

Cigars Committee on Health Effects and Patterns of Use of *Premium* Cigars

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- Dartmouth College Cancer Center
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THE CIGAR

Types and Definitions

There are many types of cigars on the market. The U.S. Department of the Treasury (1996) defines a cigar as “any roll of tobacco wrapped in leaf tobacco or in any substance containing tobacco,” while a cigarette is defined as “any roll of tobacco wrapped in paper or in any substance not containing tobacco.” In North America, and in many parts of Europe, there are at least four types of cigars, namely, little cigars, small cigars (also called cigarillos), regular cigars, and premium cigars (Figure 2). For taxation purposes, the U.S. Department of the Treasury (1996) differentiates only between small cigars, weighing not more than three pounds per thousand (≤ 1.36 g/cigar), and large cigars, weighing more than three pounds per thousand.

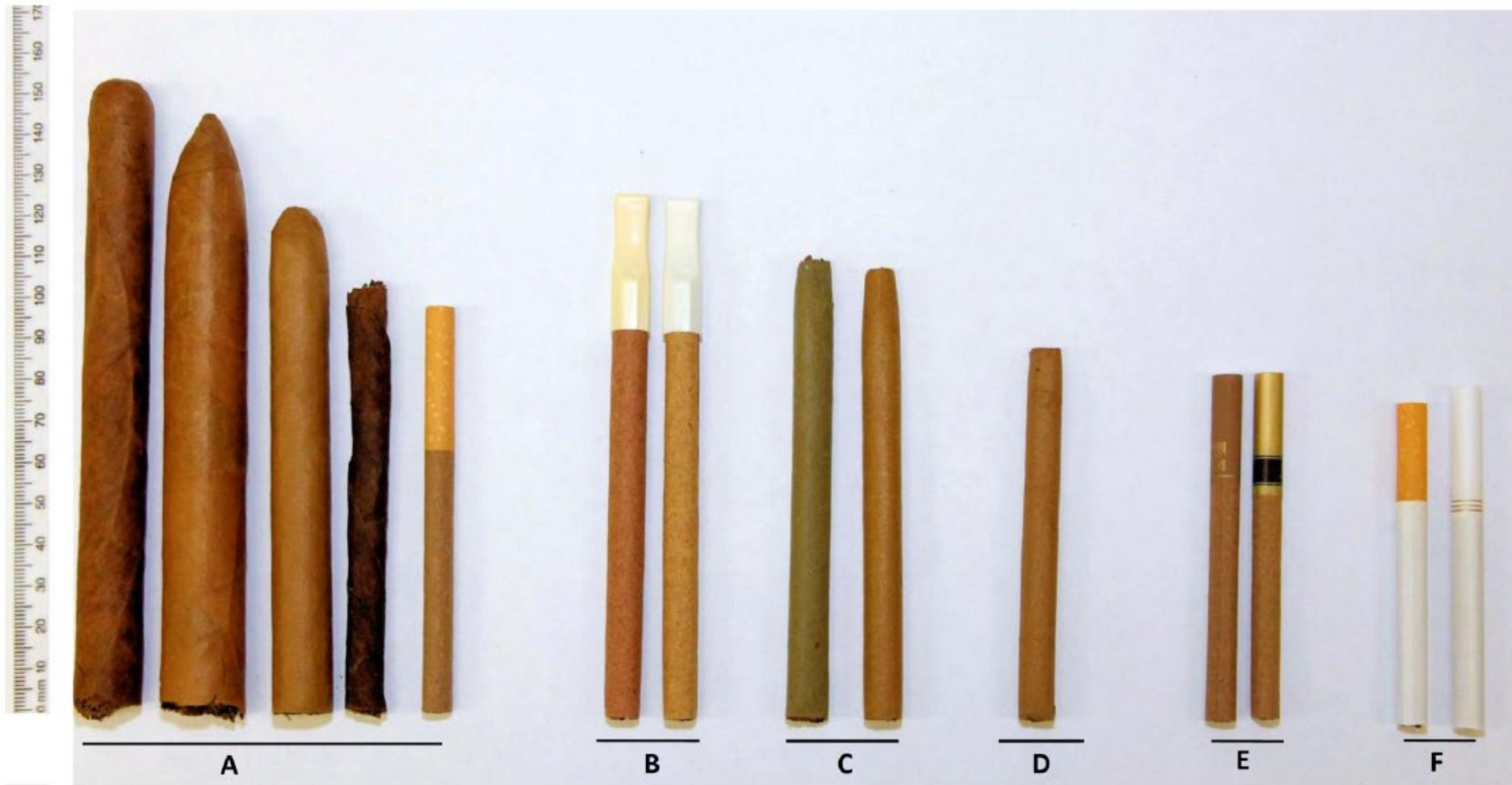


Figure 1.
Photographs of Assorted Varieties of Combustible Tobacco Products (Cigars and Cigarettes)
Based on Product Labeling
Note.
Tobacco Products: A. Large cigars (various types); B. Pipe tobacco cigars (tipped); C.
Cigarillos; D. Mini-Cigarillo; E. Little Cigars (filtered); F. Cigarettes (filtered).

Summary Statistics for 6 Combustible Tobacco Product Categories

Tobacco Product Type	Total Brands	Nicotine (mg/g)		pH	
		Mean	Range	Mean	Range
Large Cigars	27	15.4	9.20 – 24.8	6.10	5.40 – 6.83
Pipe Tobacco Cigars	13	8.79	7.88 – 9.61	5.05	4.71 – 5.75
Cigarillos	17	13.0	8.32 – 17.9	5.72	5.04 – 7.41
Mini-Cigarillos	4	12.5	12.2 – 12.6	5.68	5.64 – 5.70
Little Cigars	14	12.6	10.3 – 19.1	5.72	5.24 – 6.11
Cigarettes	50	19.2	16.2 – 26.3	5.46	5.14 – 5.61

- Premium cigars means cigars which are made entirely by hand of all-natural tobacco leaf, hand-constructed and hand wrapped, wholesaling for \$2 or more, and weighing more than 3 pounds per 1000 cigars.



