

Tobacco Screening and Counseling Among US Dental Professionals, 2010-2011

Gina Thornton-Evans, DDS, MPH

Jennifer Cleveland, DDS MPH¹; Adriana Menezes²;

Laurie Barker MSPH¹ ;

Chien-Hsun Li MS, MA³;

*¹Centers for Disease Control and Prevention , ²American
Dental Association, ³ Northrop Grumman*

NOHC

April 24, 2013

Huntsville , AL

*The findings and conclusions in this report are those of the authors and do not necessarily represent
the official position of the Centers for Disease Control and Prevention.*

National Center for Chronic Disease Prevention and Health Promotion
Division of Oral Health



Background

- *Tobacco use remains the single largest preventable cause of death and disease for both men and women.*
- *Tobacco use increases the risk of oral and pharyngeal cancer, periodontal disease, leukoplakia, and impaired oral wound healing.*
- *Dental health care providers (DHCP) are in a unique position to identify current tobacco users and provide cessation counseling or referral to tobacco quitlines.*

Healthy People 2020 Objectives

- *Healthy People 2020, includes two objectives on the percentage of dental health care providers (DHCP) (dentists, hygienists, and dental assistants) in general practices who:*
 - *TU HP2020-9 Increase tobacco screening in health care settings*
 - *TU9.3: screen dental patients for tobacco use*
 - *TU HP2020-10 Increase tobacco cessation counseling in health care settings*
 - *TU10.3: provide counseling for tobacco cessation.*
- *This project is a collaboration between CDC's Division of Oral Health (DOH) and Office on Smoking and Health (OSH) and the American Dental Association who is collecting the data.*

Healthy People 2020 Objectives

Process for Moving from Developmental to Measurable

Measurable Objective

Operational Definition

Target Setting Method (10%)
Periodicity of data (2011, 2013 2015, 2017)

Baseline data (2010)

Developmental Objective

Objectives

- *To present baseline data from 2010 and 2011 on the percentage of U.S. DHCPs that screen and counsel patients on tobacco use and cessation.*
- *To conduct a descriptive analysis to identify associations between selected variables and the prevalence of screening and counseling among DHCPs in general practices.*

Methods

- *Data were collected from the ADA's 2010 and 2011 annual Survey of Dental Practice, using a randomized sample of currently practicing US dentists:*
 - *2010: 4725 general practitioners (GPs), 9884 specialists (over-sampled).*
 - *2011: 4725 GPs, 3150 specialists*
- *During the past week, how often did you or your dental team:*
 - *Personally ask patients if they used tobacco?*
 - *Personally counsel patients who used tobacco products on tobacco cessation?*
- *Responses were dichotomized by always/usually vs. sometimes/rarely/no.*

Methods

- *Estimates for screening and counseling were weighted to account for oversampling of specialists.*
- *Tobacco screening and cessation were analyzed by demographic and practice characteristics among GPs.*
- *Pearson chi square tests (significant at $p < 0.05$) were performed to detect differences within categorical responses. We did not analyze differences between years of survey.*

Results

General Practitioner Response Rate to ADA Survey on Dental Practice, 2010 and 2011

	2010	2011
	<i>n(%)</i>	<i>n(%)</i>
Sample size	4725 (100)	4725 (100)
Respondents	1495 (31.6)	1474 (31.2)
Respondents to Screening Question	1035 (69.2)	989 (67.0)
Respondents to Counseling Question	1036 (69.2)	988 (67.0)

