

***Michigan Assessment of Oral Cancer  
Screenings and Knowledge of Human  
Papillomavirus (HPV) Among Oral Health  
Professionals  
Results Report***

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## Executive Summary

The Michigan Department of Health and Human Services Oral Health Unit was able to arrange for this assessment of oral health professionals in our state, to help guide future initiatives on the education for screening for oral cancer and promotion of the Human Papillomavirus (HPV) vaccine to prevent oral cancers.

Much work needs to be done in educating more dental providers on when and how to provide oral cancer screenings, how to talk with patients about HPV-related oral cancer and prevention of oral cancer with the HPV vaccine series.

- Most respondents were dentists; may need more dental hygienists responses for more accurate picture.
- Good representation from across the state geographically.
- Many responders do not have a policy on oral cancer screening for their practices.
- Most all respondents indicated they do oral cancer screenings but when and how varied.
- Referring patients that had a suspicious lesion was a strong point for these respondents as most had good practices on when and to whom to refer.
- Information about the HPV vaccine was less known to these responders, so more education is needed on this topic.
- Most respondents indicated they would welcome more education on these topics, especially HPV, as well.

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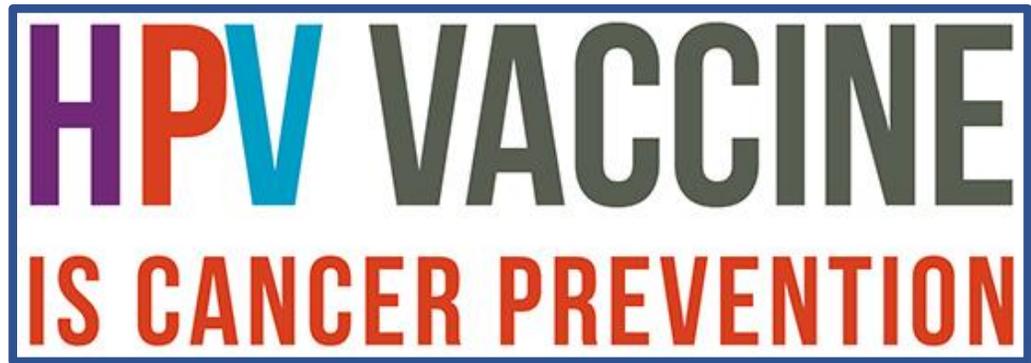
\*\*Special thanks to Dan Sharkey and Randy Schlichting from Scantron Survey Services for consultation, dissemination of the survey and compilation of results.

## Introduction

Due to the rise in the incidence of Human Papillomavirus (HPV) related oral cancer, the Oral Health Unit and Cancer Prevention and Control Section at the Michigan Department of Health and Human Services (MDHHS), brought together an advisory team in the fall of 2016.

Along with the representatives from the Oral Health Unit and Cancer Prevention and Control Section, the team consisted of Delta Dental's Chief Science Officer, and MDHHS Immunization Division. This team was able to discuss the development of an assessment of Michigan dental professionals on their practices for conducting oral cancer screenings, knowledge of HPV related oral cancers and HPV vaccines. In the subsequent year, questions were developed to ask dental professionals on these topics.

The ultimate goal of this assessment is to increase the number of Michigan residents adequately screened for oral cancer, referred to specialists if indicated, and increase the number of individuals vaccinated with the HPV vaccine. From the analysis of this assessment, plans for education and guidance opportunities for dental professionals will be explored.



### Purpose

- Assess screening procedures for oral cancer by oral health professionals.
- Assess the knowledge of oral health professionals of oral cancer screening, HPV, and HPV vaccine.
- Determine if oral health professionals perform any follow up after identifying patients with suspected oral cancers.
- Determine if oral health professionals are willing to discuss HPV, its connection to oral cancer, and/or promote the HPV vaccine.

## Methods

On July 9, 2018 a paper survey was mailed to 5,000 Michigan dental practices identified from a Delta Dental of Michigan contact list.

The MDHHS advisory team developed questions that would help answer the topics listed in the purpose section. The formatting of the hard copy survey and the mailing, which included a \$2 bill as an incentive, was conducted by Scantron Survey Services.

The participants were given until August 6, 2018 to mail in their responses. Scantron scanned the responses and sent the data file to MDHHS for analysis. SPSS statistical software was used for data cleaning and analysis.

Survey Response Rate:

1,656 (33%)

### Michigan Assessment of Oral Cancer Screenings and Knowledge of Human Papillomavirus (HPV) Among Oral Health Professionals

Conducted by the Michigan Department of Health & Human Services

2018



You were chosen for this assessment because you are a Dental Professional in Michigan. If you choose to participate in this assessment you will be asked about practices in your dental office regarding oral cancer screening and Human Papillomavirus (HPV) screening, vaccines, and knowledge.

