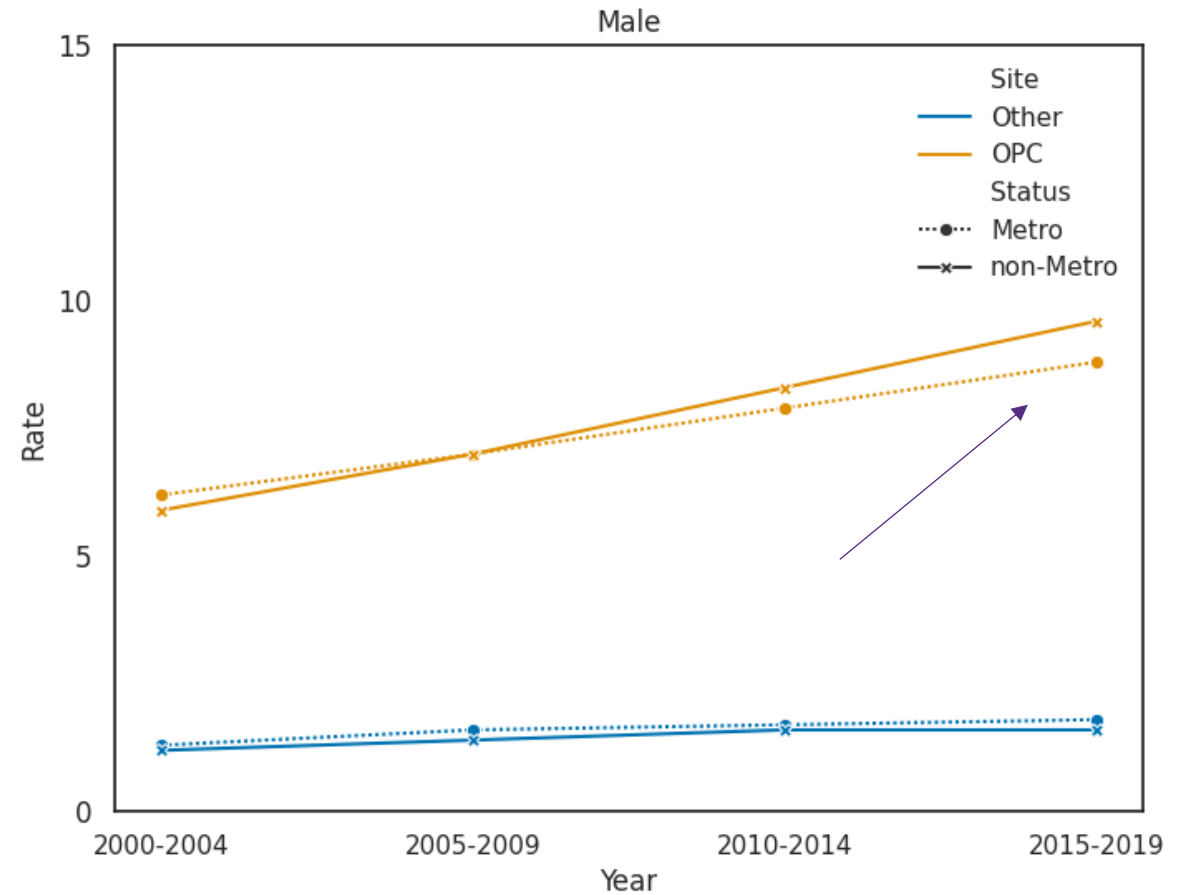
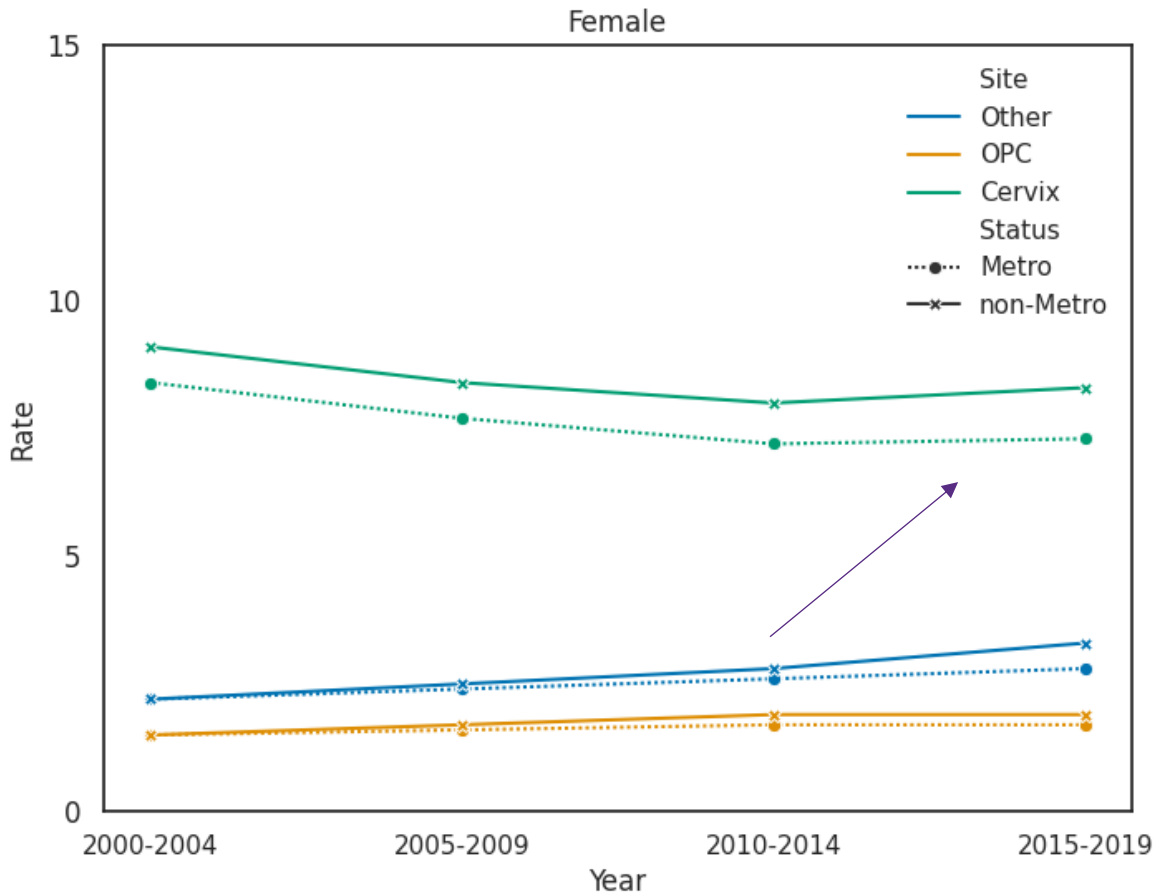
Rural incidence of HPV cancers is rising faster than the urban rate



Rural-Urban gap is widening for females (cervix) and males (OPC)



Rural-Urban gap is widening for females (cervix) and males (OPC)