Tobacco Screening and Counseling by Specialty, 2010*

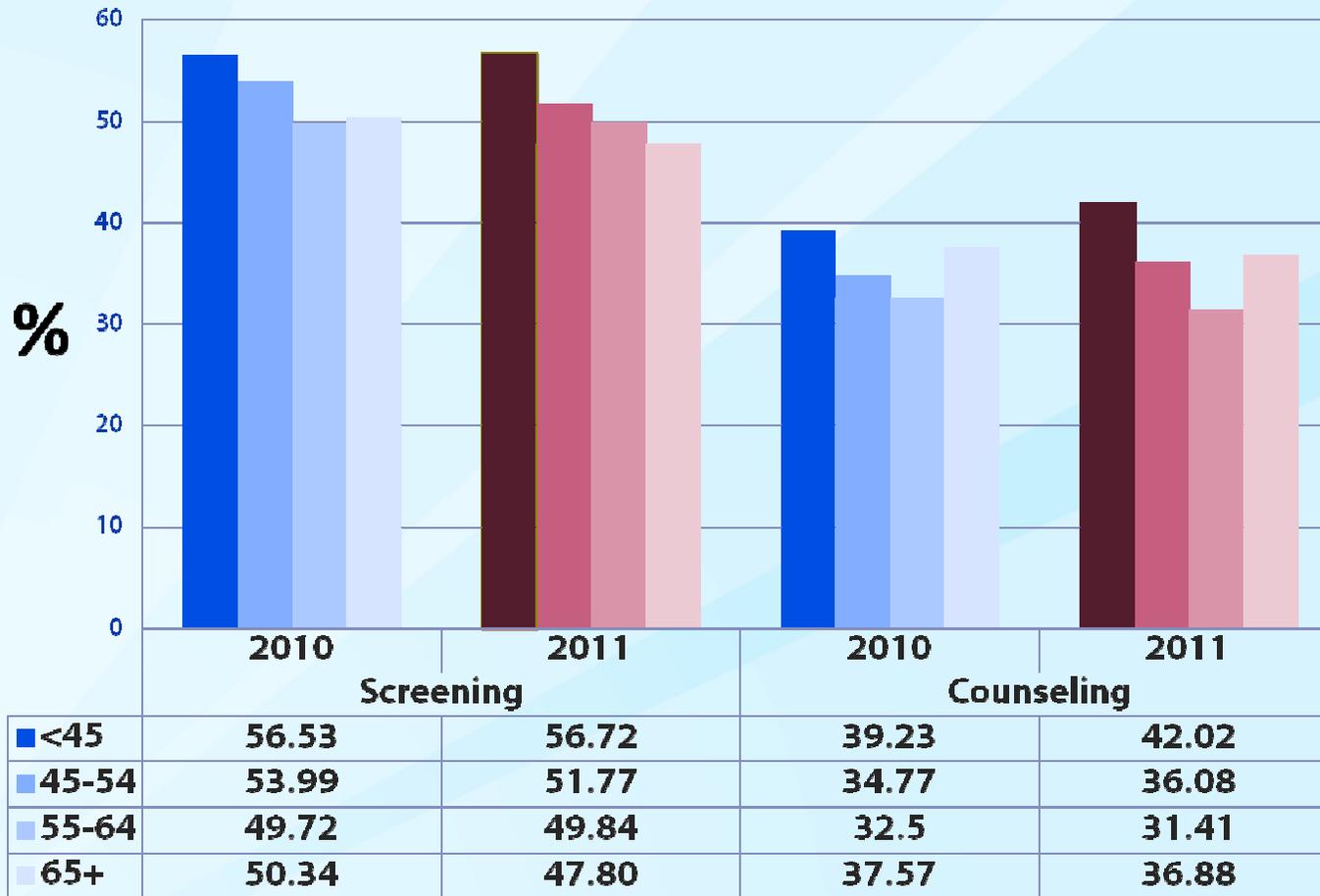
Type of Practitioner	Tobacco Screening**		Tobacco Counseling**	
	No.	Percent (SE)	No.	Percent (SE)
Periodontist	296	82.5 (2.0)	211	58.8 (2.6)
Oral Surgeon	249	79.5 (2.3)	145	46.5 (2.8)
General Practice	548	52.9 (1.5)	370	35.7 (1.5)
Prosthodontics	129	52.0 (3.2)	97	39.3 (3.1)
Endodontics	63	16.9 (1.9)	38	10.2 (1.6)
Orthodontics	37	11.5 (1.8)	46	14.4 (1.9)
Pediatric dentistry	27	7.3 (1.4)	56	15.0 (1.8)
Total ☒	1362	50.8 (1.3)	970	34.6 (1.3)