The purpose of this assessment is to:

- Assess screening procedures for oral cancer by oral health professionals.
- Assess the knowledge of oral health professionals of oral cancer screening, HPV, and HPV vaccine.
- Determine if oral health professionals perform any follow up after identifying patients with suspected oral cancers.
- Determine if oral health professionals are willing to discuss HPV, its connection to oral cancer, and/or promote the HPV vaccine.

Ultimately the goal is to increase the number of Michigan residents adequately screened for oral cancer, referred to specialists if indicated, and increase the number of individuals vaccinated with the HPV vaccine. In addition, results may assist in the development of interventions, pilots, and sharing of best practices. Education and guidance opportunities will be developed from the results of this survey. Results will be disseminated to dental professional groups, interested parties, and posted on the MDHHS-Oral Health Unit website: [www.michigan.gov/oralhealth](http://www.michigan.gov/oralhealth)

Taking this assessment is voluntary. Choosing not to fill out all the questions will not harm you in any way. You may skip questions you do not want to answer. All information from this survey will be kept confidential and your identifiable information is not connected to this assessment or your responses in any way. **Please return this survey no later than August 6, 2018.**

As a special thank you for taking this survey, a small monetary gift is included, courtesy of Delta Dental of Michigan.

If you have any questions on how to complete the assessment or would like more information please contact:

Susan Deming, RDH, RDA, B.S.

517 373-3624

[demings@michigan.gov](mailto:demings@michigan.gov) |

**Results:***Oral Health Professional title:*

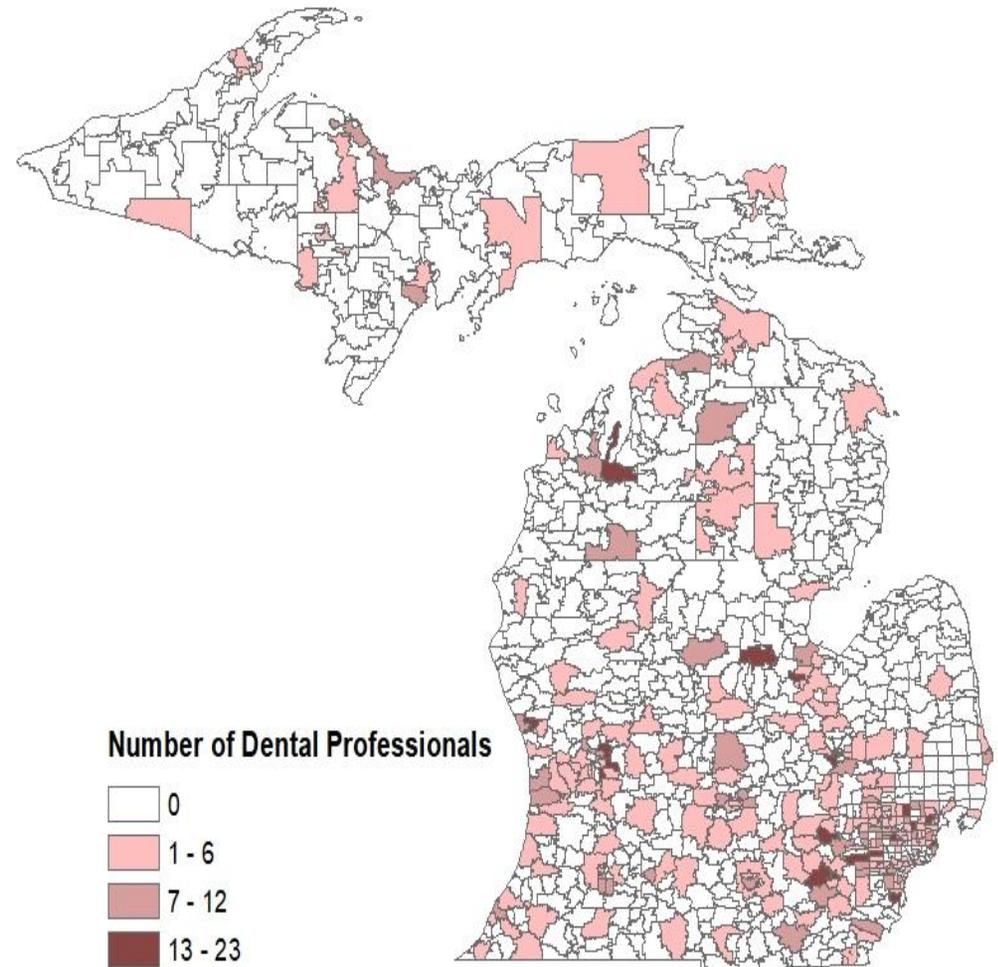
- 89.0% were dentists
- 6.2% were dental hygienists
- 3.4% were dental assistants