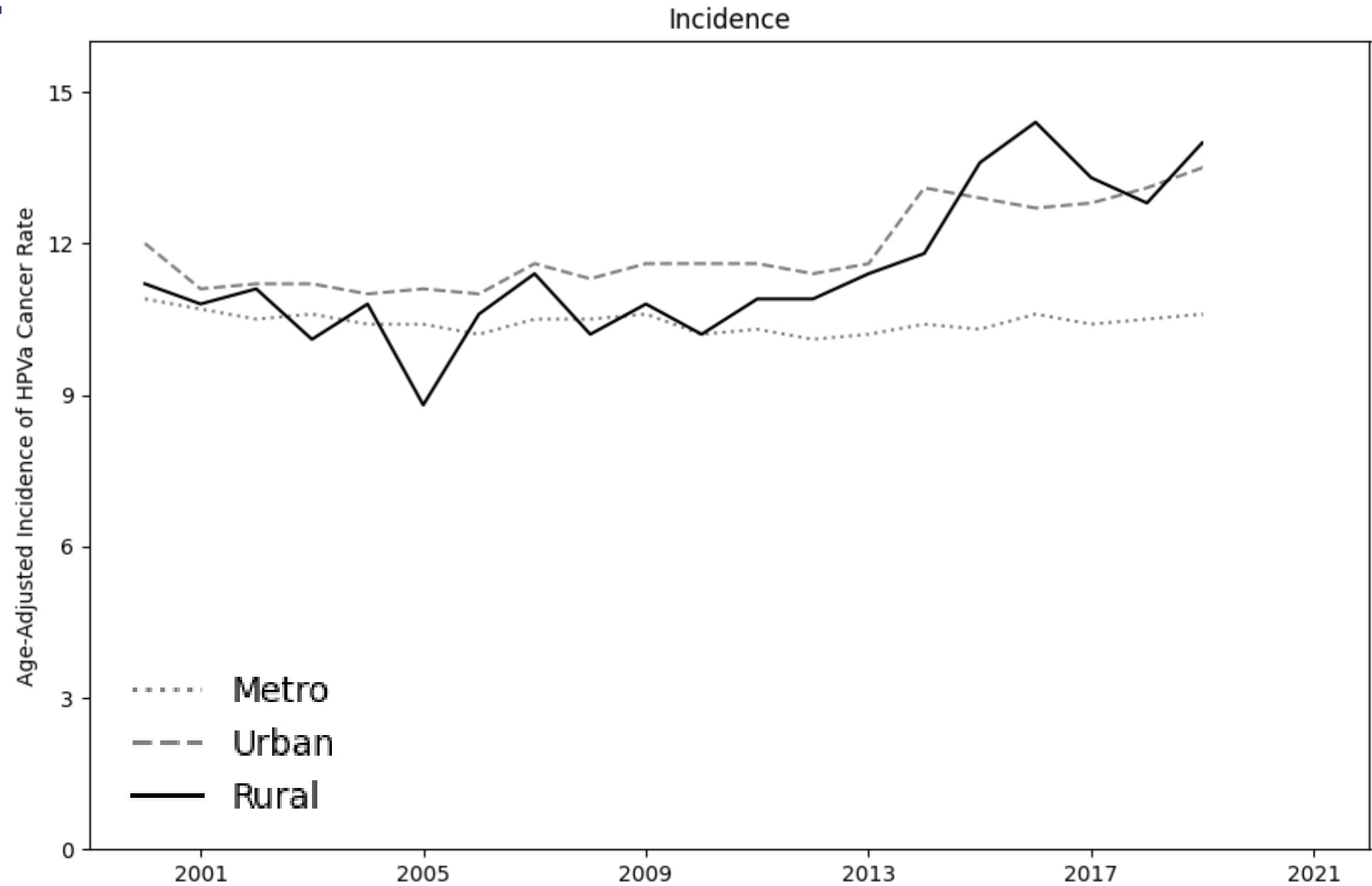


Looking Beyond

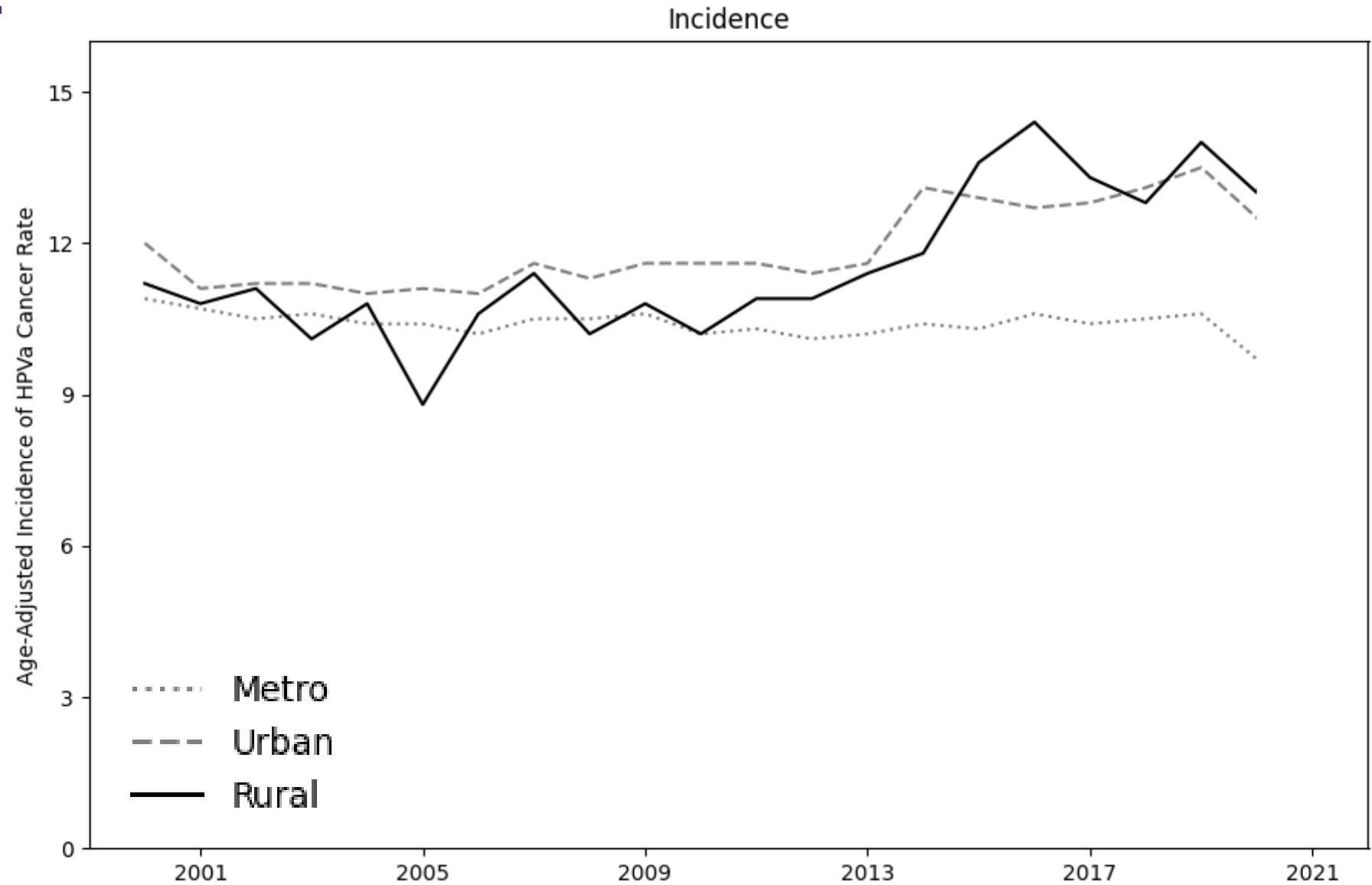
-2020
-metro and nonmetro
-incidence

How did the burden HPVa Cancer Incidence and Mortality change after 2020?

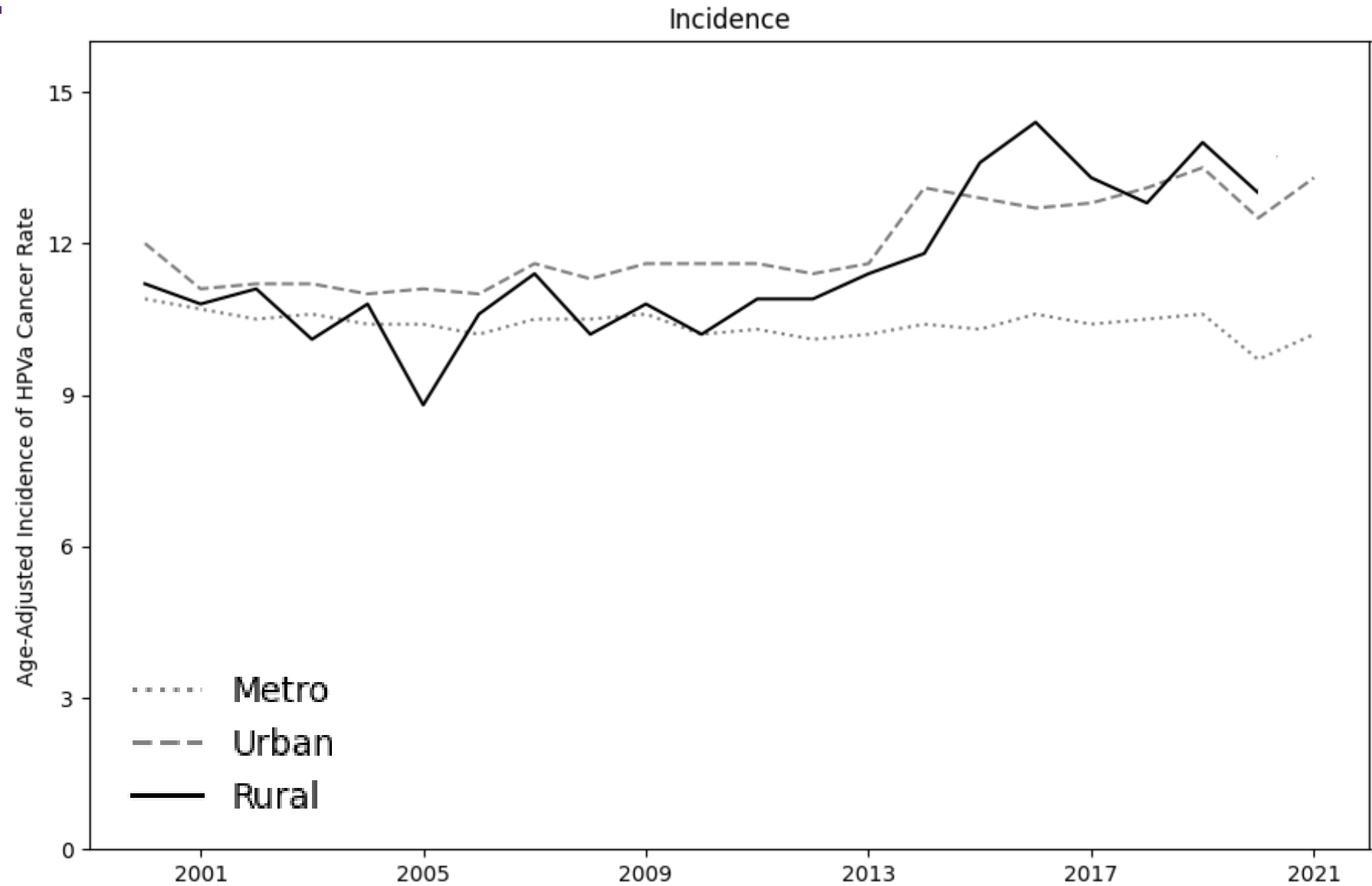
Rural incidence rising faster than urban and metro incidence