* Oral pathology, Radiology, and Public Health < 10 respondents each

** Always/usually

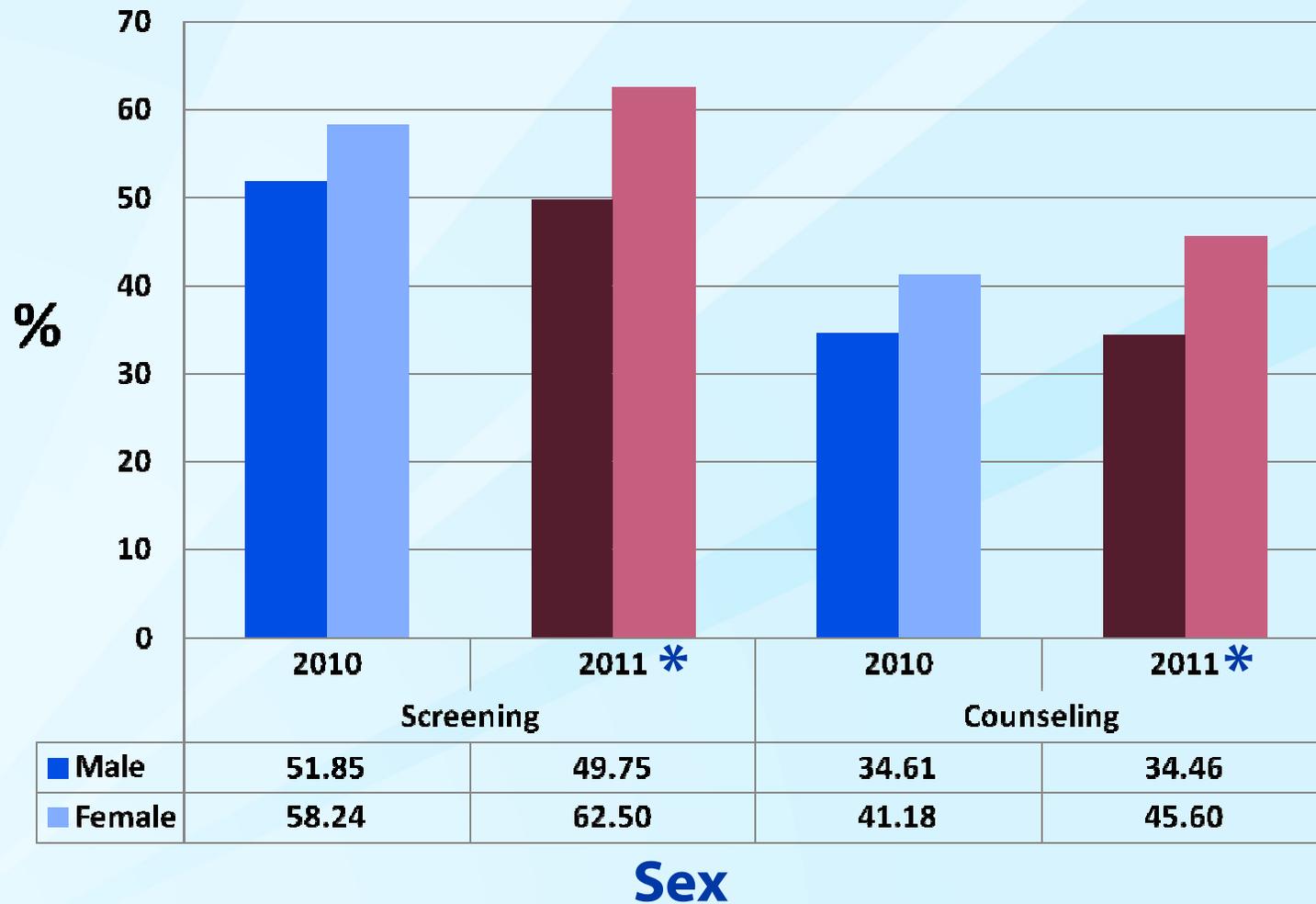
☒ Total based on all GPs and specialists