*Setting they spent the most time in:*

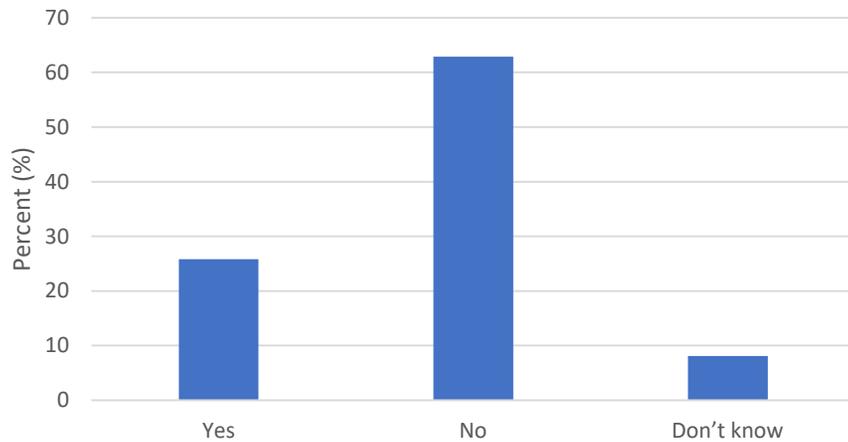
- General Dental Practice: 83.6%
- Specialty Practice: 8.8%
- Federally Qualified Health Center (FQHC): 3.0%
- Academic Institution: 0.9%
- Dental Service Organization: 0.5%
- Hospital Based Clinic: 0.2%
- Local Health Department: 0.2%
- Other: 1.0%

*Number of years in practice*

- 0-10 years: 19.8%
- 11-20 years: 14.3%
- 21+ years: 58.2%
- No longer practicing: 0.9%

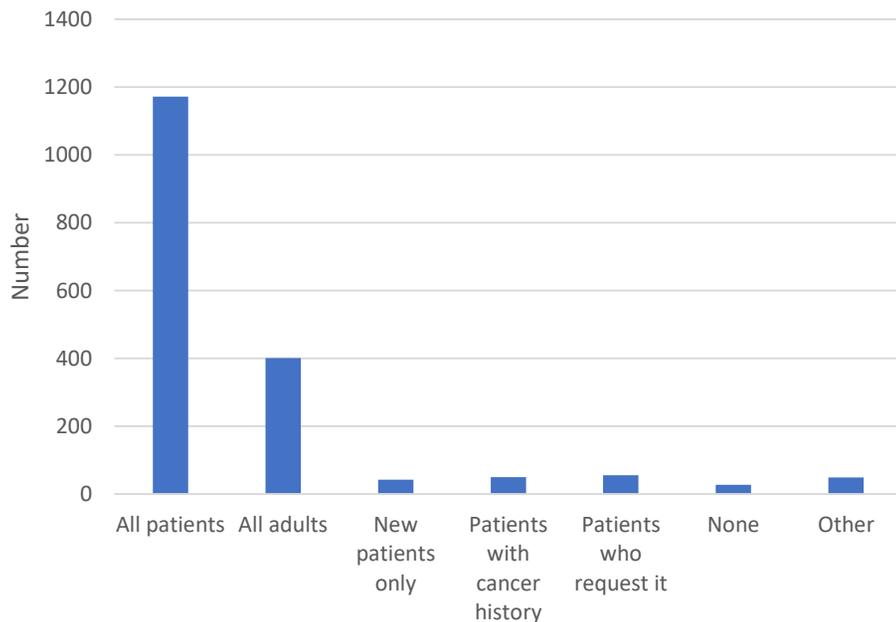
**Practicing Zip Code Location**

### Does your office have a written policy on screening for oral cancer?



- A quarter of oral health professionals (OHP) (25.8%) reported having a written policy for oral cancer screening in their offices.
- 62.9% did not have a policy and 8.1% were not sure of their office oral cancer screening policies.