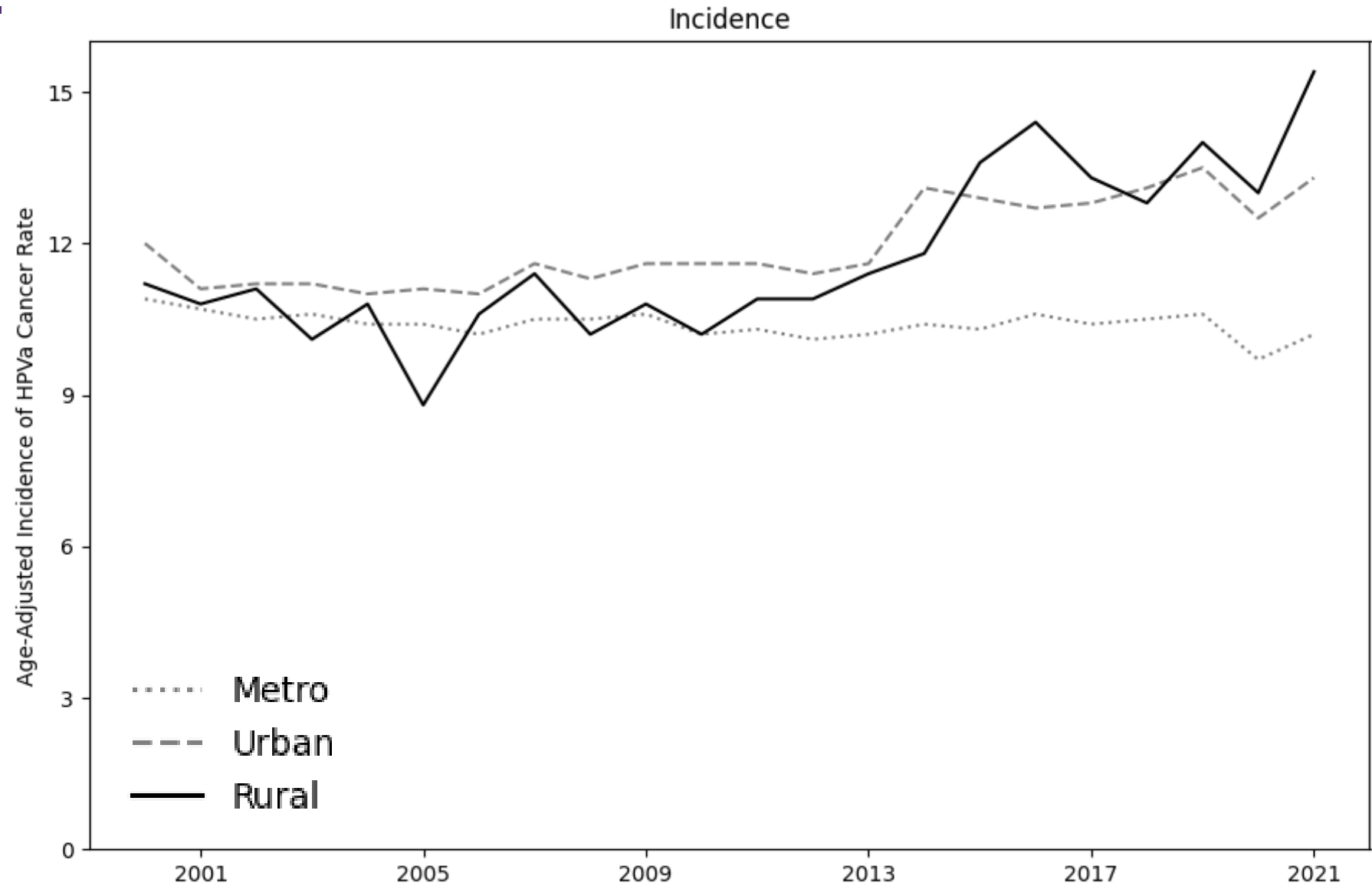
Incidence declined 7-8% during 2020.



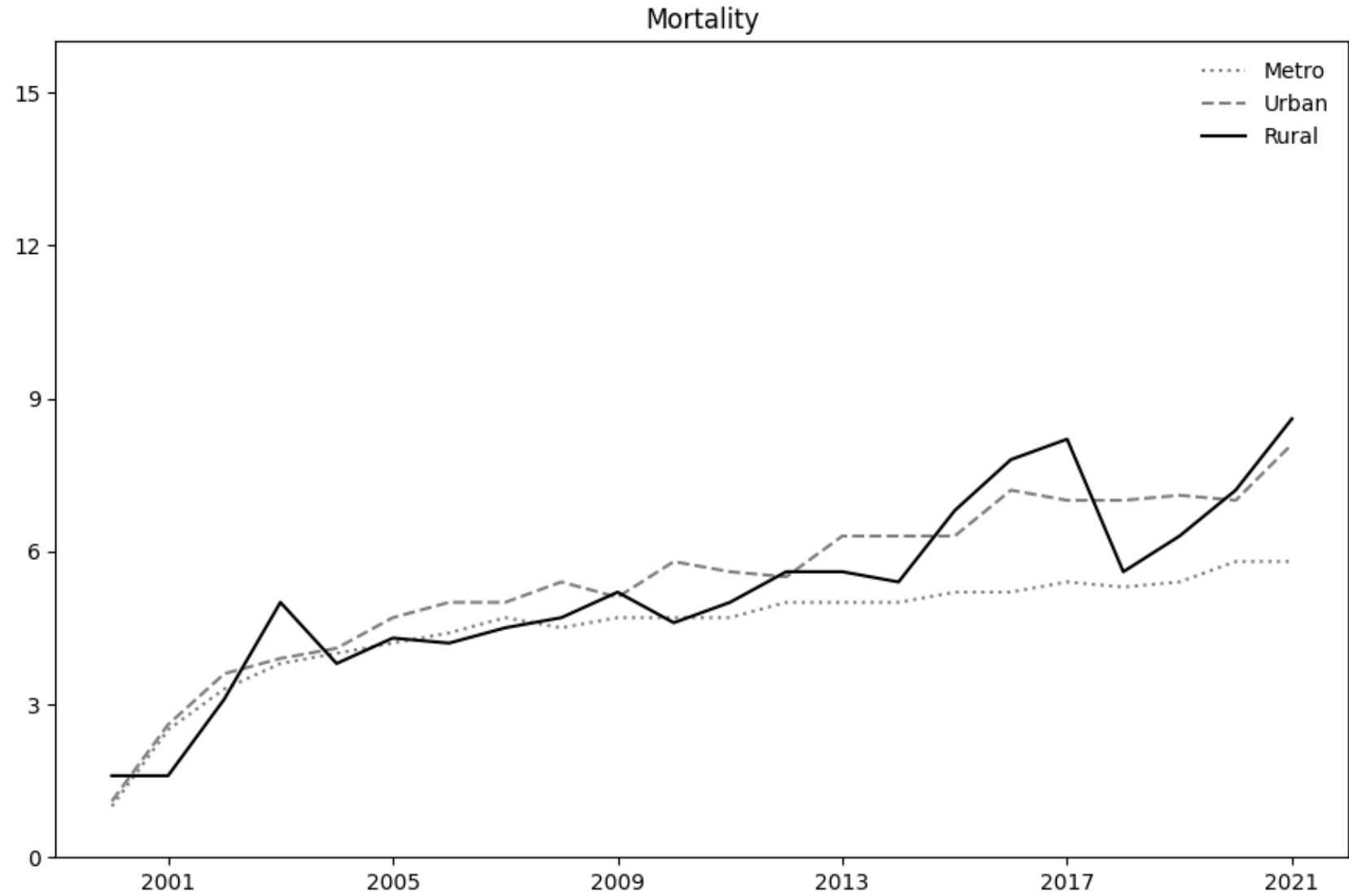
In 2021, urban and metro incidence rose 5-6%.



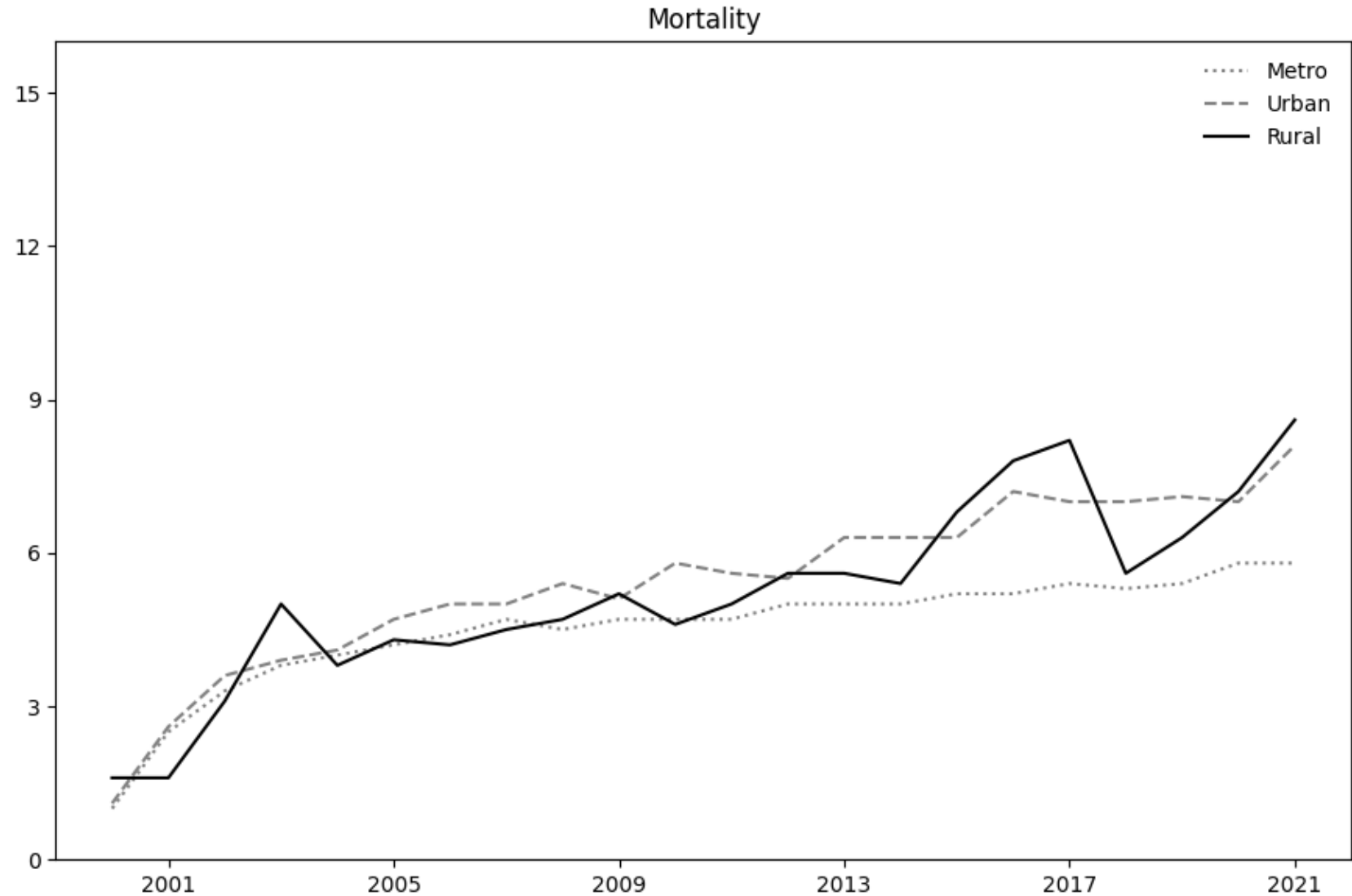
In 2021,
rural incidence
rose 18%



HPVa Cancer
mortality rates
continue to
climb...