Screening and Counseling for Tobacco Use Among GPs by Age, 2010-2011



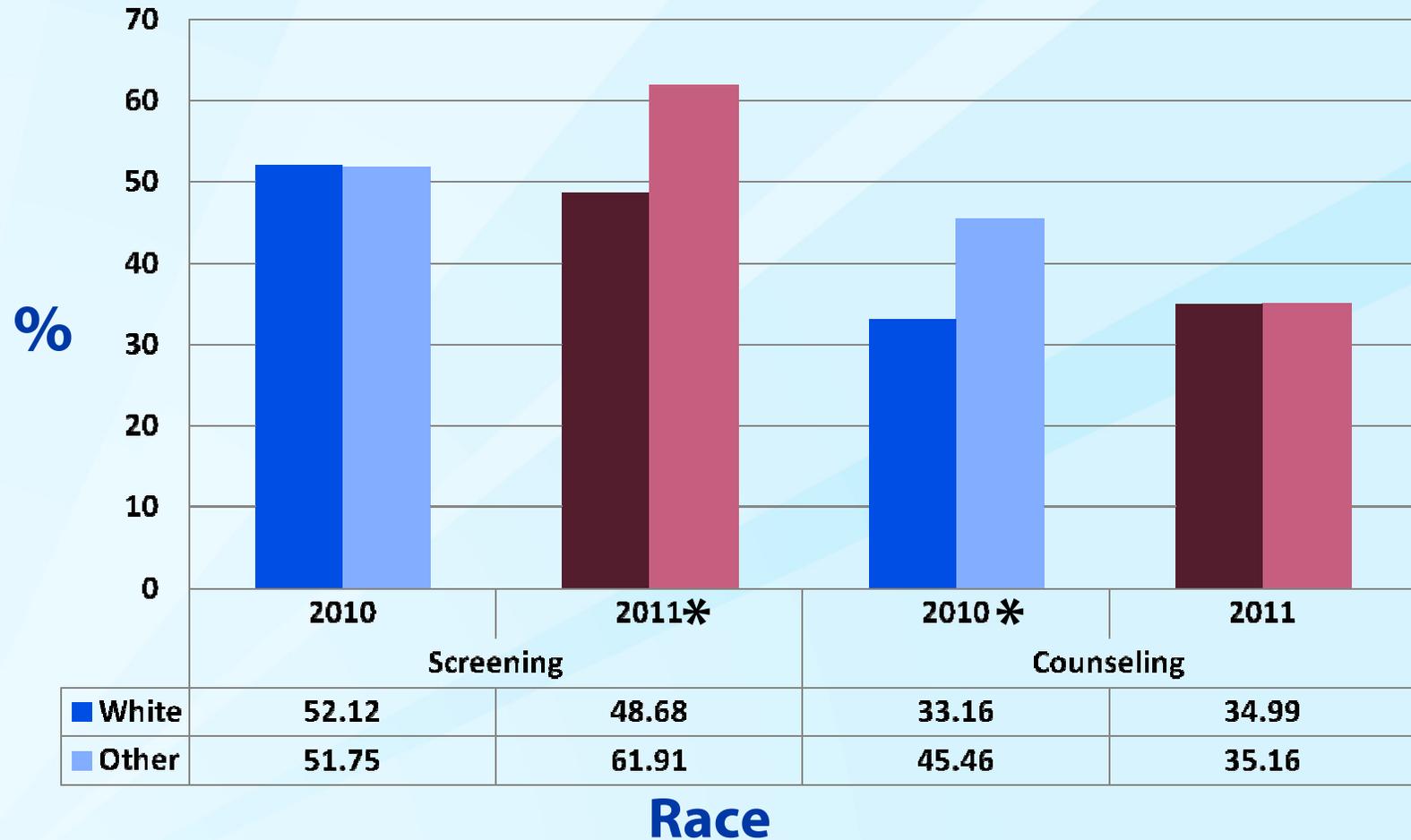
Age Group

Screening and Counseling