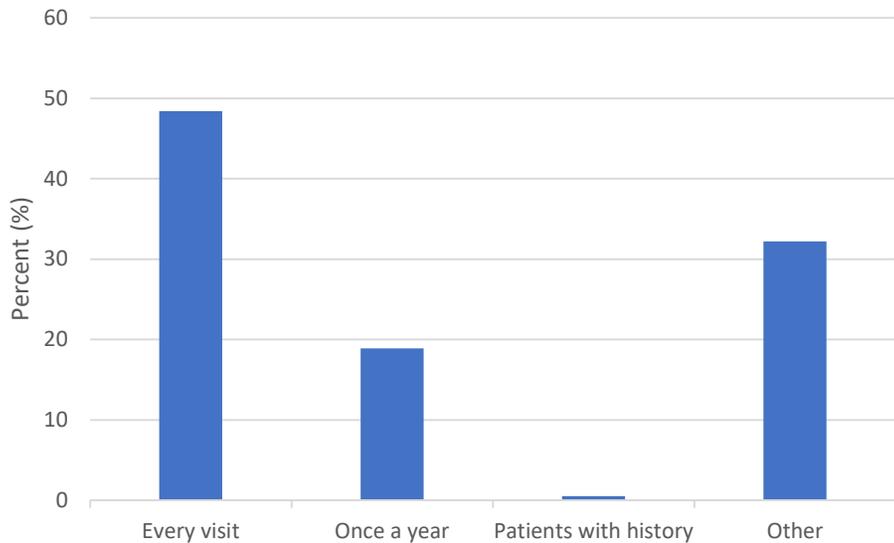
### On which patients do you perform an oral cancer screening?\*



- 1,172 oral health professionals perform oral cancer screenings on all their patients.
- 401 perform oral cancer checks on all their adults patients, 42 on new patients only, 49 on patients with a history of cancer and 55 on patients who request it.
- Only 27 OHP reported they do not perform oral cancer screenings on their patients.
- Other/Comment n=48
  - Various ages mentioned
  - Appointment type (initial exam, 6 month exam)
  - Patient types (etiologic factors, suspicious lesions, history of cancer, smokers, drinkers, only those with concerns.
- 27 indicated they screen none of their patients, the most common reason was that it was outside of their scope of practice.

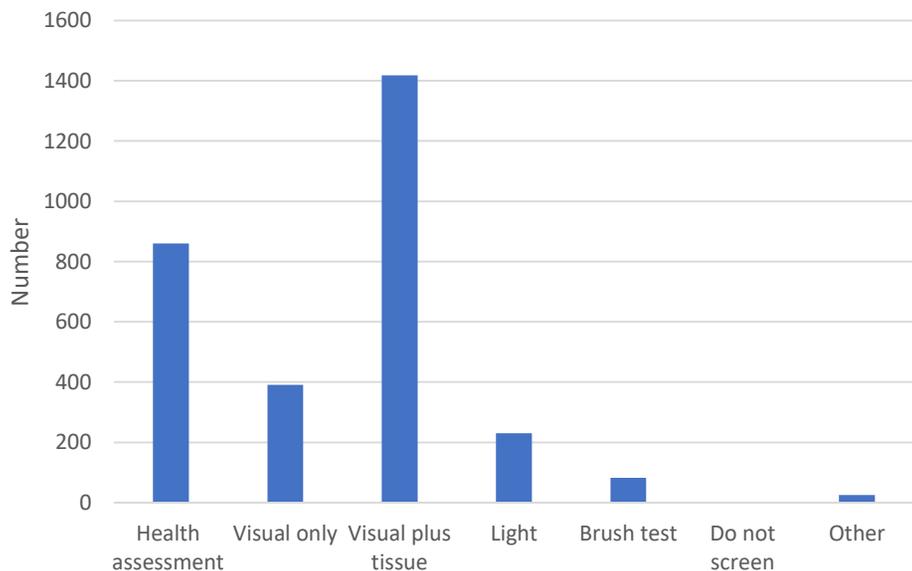
\*Question was to check all options that applied to their practice.

**If you perform oral cancer screenings, how often do you perform these?**



- Almost half (48.4%) of oral health professionals perform oral cancer screenings at every visit.
- One in five (18.9%) perform them once a year on their patients.
- One-third responded as having an other schedule:
  - Some respondents indicated they only perform this only on people with a history of oral cancer, only on people who smoke or use tobacco, every 2 years, or every 5 years.

**Which of the following do you use to screen for oral cancer?\***



- The most frequently reported screening used was a visual assessment plus tissue palpations (n=1,418).
- The second most used screening was the questions on the health assessment questionnaire (n=860).
- About 400 only use a visual assessment, 230 use a special light or equipment (ie. Velscope) and 82 use a brush test to screen their patients for oral cancer.



\*Question was to check all options that applied to their practice.