HPVa Cancer
mortality rates
continue to
climb...



Looking Beyond

rural-urban differences

Identify intersectional and geographic differences in rural HPVa Cancer Incidence

A regarding Cancer Registry Data Analysis

- Time & Sample Size
- Measuring Race/Ethnicity (NAACCR vs. NPCR)
- Measuring Sex

Female Rural HPVa Cancer Incidence (2010-2019)

	Rate	Lower CI	Upper CI
Hispanic / All Races	11.6	11.0	12.2
Non-Hispanic / White*	13.2	13.1	13.4
Non-Hispanic / Black*	13.7	13.1	14.2
Non-Hispanic / Other	11.6	10.9	12.4

* Rates are higher than Hispanic and higher than non-Hispanic / Other groups

Female Rural HPVa Cancer Incidence (2010-2019)

	Rate	Lower CI	Upper CI
Hispanic / All Races	11.6	<i>11.0</i>	<i>12.2</i>
Non-Hispanic / White*	13.2	13.1	13.4
Non-Hispanic / Black*	13.7	13.1	14.2
Non-Hispanic / Other	11.6	<i>10.9</i>	<i>12.4</i>

* Rates are higher than Hispanic and higher than non-Hispanic / Other groups

Female Rural *Cervical* Cancer Incidence (2010-2019)

	Rate	Lower CI	Upper CI
Hispanic (All Races)*	9.0	8.5	9.5
Non-Hispanic White	8.0	7.9	8.1
Non-Hispanic Black^	9.9	9.4	10.3
American Indian/Alaska Native^	10.5	9.5	11.4
Asian or Pacific Islander	7.1	6.2	8.1

* Rates are higher than non-Hispanic White and higher than non-Hispanic Asian / Pacific Islander

^ Rates are higher than Hispanic and higher than Asian / Pacific Islander

Female Rural *Cervical* Cancer Incidence (2010-2019)

	Rate	Lower CI	Upper CI
Hispanic (All Races)*	9.0	8.5	9.5
Non-Hispanic White	8.0	7.9	8.1
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Asian or Pacific Islander	7.1	6.2	8.1

* Rates are higher than non-Hispanic White and higher than non-Hispanic Asian / Pacific Islander

^ Rates are higher than Hispanic and higher than Asian / Pacific Islander

Male Rural HPV_a Cancer Incidence (2010-2019)

	Rate	Lower CI	Upper CI
Hispanic / All Races	4.9	4.5	5.3
Non-Hispanic / White#	11.0	10.9	11.2
Non-Hispanic / Black*	9.2	8.8	9.7
Non-Hispanic / Other^	6.9	6.3	7.6

* Rates is higher than non-Hispanic / Other groups

^ Rate is higher than Hispanic / All Races

Rate is higher than Non-Hispanic / Black

Male Rural *Oropharynx* Cancer Incidence (2010-2019)

	Rate	Lower CI	Upper CI
Hispanic (All Races)	3.8	3.5	4.2
Non-Hispanic White [^]	9.5	9.4	9.7
Non-Hispanic Black [*]	7.6	7.3	8.1
American Indian/Alaska Native [*]	7.8	7.0	8.7
Asian or Pacific Islander	3.5	2.8	4.4

^{*} Rates are higher than Hispanic and higher than non-Hispanic Asian / Pacific Islander

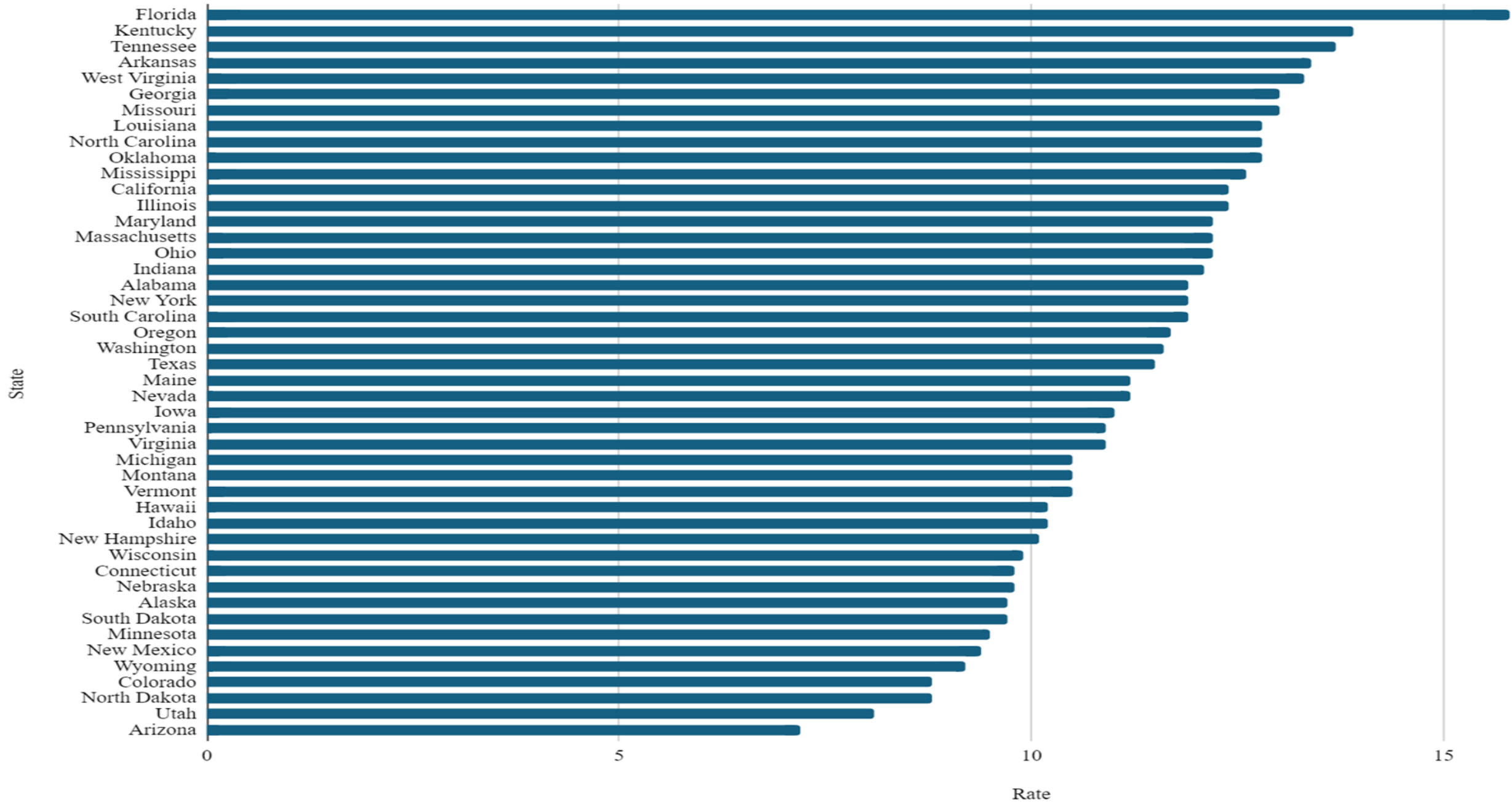
[^] Rates are higher than non-Hispanic Black and higher than American Indian / Alaska Native

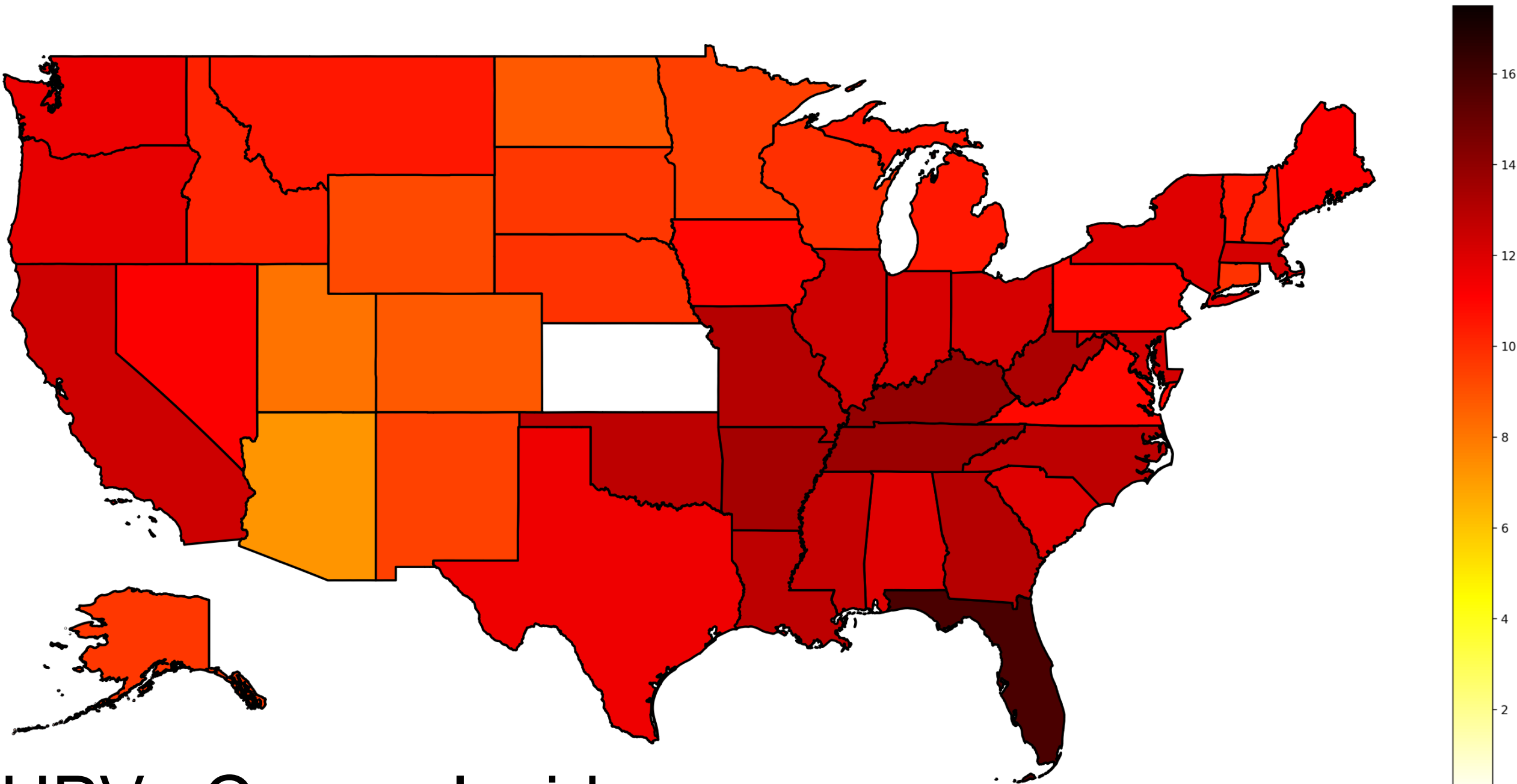
Male Rural *Oropharynx* Cancer Incidence (2010-2019)