for Tobacco Use Among GPs by Sex, 2010-2011



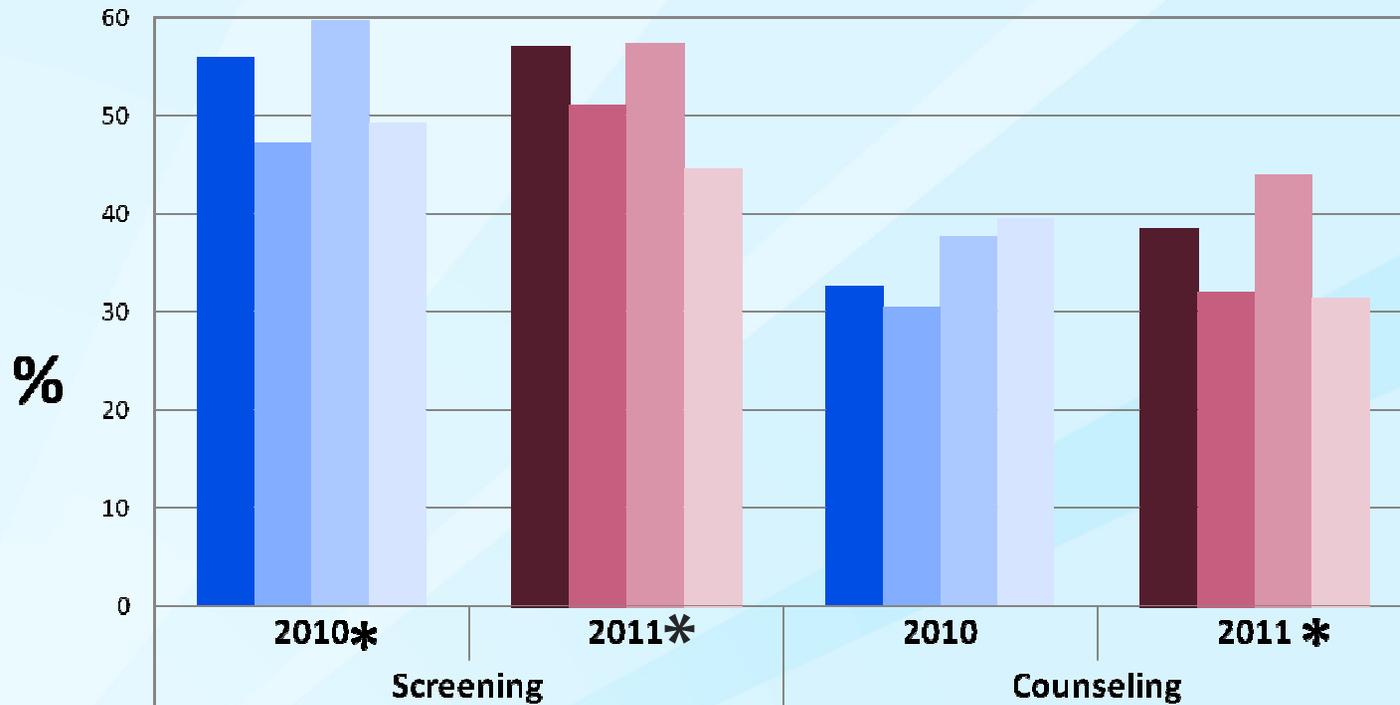
*Frequency significant higher among females: $p < 0.05$