When performing an oral cancer screening, mark areas you check routinely.\*

Tongue and gauze:  
1,466 (88.5%)



Lip and cheek roll:  
1,374 (83.0%)



Double-digit probe:  
881 (53.2%)



Palate tickle:  
612 (37.0%)



Throat ahhh:  
1,326 (80.1%)



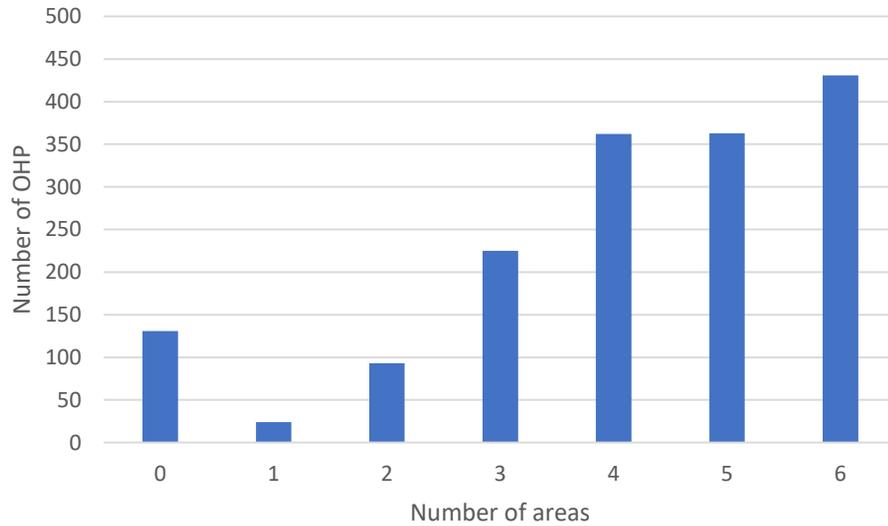
Neck caress:  
1,075 (64.9%)



Six Step Screening pictures courtesy of Eva Grayzel, [www.sixstepscreening.org](http://www.sixstepscreening.org)

\*Question was to check all options that applied to their practice.

### Number of areas the oral health professionals reported checking routinely

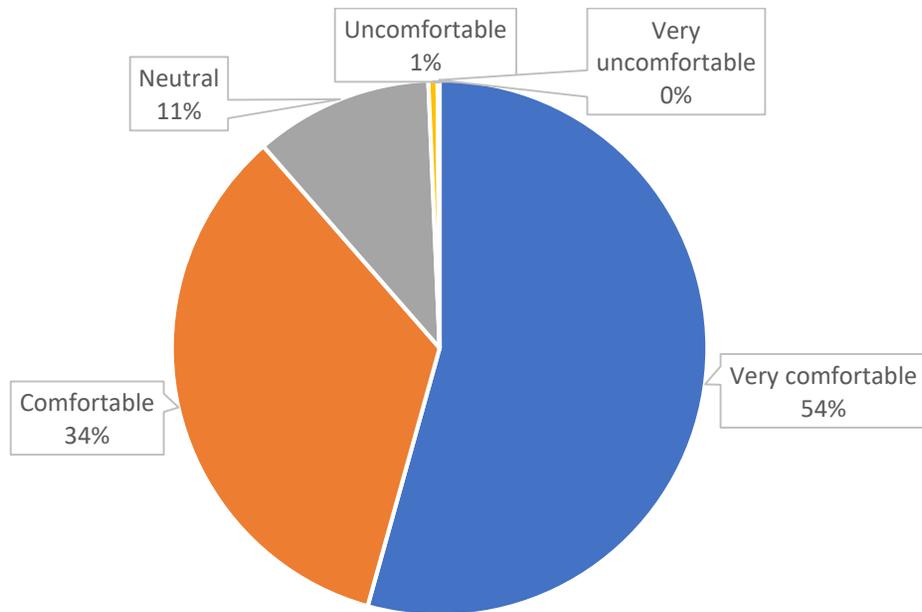


- 131 oral health professionals reported they do not check any of the areas routinely.
- 431 oral health professionals reported checking all 6 areas routinely on their patients.