	Rate	Lower CI	Upper CI
Hispanic (All Races)	3.8	3.5	4.2
Non-Hispanic White [^]	9.5	9.4	9.7
Non-Hispanic Black [*]	7.6	7.3	8.1
American Indian/Alaska Native [*]	7.8	7.0	8.7
Asian or Pacific Islander	3.5	2.8	4.4

^{*} Rates are higher than Hispanic and higher than non-Hispanic Asian / Pacific Islander

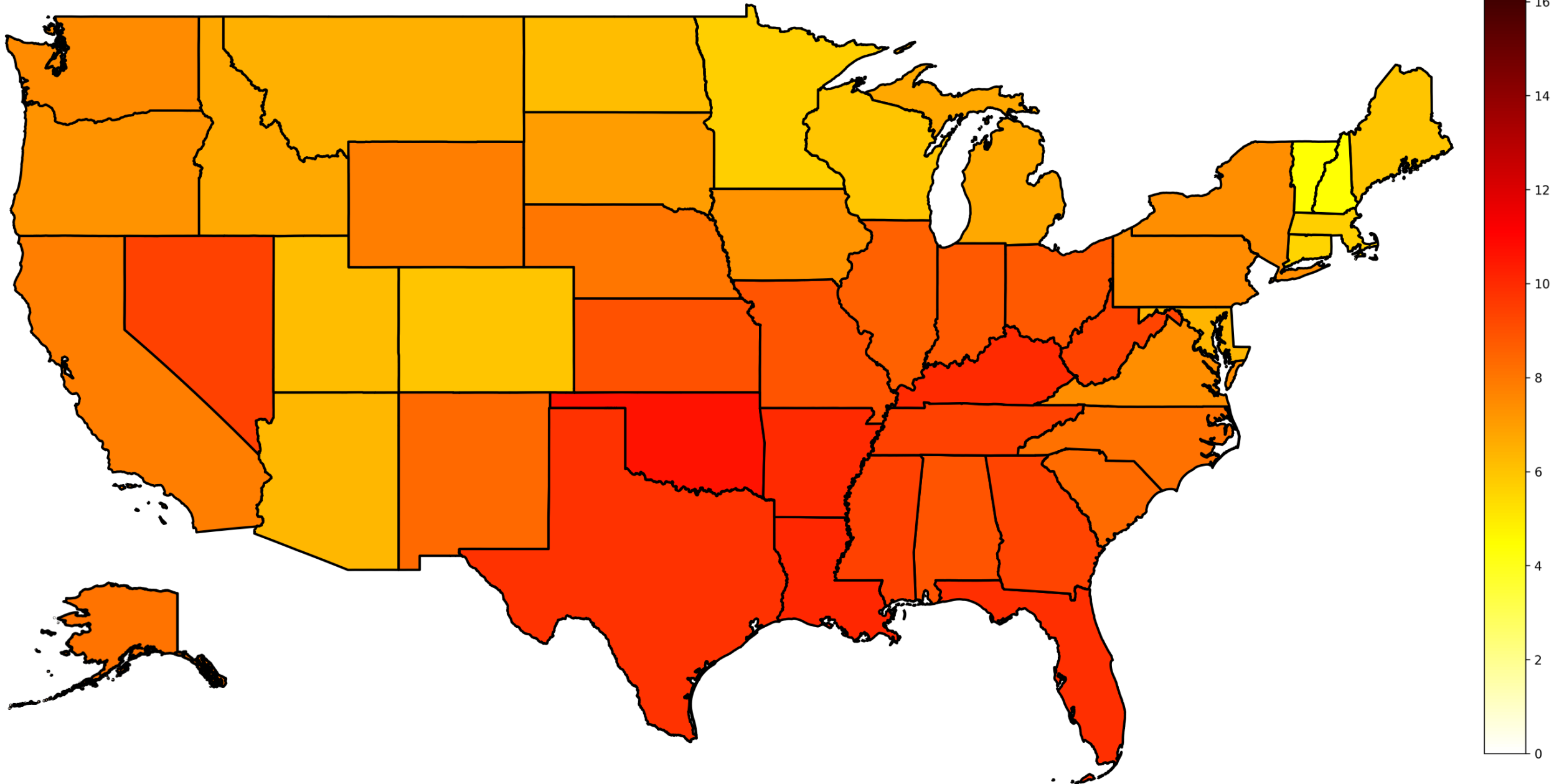
[^] Rates are higher than non-Hispanic Black and higher than American Indian / Alaska Native



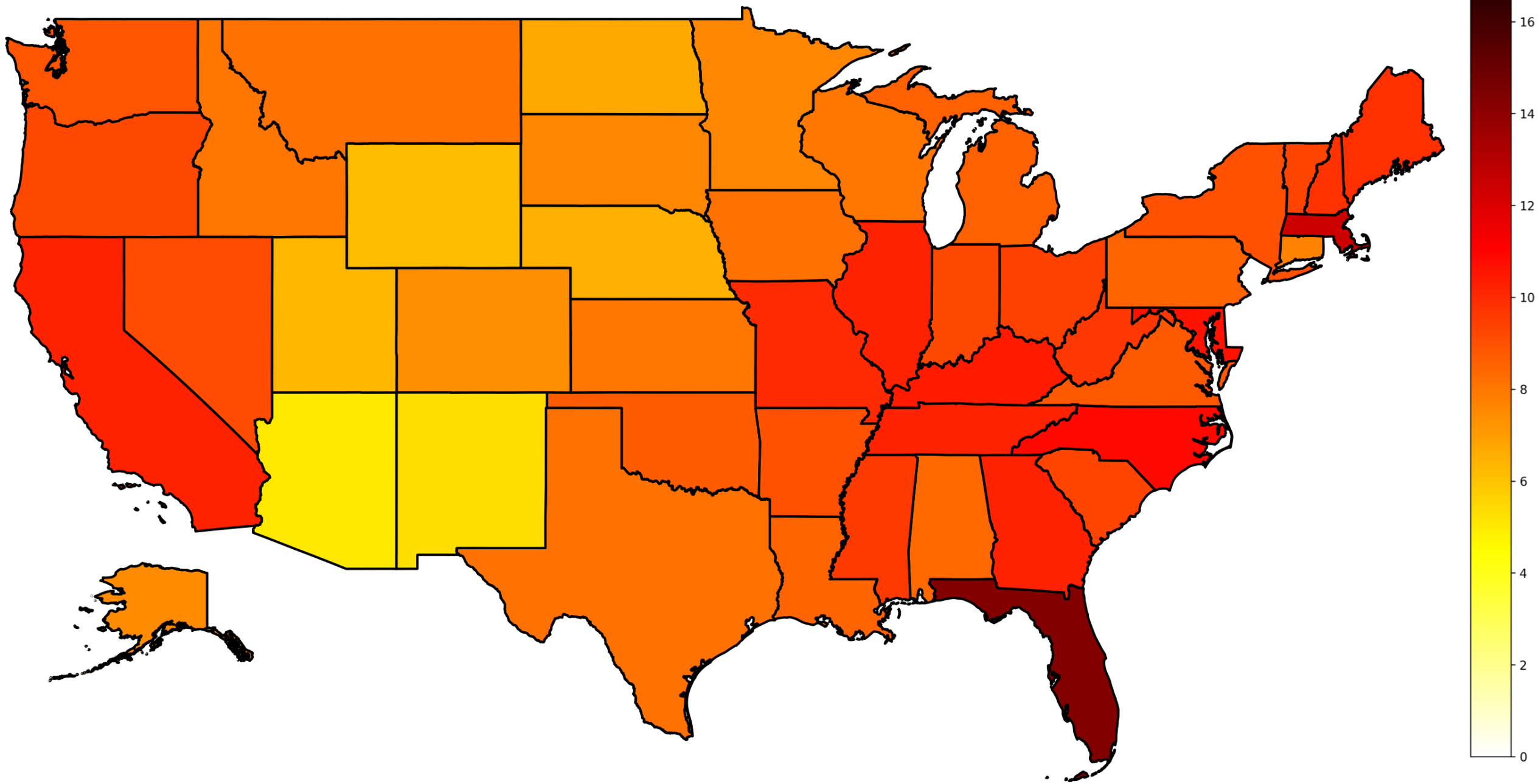


HPVa-Cancer Incidence

Female Cervix Cancer Incidence



Male OPC Incidence



Summary

Rising incidence of HPVa cancer in rural America

Cervical cancer in females and OPC in males explain the widening rural-urban disparity