Screening and Counseling for Tobacco Use Among GPs by Race, 2010-2011



* Frequency significantly higher among non-whites: $p < 0.05$

Screening and Counseling for Tobacco Use Among GPs by Census Division, 2010-2011

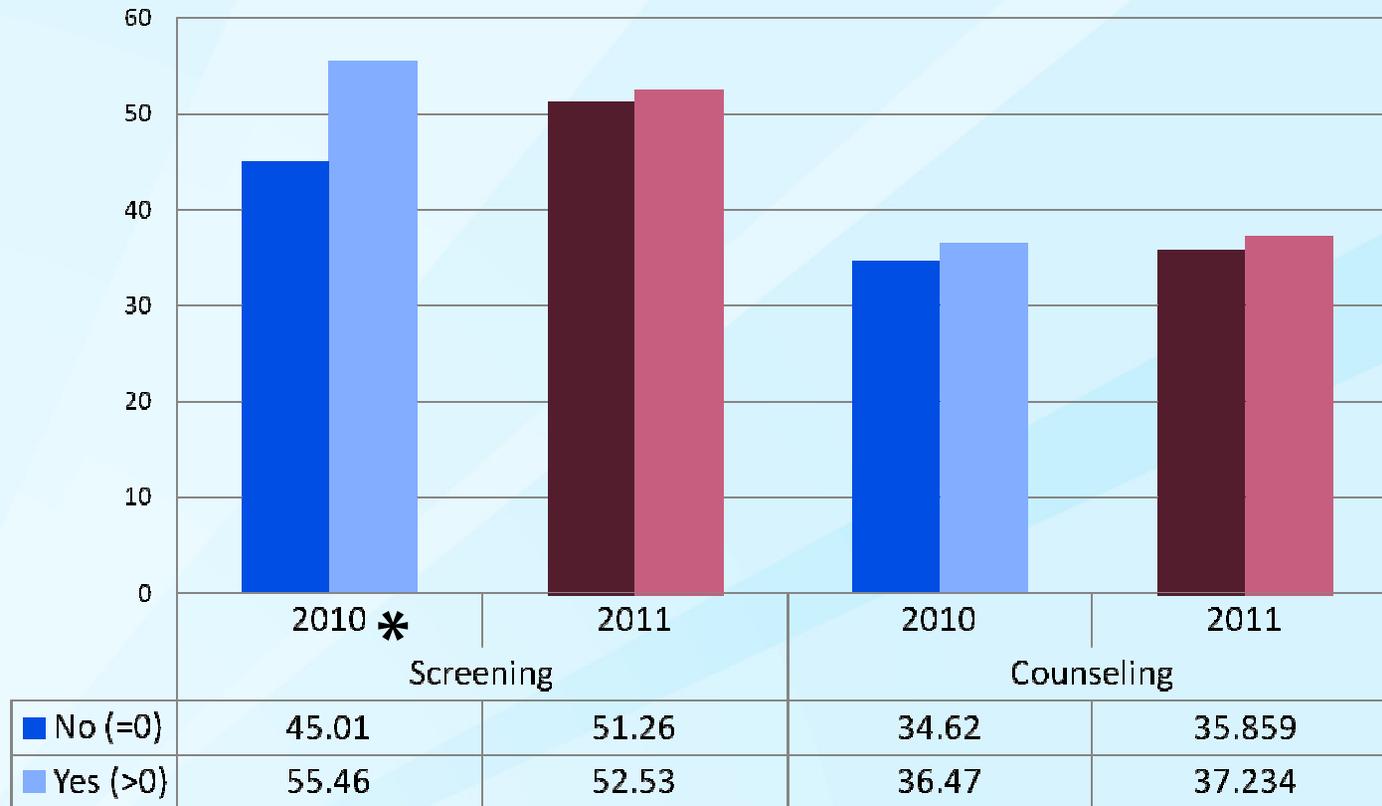


	Screening		Counseling	
	2010*	2011*	2010	2011 *
■ Northwest	55.93	57.14	32.66	38.46
■ Midwest	47.27	51.11	30.47	32.00
■ South	59.69	57.39	37.78	43.99
■ West	49.33	44.68	39.59	31.32

