

This is a Post-Referee Draft. For the final version please consult:

LeHew CW, Weatherspoon DJ, Peterson CE, et al. The Health System and Policy Implications of Changing Epidemiology for Oral Cavity and Oropharyngeal Cancers in the United States From 1995 to 2016. *Epidemiol Rev.* April 2017:1-16.
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Table 1. Statistically Significant Risk Factors for Oral Cavity Cancers: Meta-analyses Published Between January 1, 1995 and March 22, 2016.

First Author, Year ^{Reference #}	Study Period	No. of Studies	Sample Size		Cancer Site (Exposure)	Findings		Comments
			No. cases	No. controls		OR	95% CI	
Turati, 2010 ³⁸	Up to September 2009	9	534	1,471	<u>Alcohol</u> OCC (Light drinkers)	1.17 ^{a,c}	1.01, 1.35	Increased odds by site
		17	1,706	847	OCC (Heavy drinkers)	4.64 ^{a,c}	3.78, 5.70	
Bagnardi, 2015 ³⁷	Before September 2012	52	13,895	4,942	OCC (Light drinkers)	1.13 ^{a,c}	1.00, 1.26	Increased odds: dose response
					OCC (Moderate drinkers)	1.83 ^{a,c}	1.62, 2.07	
					OCC (Heavy drinkers)	5.13 ^{a,c}	4.31, 6.10	
Gong, 2015 ⁴²	January 1, 1966 – May 31, 2014	13	1,806	N/A	<u>Diabetes</u> OCC	1.15 ^{b,c}	1.02, 1.29	Increased odds with Type 2 DM
Pavia, 2006 ⁴¹	Up to September 2005	16	65,802	N/A	<u>Diet</u> OCC (Fruit)	0.51 ^a	0.40, 0.65	Reduced odds
			57,993	N/A	OCC (Vegetables)	0.50 ^a	0.38, 0.65	
Xu, 2014 ⁴⁰	January 1966 – May 2013	13	4,104	N/A	OCC (Processed meat)	1.91 ^{a,c}	1.19, 3.06	Increased odds
Miller, 2001 ⁴⁵	December 1982 – April 1997	19	N/A	N/A	<u>HPV</u> OSCC	5.37 ^a	2.49, 11.55	Increased odds: HPV detection in OSCC vs. normal tissue
Hobbs, 2006 ⁴⁶	Inception to February 2004	8	1,641	2,277	OCC	2.0 ^b	1.2, 3.4	Increased odds
Yao, 2014 ⁴³	2005-2010	5	1,191	1,992	<u>Periodontal disease</u> OCC	3.53 ^a	1.52, 8.23	Increased odds
Rodu, 2002 ⁴⁷	1957-1998 ^d	4	581	798	<u>Smokeless tobacco</u> OCC (SLT-unspecified)	2.8 ^{b,c}	1.9, 4.1	Increased odds: site and SLT material specific
			8	3,145	5,245	ALL SITES (CT)	1.2 ^{b,c}	

		4	391	1,340	ALL SITES (DS)	5.9 ^{b,c}	1.7, 20	
		7	1,428	3,681	ALL SITES (SLT-unspecified)	1.9 ^{b,c}	1.5, 2.3	
Weitkunat, 2007 ⁴⁴	1920-2005	32	13,669	297,134	OCC (All types of SLT)	1.87 ^{a,e}	1.40, 2.48	Increased odds: summing all SLT types
<i>Socioeconomic Status</i>								
Conway, 2008 ³⁶	1950 - September 2006	41	15,344	33,852	All Countries Contributing Studies			Increased odds
		37			OCPC (Low Education)	1.85 ^a	1.60, 2.15	
		14			OCPC (Low Occupation)	1.84 ^a	1.47, 2.31	
		5			OCPC (Low Income)	2.41 ^a	1.59, 3.65	
					North America			
		13			OCPC (Low Education)	1.62 ^a	1.34, 1.96	
		6			OCPC (Low Occupation)	1.63 ^a	1.31, 2.04	
		2			OCPC (Low Income)	3.41 ^a	2.14, 5.44	
<i>Tea</i>								
Wang, 2014 ³⁹	Up to June 2013	19	4,675	N/A	OCC (All teas studied)	0.85 ^{a,c}	0.78, 0.93	Reduced risk
		5	1,313	N/A	OCC (Green tea)	0.80 ^{a,c}	0.67, 0.95	

Abbreviations: OCC, oral cavity; OCPC, oral cavity/pharynx; N/A, not available from published report; DM, Diabetes Mellitus; HPV, Human Papilloma Virus; OSCC, oral squamous cell carcinoma; SLT, smokeless tobacco; CT, chewing tobacco; DS, dry snuff; SES, socioeconomic status;

^a adjusted

^b adjustment unclear

^c relative risk

^d years of publications of used studies

^e odds ratio or relative risk random-effects estimate