**The oral health professionals reported checking an average of 4 of the 6 areas**

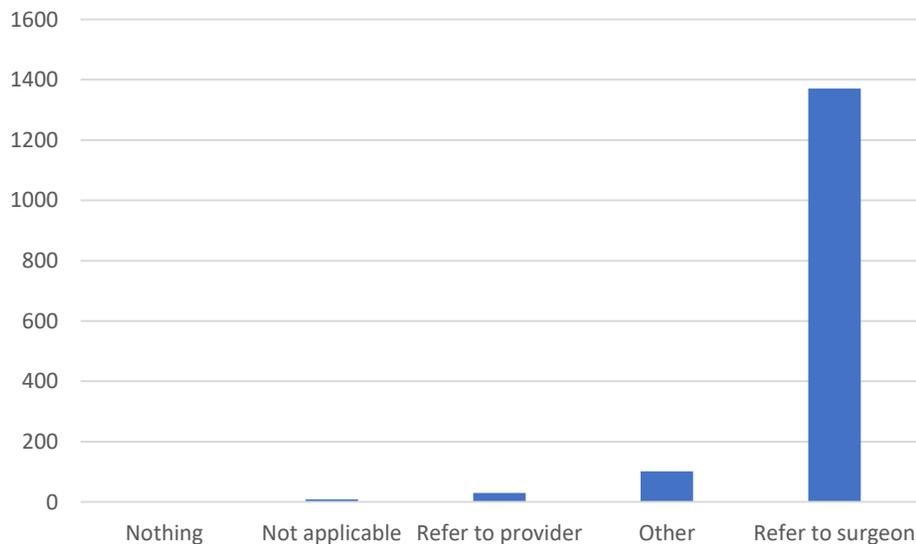


**Please rate your comfort level with doing an oral cancer screening**



- 1,441 (88.6%) oral health professionals felt comfortable or very comfortable with doing oral cancer screenings.
- Only 11 (1.8%) oral health professionals reported being uncomfortable or very uncomfortable doing oral cancer screenings.

**After performing an oral cancer screening, and finding a suspicious lesion, what does your office normally do?**

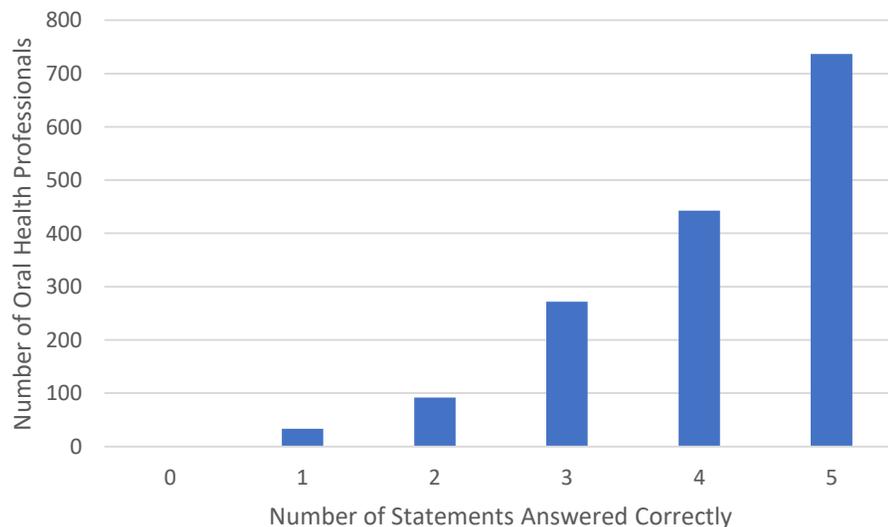


- The majority of oral health professionals (90.7%) refer patients with a suspicious lesion to an oral surgeon.
- Just over 100 oral health professionals indicated ‘other’ and responses included:
  - 2 week re-eval before referral
  - biopsy lesion first and then refer
  - take photo, document well, etc.
  - refer to PCP if required by insurance
  - Some of the respondents were oral surgeons so they listed “do biopsy”, or “treat”.

To assess your knowledge on Human Papilloma Virus (HPV) and HPV vaccines, please answer true or false to the statements below.

Statement	True	False
About one in four individuals are currently infected with HPV in the United States.	1,291	224
HPV infection can cause cancer in the back of the throat, including the base of the tongue and tonsils (called oropharyngeal cancer).	1,545	21
Most children who are 11 or 12 years old should get two shots of HPV vaccine six to twelve months apart.	1,349	149
Adolescents who receive their two shots less than five months apart will require a third dose of HPV vaccine.	981	442
HPV vaccine is recommended for young women through age 26, and young men through age 21.	1,324	186

- All of the statements provided were true statements at the time of the survey.
- The statement most oral health professionals got correct was how HPV infection causes oropharyngeal cancer.
- *The statement that most oral health professionals got incorrect was that adolescents will need a third shot if the first two were administered less than five months apart.*

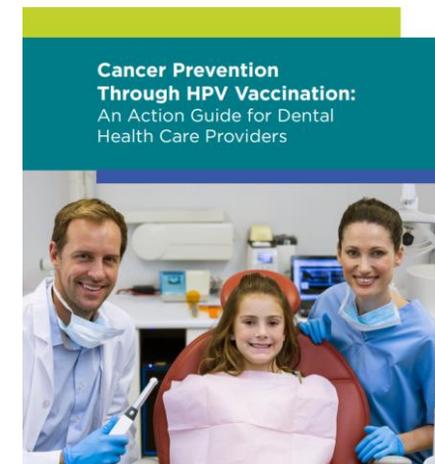


- 431 oral health professionals answered all five statements correctly as true.
- None of them answered all incorrectly as false, however, 79 chose not to complete this section of the survey.