Census Regions

* Frequency significantly different by Census Division: $p < 0.05$

Screening and Counseling for Tobacco Use Among GPs by Having a Hygienist, 2010-2011



Hygienist No/Yes

* Frequency significantly higher in practices with a hygienist: $p < 0.05$

Summary

- *Overall, the frequency of screening was higher than counseling among all DHCP.*
- *The frequency of tobacco screening and counseling in 2010 was highest among periodontists and oral and maxillofacial surgeons.*
- *Among DHCP in general practices in 2010 or 2011:*
 - *Tobacco screening was higher among females, non-whites, DHCPs in the Northwest or South, and in practices with a hygienist (2010).*
 - *Tobacco counseling was higher among females, non-whites, DHCPs in the Northwest or South.*

Limitations

- *A low response rate may yield a biased estimate from the survey if the responders and non-responders are inherently different.*
- *Data was obtained through self-report.*
- *Information on the type of DHCP who conducted the screening or counseling was unavailable.*
- *The percentage of patients that were current smokers is unknown.*
- *Information on the type of screening or counseling was unavailable.*

Recommendations

DHCP should ask patients about their tobacco use and educate users about their potential risks of developing adverse health conditions.

DHCP should encourage tobacco cessation and provide appropriate counseling.

Alternatively, DHCP could provide brief counseling messages (< 3 minutes) and refer patients to the Quitlines portal (1-800-QUIT-NOW)

Sources: Fiore MC, et al., 2008; Carr AB, et al., 2012

Interventions for Tobacco Cessation in the Dental Setting Cochrane Review, 2012

- *Objective was to assess the effectiveness of interventions for tobacco cessation delivered by DHCP*
- *14 studies met the criteria for inclusion*
 - *6 studies evaluated the effectiveness of interventions for smokeless tobacco*
 - *8 studies evaluated studies among cigarette smokers, 6 of which involved adult smokers in dental practice settings*
- *Combined findings from 14 studies involving 10,500 participants showed that tobacco interventions (brief behavioral counseling with oral examination) by DHCP helped tobacco users to quit.*
 - *Findings were similar for smokeless tobacco and smokers and evidence of a benefit was much stronger than for earlier reviews*

**Carr AB, Ebbert J. Interventions for tobacco cessation in the dental setting.
Cochrane Database of Systematic Reviews 2012,
Issue 6. Art. No.: CD005084. DOI: 10.1002/14651858.CD005084.pub3.**

Community Preventive Services Task Force

Community Guide CDC.gov

- [Home](#)
- [Task Force Findings ▾](#)
- [Topics ▾](#)
- [Use The Community Guide ▾](#)
- [Methods ▾](#)
- [Resources ▾](#)
- [News ▾](#)
- [About Us ▾](#)

[Home](#) » [Topics](#) » [Tobacco](#) » [Increasing Tobacco Use Cessation](#)

Text Size: [S](#) [M](#) [L](#) [XL](#)

- Tobacco**
- + [Reducing Tobacco Use Initiation](#)
 - [Increasing Tobacco Use Cessation](#)
 - Summary of Findings**
 - [Increasing the Unit Price](#)
 - [Internet-Based Interventions](#)
 - [Mass Media Campaigns](#)
 - [Mass Media: Cessation Series](#)
 - [Mass Media: Cessation Contests](#)
 - [Mobile Phone-Based Interventions](#)
 - [Provider Reminders When Used Alone](#)
 - [Provider Reminders with Provider Education](#)
 - [Provider Education](#)
 - [Provider Assessment & Feedback](#)
 - [Reducing Client Out-of-Pocket Costs](#)
 - [Multicomponent Interventions](#)
 - [Supporting Materials](#)
 - [Archived Reviews](#)

Increasing Tobacco Use Cessation



These interventions are designed to increase the number of people who stop using tobacco. Approaches range from providing support to people who are trying to quit to increasing the cost of tobacco products.