Rural (micropolitan) bearing the greatest burden of HPV cancer beyond 2020

Variation in HPVa Cancer incidence by sex, race/ethnicity, and type

Geographic variation by sex and type

Summary

Rising incidence of HPVa cancer in rural America

Cervical cancer in females and OPC in males explain the widening rural-urban disparity

Rural (micropolitan) bearing the greatest burden of HPV cancer beyond 2020

Variation in HPVa Cancer incidence by sex, race/ethnicity, and type

Geographic variation by sex and type

- *Next steps: Explore intersectional differences by state

- *Identify population and geographic “hotspots”

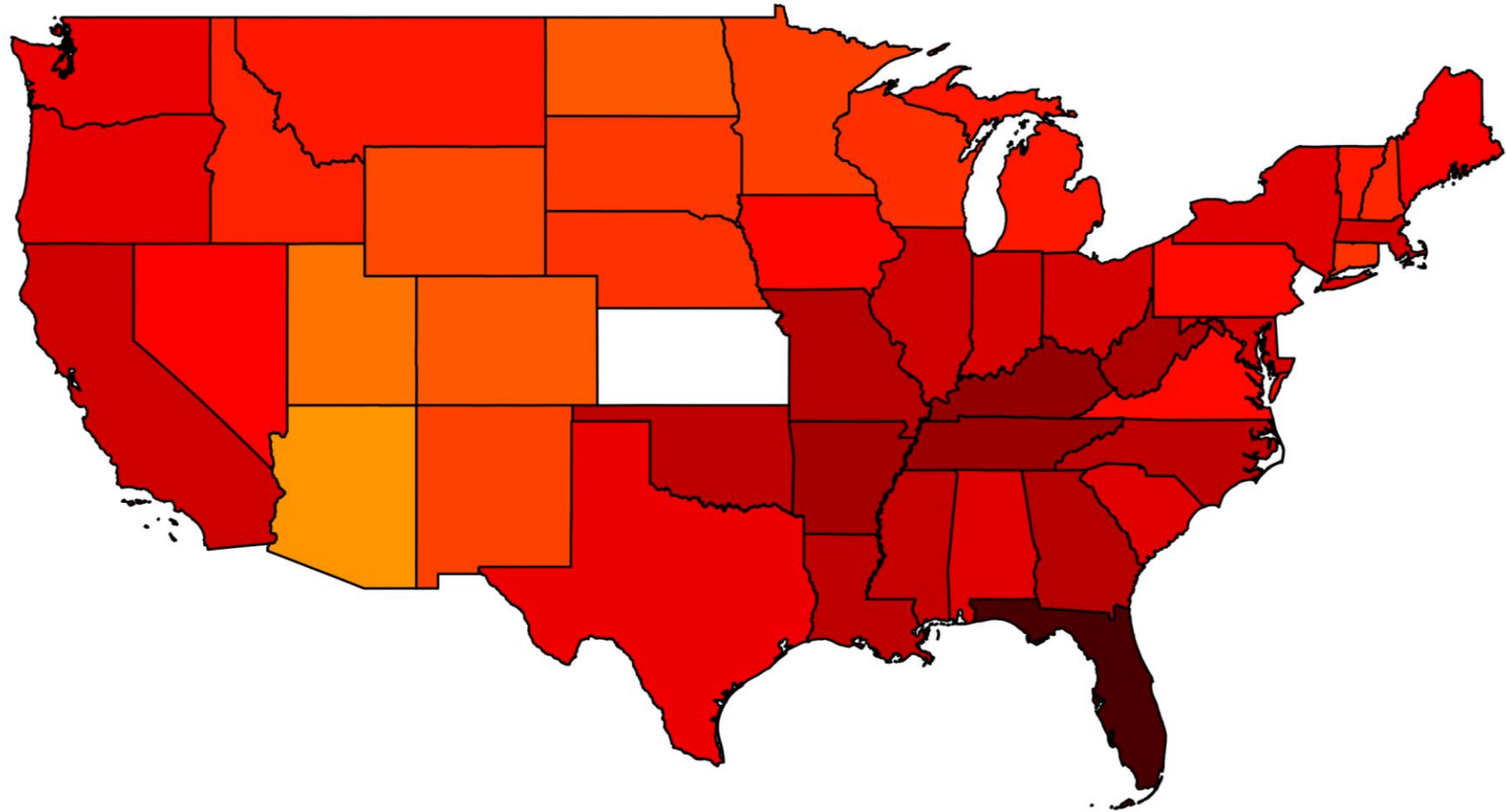
Contact

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Des Moines University College of Health Sciences
Department of Public Health

jsemprini@dmu.edu

@SempriniJason



PATH →
to prevention

Supporting Pediatricians to Increase HPV Vaccination Rates

Sara Lolley, MPH
Program Manager, Immunization
Initiatives
American Academy of Pediatrics



**HPV Cancer
Prevention
Program**





Supporting Pediatricians to Increase HPV Vaccination Rates

Social Media Influencer Campaign

Sara Lolley, MPH

Program Manager, Immunization Initiatives
American Academy of Pediatrics

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



Funding Acknowledgement

- The AAP program, Supporting Pediatricians to Increase HPV and Pediatric Influenza Vaccination Rates, is funded by Cooperative Agreement Number 6NU38OT000282 awarded by the Centers for Disease Control and Prevention to the American Academy of Pediatrics.
- The contents of this presentation are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

Rural Social Media Influencer Campaign, Spring 2024

Project Overview

- AAP worked with consultant Public Communications, Inc (PCI) to partner with 7 social media influencers to support HPV and flu vaccination
 - 4 posted content on influenza vaccinations, 3 posted about HPV vaccination
- Target audience: parents/guardians in rural areas. Each of the 7 influencers were also parents. Social media channels included Facebook, Instagram, TikTok, and YouTube.
- Main project goal: leverage influencers to support vaccination and build/strengthen relationships with influencers for future collaborations

Rural Social Media Influencer Campaign

Strategies

- Influencers were encouraged develop their content on their own, based on their personal stories and opinions on vaccines, talking to their audience parent to parent in their own voice and style, after being given resources and guidance from AAP on how to talk about vaccines
- Posted content included links to direct parents to [HealthyChildren.org](https://www.healthychildren.org) information on vaccines
- Initial outreach included influencers at varying levels of followers: nano, micro, macro, and mega to reach diverse audiences and were selected based on their audience demographics, engagement rates, and relevance to the campaign's goals
- Before selection, influencers were vetted to ensure their content aligns with AAP policies and guidelines on child health and wellbeing.

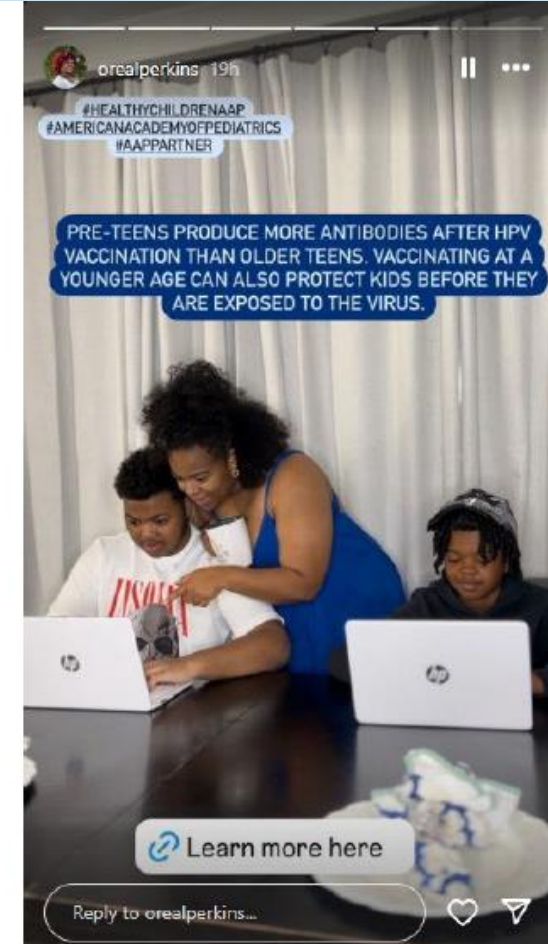
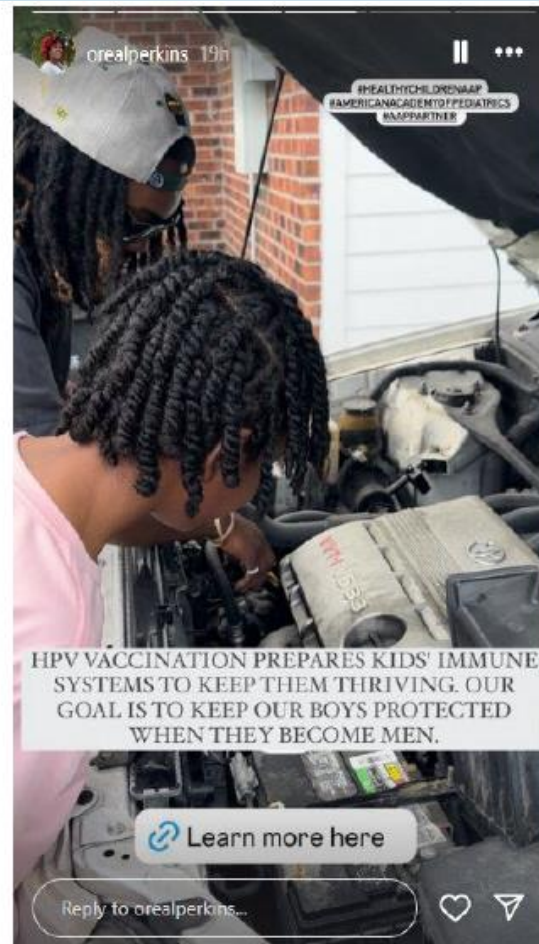
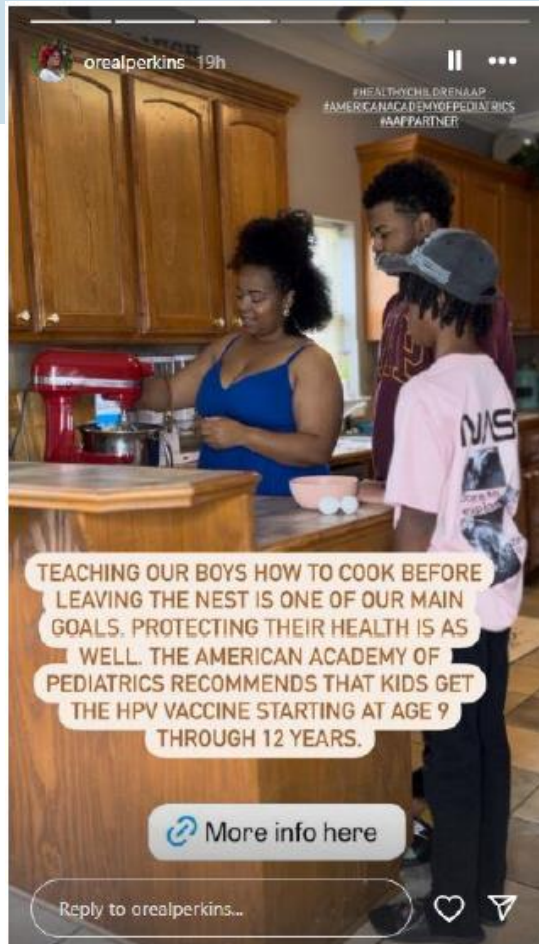
Influencer: Oreal Perkins