Requirements for Premium Cigars

August 26, 2020

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On Aug. 19, 2020, the U.S. District Court for the District of Columbia issued a ruling, in part, to prohibit FDA enforcement of the Tobacco Control Act's premarket authorization requirement for premium cigars until after the agency considers developing a streamlined substantial equivalence process specifically for premium cigars. FDA will provide further updates on this topic as appropriate.

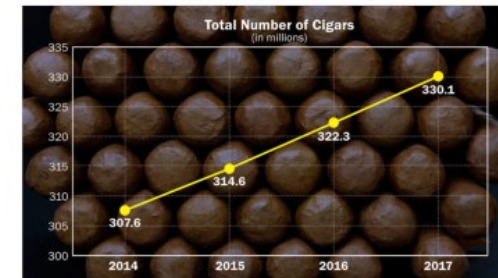
Accordingly, FDA will not enforce the premarket review requirement against manufacturers of premium cigars that do not submit premarket applications for these products by the Sept. 9, 2020 deadline. For purposes of the Court's order, a premium cigar is defined as a cigar that meets all of the following eight criteria:

1. Is wrapped in whole tobacco leaf;
2. Contains a 100 percent leaf tobacco binder;
3. Contains at least 50 percent (of the filler by weight) long filler tobacco (i.e., whole tobacco leaves that run the length of the cigar);
4. Is handmade or hand rolled (i.e., no machinery was used apart from simple tools, such as scissors to cut the tobacco prior to rolling);
5. Has no filter, nontobacco tip, or nontobacco mouthpiece;
6. Does not have a characterizing flavor other than tobacco;
7. Contains only tobacco, water, and vegetable gum with no other ingredients or additives; and
8. Weighs more than 6 pounds per 1,000 units.

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U.S. Imports 330 Million Premium Cigars In 2017, Most Since 1998; Nicaragua Named Biggest Supplier

Mar 21, 2018 | By Gregory Mottola



The final import numbers for 2017 are in and the news is very positive. Premium cigar imports are at a level not seen in the United States since 1998, in the waning days of the cigar boom.