Task Force Recommendations & Findings

This table lists interventions reviewed by the Community Guide, with Task Force findings for each ([definitions of findings](#)). Click on an underlined intervention title for a summary of the review, and where available, [Research-tested Intervention Programs \(RTIPs\)](#).

Increasing the Unit Price of Tobacco Products	Recommended February 1999
Internet-Based Interventions	Insufficient Evidence December 2011
Mass Media Campaigns when Combined with Other Interventions	Recommended October 2009
Mass Media - Cessation Series	Insufficient Evidence May 2000
Mass Media - Cessation Contests	Insufficient Evidence May 2000
Mobile Phone-Based Interventions	Recommended December 2011
Provider Reminders when Used Alone	Recommended February 2000
Provider Reminders with Provider Education	Recommended February 2000
Provider Education when Used Alone	Insufficient Evidence February 2000
Provider Assessment & Feedback	Insufficient Evidence February 2000

✉ Get Email Updates

Submit your email address to get updates on The Community Guide topics of interest.

[What's this?](#)



The Guide to Clinical Preventive Services

Together, the Community Guide and the Clinical Guide provide evidence-based recommendations across the prevention spectrum.

[More »](#)

Contact Us

- [Email](#)
- [Address](#)

Feasibility of Implementing the PHS Guidelines in a Dental Setting

- *In 2008, the NYDH funded 14 general dental clinics affiliated with the NYU college of Dentistry to develop the following strategies to implement tobacco use treatment guidelines:*
 - *Chart system to prompt students to screen for tobacco use*
 - *Training of faculty and dental students on treatment protocols*
 - *System for referring patients for further counseling*
 - *Free nicotine replacement therapy for patients ready to quit within 30 days*
 - *Provider feedback program to compare monthly prescribing patterns with other clinics*
- *Feasibility and sustainability compared favorably with other similar programs conducted in dental public health clinics.*

Shelley D, Jannat-Khah D, Wolff M. Tobacco-use treatment in dental practice: How Healthy People 2020 aligns federal policy with the evidence. J Am Dent Assoc 2011;142:592-596.

Conclusions

- *Current evidence suggests that tobacco cessation efforts among DHCP can be effective at reducing tobacco use among dental patients.*
- *However, these findings suggest that only about half of DHCP in general practices screen for tobacco use and about one third counsel patients for tobacco cessation.*

References

Fiore MC, Jaén CR, Baker TB, et al. Treating Tobacco Use and Dependence: 2008 Update—Clinical Practice Guideline. Rockville, Md.: U.S. Department of Health and Human Services, Public Health Service; 2008.

Carr AB, Ebbert J. Interventions for tobacco cessation in the dental setting. Cochrane Database of Systematic Reviews 2012, Issue 6. Art. No.: CD005084. DOI: 10.1002/14651858.CD005084.pub3.

Shelley D, Jannat-Khah D, Wolff M. Tobacco-use treatment in dental practice: how Healthy People 2020 aligns federal policy with the evidence. J Am Dent Assoc 2011;142:592-596.

*Task force on Community Preventive Services:
<http://www.thecommunityguide.org/index.html>*

For more information please contact Centers for Disease Control and Prevention

1600 Clifton Road NE, Atlanta, GA 30333
Telephone, 1-800-CDC-INFO (232-4636)/TTY: 1-888-232-6348
E-mail: cdcinfo@cdc.gov Web: www.cdc.gov

JLCleveland@cdc.gov

National Center for Chronic Disease Prevention and Health Promotion