Please rate your agreement with the following statements.

	Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
Dental providers should discuss HPV vaccines with their patients	59 (3.6%)	209 (12.6%)	744 (44.9%)	442 (26.7%)	129 (7.8%)
Dental providers should discuss HPV vaccines with parents	59 (3.6%)	207 (12.5%)	722 (43.6%)	462 (27.9%)	133 (8.0%)
There is adequate time to discuss HPV vaccines during our office's dental appointments	90 (5.4%)	410 (24.8%)	424 (25.6%)	558 (33.7%)	98 (5.9%)
I have adequate knowledge about HPV vaccine to discuss it with patients/parents.	140 (8.5%)	641 (38.7%)	415 (25.1%)	319 (19.3%)	56 (3.4%)
I have questions about the HPV vaccines	76 (4.6%)	196 (11.8%)	420 (25.6%)	757 (45.7%)	112 (6.8%)
I am comfortable discussing the HPV vaccines with patients/parents	125 (7.5%)	515 (31.1%)	450 (27.2%)	402 (24.3%)	86 (5.2%)
I know where to send patients to get the HPV vaccine	77 (4.6%)	319 (19.3%)	275 (16.6%)	715 (43.2%)	187 (11.3%)

- Only 375 (22.6%) of oral health professionals indicated they had adequate knowledge about HPV vaccinations to discuss it with their patients.
- 640 (38.6%) of OHP disagreed with the statement of being comfortable discussing HPV with their patients.
- Over half of OHP agreed that they knew where to send their patients to get HPV vaccinations.



Which patients do you routinely ask or advise to receive HPV vaccines?\*

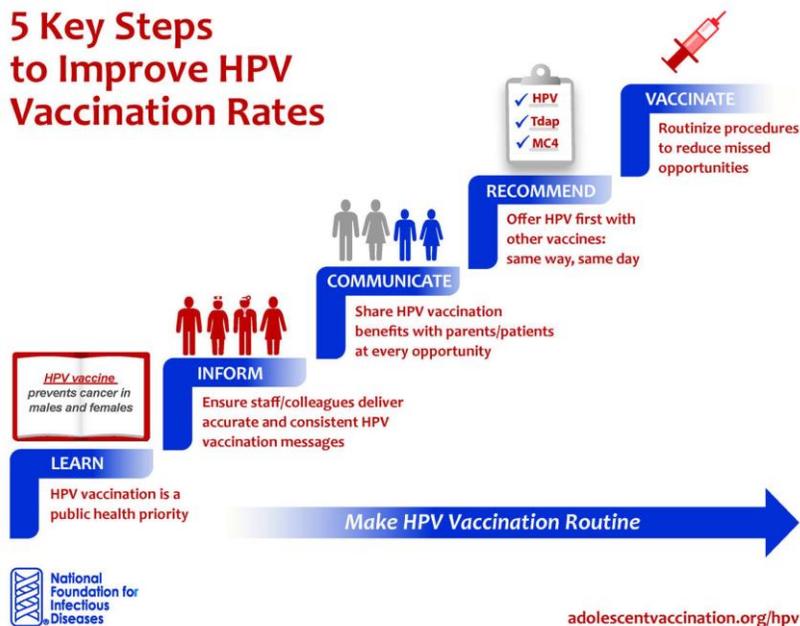
- I do not routinely ask or advise patients to receive HPV vaccine-1,362
- Parents of children and adolescents-127
- Children and adolescents- 107
- Young adults-106
- Parent of young adults-49
- All patients- 47
- Other-18
  - We have literature on the counter
  - Refer to their family physician if not vaccinated
  - Discuss abstinence first
  - I typically do not see patients in this age range
  - If parents ask my advice I tell them to get it
  - I have had resistance to this due to religious or values differences with patients
  - Only in presentations
  - Patients who ask



\*Question was to check all options that applied to their practice.