Instagram story and reel

- Background: nurse practitioner living in Louisiana with her husband and 6 children
 - Micro influencer with 37.1K Instagram followers
 - Content included an Instagram reel and 3-slide Instagram story
- Content emphasized the importance of protecting their children's health, alongside the importance of teaching life skills, like cooking, before they leave home
- Highlighted reel analytics: 3,911 total video plays, 2,494 accounts reached, 103 total engagements (likes, comments, etc)
- Highlighted story analytics: 30 total impressions, 30 accounts reached, 12 total engagements

Influencer: Oreal Perkins

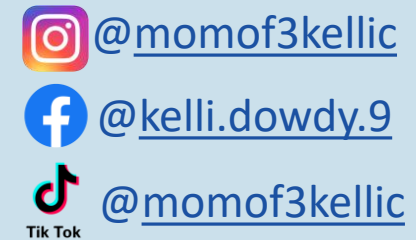
Instagram story slides



Instagram story slides

Influencer: Kelli Caughman

Instagram story and reel, TikTok reel, Facebook video



- Background: kindergarten teacher, lives in Indiana with her husband and 4 children. Vocal down syndrome advocate in support of her youngest son.
 - Nano influencer with 5.4K Instagram followers, 4.6K Facebook followers, and 1.7K TikTok followers
 - Content included an Instagram reel, 2-slide Instagram story, Facebook video, and TikTok reel
- Content emphasized the importance of timely HPV vaccination and talking to children about their health, regardless of age
- Highlighted Instagram reel analytics: 771 total video plays, 441 accounts reached, 60 total engagements

Influencer: Kelli Caughman

Instagram story and reel

 [@momof3kellic](https://www.instagram.com/momof3kellic)

 [@kelli.dowdy.9](https://www.facebook.com/kelli.dowdy.9)

 [@momof3kellic](https://www.tiktok.com/@momof3kellic)

- Highlighted Instagram story analytics: 342 total impressions, 338 accounts reached, 16 total engagements
- Highlighted Facebook video analytics: 440 total video plays, 23 accounts reached, 13 total engagements
- Highlighted TikTok reel analytics: 229 total video plays, 191 total viewers, 28 total engagements



momof3kellic

Kelli Caughman · 5-20

Follow

As a mom of three, I believe that empowering my kids with knowledge about their health is crucial, no matter their age. That's why I'm passionate about sharing this important message about HPV vaccination. Did you know that the American Academy of Pediatrics recommends starting the HPV vaccine from 9 through 12 years old? Vaccinating at a younger age not only protects our kids before they're exposed to the virus but also equips their immune systems to fight off over 90% of HPV-related cancers after vaccination. It's about preparing our children's immune systems to thrive!

💡 For more information and resources about HPV vaccines, I highly recommend checking out @healthychildrenaap and the American Academy of Pediatrics. They provide invaluable guidelines and resources to help keep our families protected.

This post is made possible with support from @healthychildrenaap. All opinions are my own.

[#HealthyChildrenAAP](#) [#AmericanAcademyofPediatrics](#) [#AAPPartner](#) [#healthiswealth](#)
[#indianamoms](#) [#mominfluencer](#) [#blackmotherhood](#) [#unmasteringmotherhood](#)
[#advocatelikeamother](#) [#HPV](#)

less

🎵 These Memories - Hollow Coves


Caption used across platforms

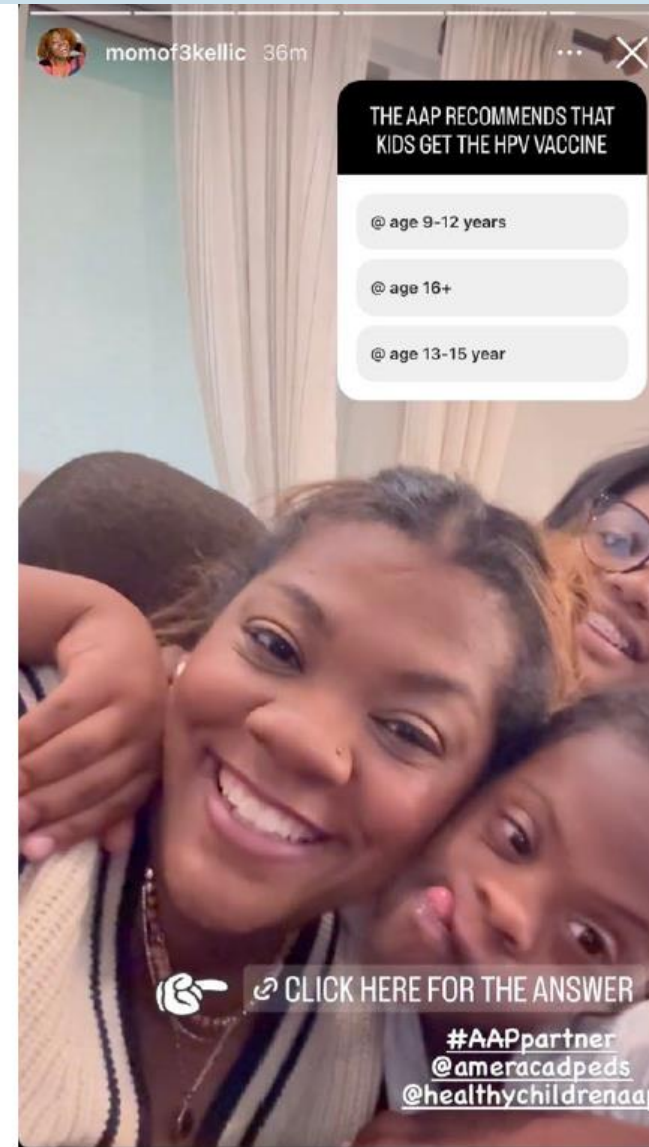
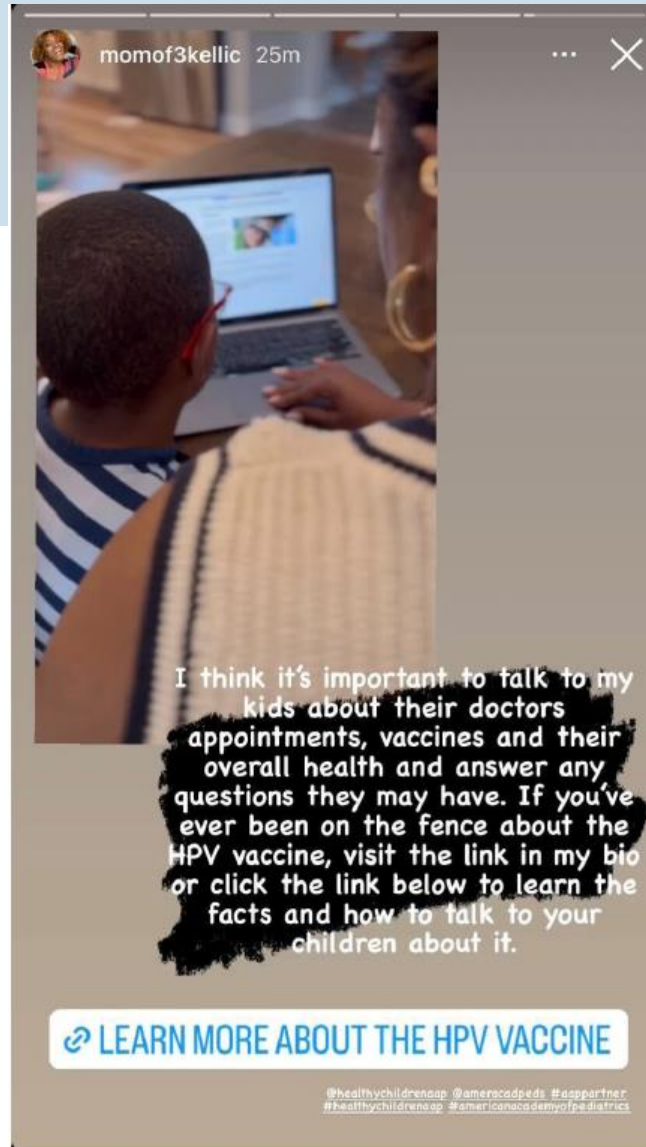
Influencer: Kelli Caughman