2020 Cigar Retailer Survey: The Hottest Cigar Brands In America

Cigar Insider's annual retail survey of 141 cigar shops reveals the hottest and best-selling brands in America

Jul 27, 2020 | By David Savona



THE HOTTEST CIGAR BRANDS IN AMERICA		
Brands Requested Most Often by Consumers		
	1 Padrón 1964 Anniversary Series	29.9%
	2 Arturo Fuente	26.4%
	3 Fuente Fuente OpusX	16.1%
	4 Liga Privada	14.9%
	5 La Flor Dominicana	13.8%
	6 Rocky Patel	11.5%
	7 Davidoff	9.2%
	7 Oliva Serie V	9.2%
	9 My Father	8.0%
	10 Montecristo	6.9%
Source: CIGAR INSIDER		

anken.com/d/cao/bolt/2020-07/hottestbrands-1.jpg



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SHOW ARCHIVES
July 16, 2016 – Cigars vs. FDA



NEWS & INTEL
Cigar Industry Files Lawsuit Against FDA

SMOKING
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MONOGRAPH

9

Cigars: Health Effects and Trends

U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
National Institutes of Health
National Cancer Institute

Cigar definition,
manufacture, chemistry

Manufacture of Cigars

Cigars consist of filler, binder, and wrapper; all of which are air-cured and fermented. In recent decades, some brands of regular cigars (though not premium cigars) have used reconstituted cigar tobacco as binder, wrapper, or both (Moshy, 1967; Halter and Ito, 1980). Cigars are either hand-rolled (Jeffers and Gordon, 1996) or machine-made (Van der Boor, 1996). The flavor and aroma of cigars and their smoke are, in large measure, the results of precisely controlled fermentation of the tobacco. Most little cigars are machine-made, much like cigarettes, except that fermented cigar tobacco, not blends of cured tobaccos are used (20, 30, or 50 cuts per inch); the little cigars have wrappers which contain tobacco.

Cigars consist of a filler (the inner part of the cigar), a binder, and a wrapper. The filler, binder, and wrapper of small cigars, regular cigars, and premium cigars are all made with air-cured and fermented tobaccos (Cornell et al., 1979). Since the mid-fifties, the binders and/or wrappers of many of the regular brands (but not of premium brands) are made from reconstituted cigar tobacco (Moshy, 1967). In general, about 85 percent of the weight of a cigar is contributed by the filler, 10 percent by the binder, and 5 percent by the wrapper (Frankenburg and Gottscho, 1952).

Smoke yields of leading U.S. cigarettes^a without and with filter tips, little cigars with filter tips, cigars^b, and premium cigars^b 1997

Parameters	Pall Mall Non-filter Cigarettes	Marlboro Filter Cigarettes	Swisher Sweets Little Cigars	King Edward Cigars	Macanudo Premium Cigars
Length (mm)	85	85	100	138	176
Weight (g)	1.1	1.0	1.24	8.06	8.01
Puff (No)	11	10	18.5	89.7	119.4
Total Smoke (L)	0.385	0.35	0.4	1.8	2.4
"Tar" (mg)	26	16	24	37	44
CO (mg)	18	14	38	96	97
Nicotine (mg)	1.7	1.1	3.8	9.8	13.3
BaP (ng)	20	16	26.2	96.0	97.4
NNN (ng)	280	200	595	1225	1225
NNK (ng)	160	130	310	1200	1145

^aThe cigarettes were smoked under FTC conditions: 1 puff/min, 35 ml, 2-second puff duration butt length NF, 23 mm; F., 29 mm. (FTC) Pillsbury et al., 1969