## What are your suggestions for educational resources on oral cancer, HPV, and HPV vaccines for oral health professionals?\*

### 5 Key Steps to Improve HPV Vaccination Rates



- CE course- 1,314
- Informational pamphlets and fact sheets-1,041
- Webinars- 861
- Professional resources (i.e. ADA)- 752
- Reference cards- 584
- Patient resources- 475
- Conference workshops-242
- Education curricula-241
- Onsite refresher trainings- 235
- Inter-professional resources- 185
- None needed-16
- Other- 21
  - Most or all of the above
  - Commercials/TV ads for the public
  - Demonstrations on how to talk to patients/parents
  - Insurance covered (ie. D0431)
  - Various publications

\*Question was to check all options that applied to their practice.

Other comments on your office practice for screening for oral cancer, knowledge and/or promotion of HPV related cancers and vaccine.

Over 180 open comments were submitted that were quite varied in nature. Below are some examples:

- *This is not the place to discuss this matter. Patients and parents will be offended. This is more of a primary healthcare provider issue.*
- *I have not been promoting the HPV vaccine as much as I should. I will be changing that policy in my office shortly.*
- *I wish I was more familiar and more informed, and would welcome any improvement in increasing the knowledge for myself and all dentists.*
- *What I do know about HPV is that it is a venereal disease. Prevention should be abstinence and monogamy and that is not my personal view.*
- *Risks of oral cancer and HPV vaccine are not part of my typical health review with patients. But after this survey I realize it should be and can put into our health review-oral exam discussion. THANK YOU.*
- *We are NOT doctors or gynecologists, etc.*
- *Each physician should be prescribing vaccines, not dentist. I screen all patients but don't consult each client about things their physicians should do.*
- *Oral cancer screenings including HPV should be included in insurance benefits in order to have adequate discussions with patients.*
- *I would like more pre-printed patient education to give to parents.*
- *I would like to know more about HPV vaccines. I feel we are aggressive in our present scanning for oral lesions but I am not knowledgeable about HPV vaccines.*



## Conclusions:

Oral health professionals are the best health providers to screen for oral cancer. A screening for oral cancer is an expected part of the comprehensive oral exam. Discussing HPV-related oral cancer and the benefit of the HPV vaccine in the dental setting could help increase immunization rates and reduce the occurrence of HPV-related cancers in the state of Michigan.



From this assessment of Michigan oral health professionals, we conclude:

- There are varied practices on screening for oral cancer, on whom to provide a screening, the areas of the oral cavity screened, and when to provide a screening.
- 62% of oral health professionals do not have a written policy or office procedure on screening for oral cancer.
- 82% of oral health professionals do not routinely ask or advise on the HPV vaccine.
- Many had a wrong answer or did not respond to True/False questions on the HPV vaccine.
- There were strong suggestions for more continuing education (CE) opportunities on oral cancer, HPV-related oral cancers, and how to talk with patients about the HPV vaccine.



### **Next Steps/Recommendations**

- Offer the survey again to just dental hygienists, as they are normally the provider that would do oral cancer screenings
- Develop sample policy form/statement on screening for oral cancer for dental settings to use
- Offer more education opportunities to oral health professionals on oral cancer, HPV-related oral cancers and HPV vaccines
- Develop chairside education materials for talking with patients about HPV vaccines
- Provide a public awareness campaign about HPV-related oral cancers
- Include invitations to dental providers regarding conferences, summits, and educational sessions on HPV-related topics
- Promote coding and reimbursement mechanisms for oral cancer screening



**For more information:**

- MDHHS Oral Cancer Fact Sheet: [www.michigan.gov/oralhealth](http://www.michigan.gov/oralhealth)
- Michigan.gov/oralhealth: [www.michigan.gov/oralhealth](http://www.michigan.gov/oralhealth) e-mail: [oralhealth@Michigan.gov](mailto:oralhealth@Michigan.gov)
- Michigan.gov/immunizations: [https://www.michigan.gov/mdhhs/0,5885,7-339-73971\\_4911\\_4914---,00.html](https://www.michigan.gov/mdhhs/0,5885,7-339-73971_4911_4914---,00.html)
- Michigan Cancer Consortium: <https://www.michigancancer.org/>
- The American Cancer Society Michigan: <https://www.cancer.org/about-us/local/michigan.html>
- HPV Roundtable: [www.hpvroundtable.org](http://www.hpvroundtable.org)
- The Oral Cancer Foundation: <https://oralcancerfoundation.org/>
- The Centers for Disease Control and Prevention (CDC): <https://www.cdc.gov/cancer/headneck/index.htm>
- The American Dental Association: <https://www.mouthhealthy.org/en/az-topics/h/hpv-and-oral-cancer>
- National Cancer Institute: <https://www.cancer.gov/>

\*\* Special thank you to The Delta Dental Foundation, an affiliate of Delta Dental of Michigan, Ohio and Indiana, for consultation and financial support for this project!