Instagram story and reel

 [@momof3kellic](https://www.instagram.com/momof3kellic)

 [@kelli.dowdy.9](https://www.facebook.com/kelli.dowdy.9)

 [@momof3kellic](https://www.tiktok.com/@momof3kellic)



Instagram story slides

Influencer: The Groce Family

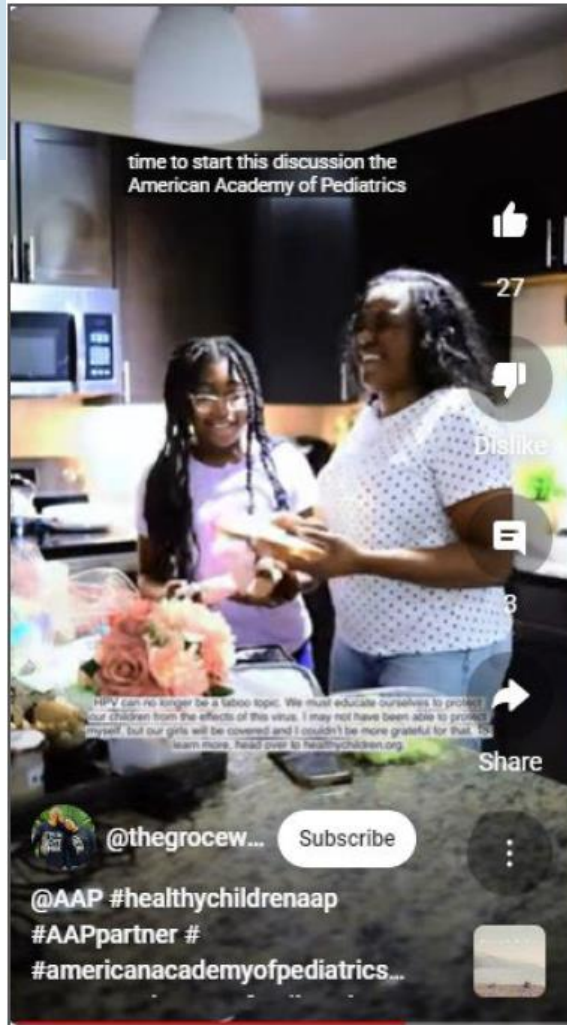
YouTube Short

- Background: family of 5 living in Texas. Wife and mother Jahneiss Groce is a cervical cancer survivor.
 - Micro influencer with 48.8K YouTube subscribers
 - Content included a 1-minute YouTube short
- Content included Jahneiss's journey through cervical cancer in her 20s and the steps she's taking to protect her children from HPV-related cancers
- Highlighted YouTube analytics: 1,879 total views, 1,700 unique views, 5,800 accounts reached, 170 total engagements

Influencer: The Groce Family

YouTube Short

YouTube @thegroceway



Description

@AAP #healthychildrenaap #AAPpartner #americanacademyofpediatrics #mommyvlogger #family #short

27
Likes

44
Views

2h
Ago

 @user-yl6wz9ez7s 3 weeks ago
Thank you Hun for sharing. I contacted it when I was I believe 28 but I didn't know until I did my yearly annual but my then Dr did a biopsy and it took so long to get .my results but I was Cancer Free thank God. Then when the Vaccine came out I made sure my Daughter got the Vaccine. God is sooo Good.
Show less
👍 1 🗨️ 🇺🇸 Reply
👤 • 2 replies

 @thegroceway 10 days ago
So very happy to hear it came back Cancer Free! Mine didn't and i wouldn't wish everything i went through on anyone. Good job making sure your daughter was covered!! God really is so good and faithful!!
Show less
👍 1 🗨️ Reply

 @reneepope4881 1 month ago
Sis, thank you for sharing this informative information with us. ❤️🙏
👍 3 🗨️ Reply
👤 • 1 reply

 @divinedestiny1943 1 month ago
Thanks for sharing this 😊 I pray it helps many people. God bless you
👍 1 🗨️ Reply
👤 • 1 reply

 @lindaturner6514 3 weeks ago
Great mother. Doing what our God called you to do in him as a mother. God bless you always.
👍 1 🗨️ Reply

YouTube short screengrab and comments

Successes and Lessons Learned

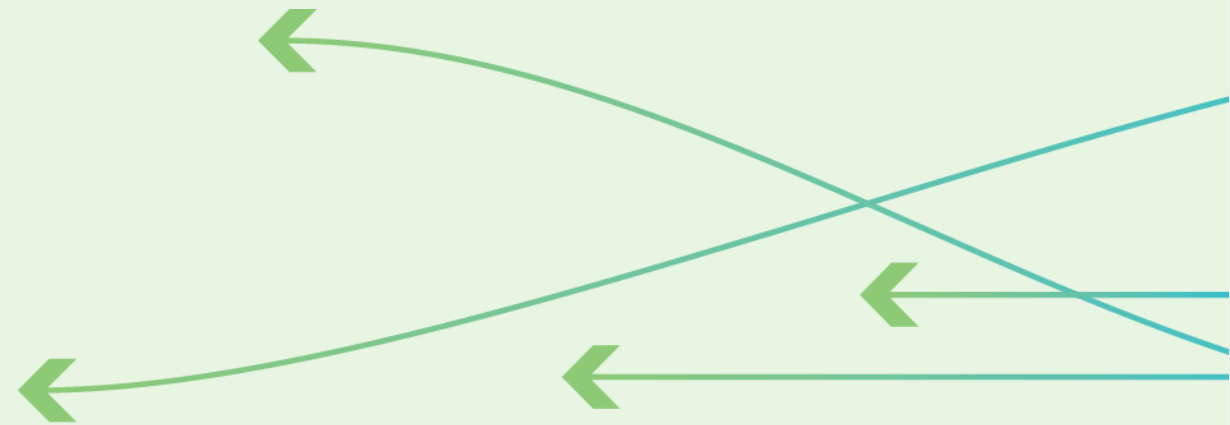
- Partnering with micro- and nano-influencers allowed us to reach more targeted audiences as they often have more niche followers. They also tended to have higher engagement rates and compensation rates within our preferred budget range
 - Smaller audiences led to less trolling and spam comments
- Influencers on this campaign included nurses, teachers, and cancer survivors, among others. Allowing them to use their own voice and tell their own unique stories helped in creating authentic content with powerful messages that resonated with many.
- We are exploring the possibility of establishing long-term partnerships with influencers to continue promoting vaccine confidence to their audiences

Successes and Lessons Learned

- Influencers appreciated the toolkit of resources provided at the beginning of the partnership with sample social media messages and how to respond to trolls and misinformation in the comments section
- Most of the influencers posted their content to multiple channels which contributed to the “surround-sound” campaign approach
- Most influencers’ audiences had a majority of viewers within the 25-54 age range, representing the target audience of parents with pre-teen children
- Negotiating compensation rates was an important part of establishing contracts with influencers – many rates were over budget, but most were willing to reduce the amount or add additional content

Questions?





Discussion

Upcoming Events

- *Vacunación Sin Barreras*: Addressing HPV Vaccination Inequities and HPV Cancer Disparities in Hispanic and Latino Communities. October 2, 12:00 – 1:15 PM CT.
- Empowering American Indian and Alaskan Native Communities: Bridging Gaps in HPV Vaccination and Cancer Prevention. November 6, 12:00 – 1:15 PM CT.



HPV Cancer
Prevention
Program

Empowering and Strengthening
Community, Culture and Connection
to Prevent HPV Cancers

Vacunación Sin Barreras

Addressing HPV Vaccination Inequities and HPV Cancer Disparities
in Hispanic and Latino Communities

October 2, 2024

1:00 – 2:15 PM EST / 12:00 – 1:15 PM CST



Deborah Parra-Medina, PhD
MODERATOR
Executive Director, Center for Health Equity
Professor, Department of Family Medicine
University of Colorado Anschutz
Medical Campus



Jesse Nodora, DrPH
FEATURED PANELIST
Associate Professor
Radiation Medicine and Applied Sciences
UC San Diego Moores Cancer Center



Jane Montealegre, PhD
FEATURED PANELIST
Associate Professor
MD Anderson Cancer Center



Ada Valdes
CANCER SURVIVOR



Daisy Morales-Campos, PhD
FEATURED PANELIST
Associate Professor
The University of Texas Health
Science Center at Houston
School of Public Health
San Antonio Regional Campus

Register at stjude.org/ESC2024

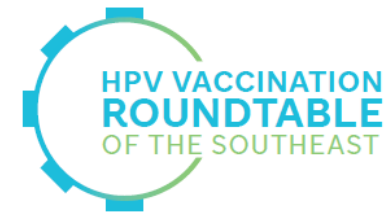
For more information visit stjude.org/hpv or email PreventHPV@stjude.org.

PATH →
to prevention

Eliminating HPV Cancers Beginning with Cervical Cancer as a Public Health Problem – We want to hear from you!

- Needs assessment goal is to develop and disseminate a plan for HPV cancer elimination in the Southeast, beginning with cervical cancer as a public health problem.
- August is National Immunization Awareness Month, and we are pleased to invite you to complete and share an HPV cancer elimination survey.

Survey can be accessed using the QR code or there will be a link in the chat



What's Next?

**Quarterly Updates Meeting
November 20, 2024**

**2:00 – 3:00 PM ET /
1:00 – 2:00 PM CT**



- **National Rural Health Day and rural HPV vaccination materials to be shared in early November**
- **By November 8, share with us your resources to increase vaccination with rural communities**
- **Rural quarterly communication to be sent on November 13**
- **Rural quarterly updates meeting presentations on:**
 - **We The People Vax**
 - **Louisiana Department of Health rural HPV vaccination campaign**
- **November 21 is National Rural Health Day**