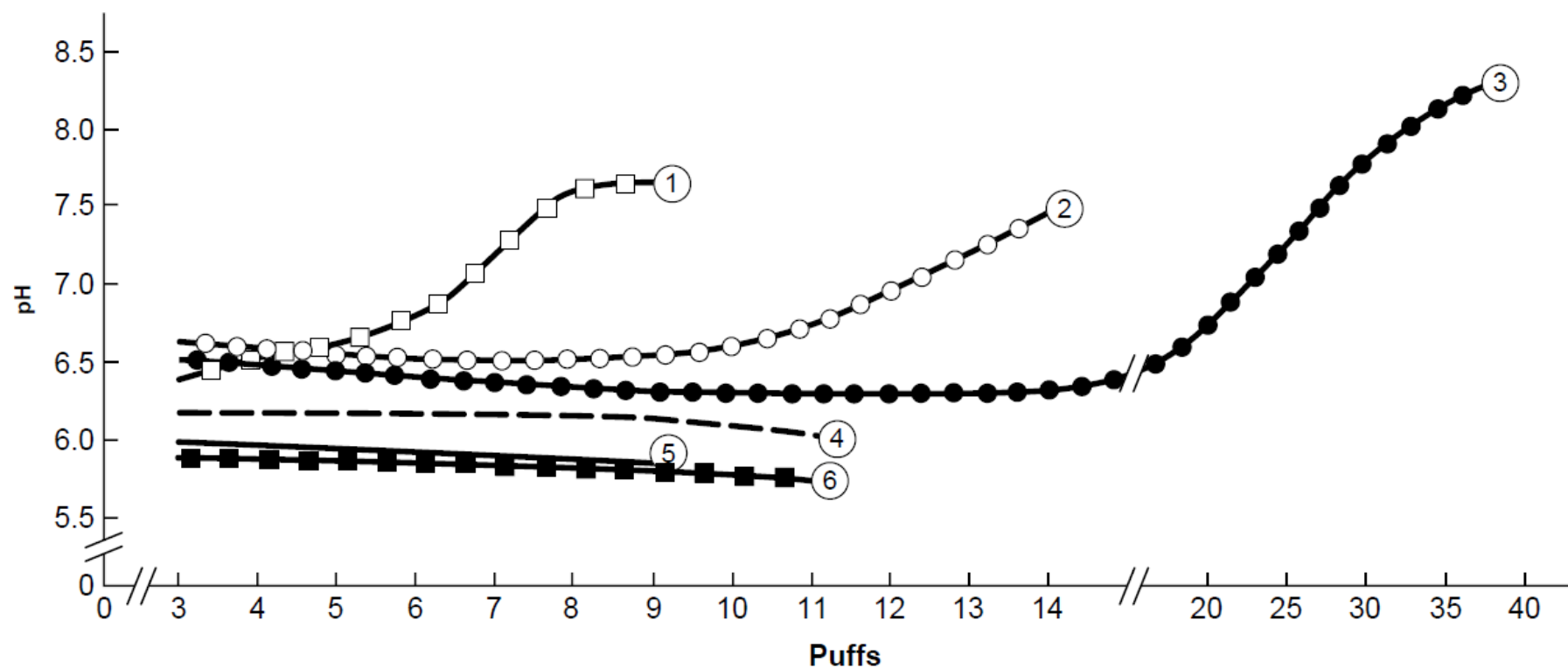
^bLittle cigars, cigars; and premium cigars were smoked under the conditions of the International Committee for Cigar Smoke Study (ICCSS): 1 puff/40 seconds, 20 ml, 1.5-second puff duration, butt length 33 mm. Values are averages of 3 runs. (ICCSS) International Committee for Cigar Smoke Study, 1974.

Abbreviations: BaP, Benzo (a) pyrene; NNN, N¹-nitrosonornicotine; NNK, 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone.

Source: Unpublished data Hoffmann, D. American Health Foundation

Figure 6

pH of total mainstream smoke of various tobacco-products



- (1) little cigar I
- (2) little cigar II
- (3) cigar
- (4) Kentucky reference cigarette
- (5) blended filter-tipped cigarette (85 mm)
- (6) blended cigarette without filter (85 mm)

Source: Brunnemann and Hoffmann, 1974a and 1974b.

SECRET

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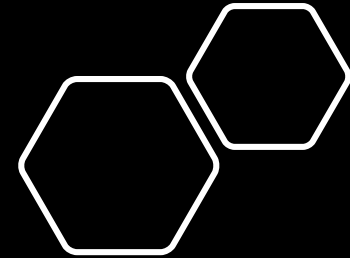
IMPLICATIONS AND ACTIVITIES ARISING FROM CORRELATION

OF SMOKE pH WITH NICOTINE IMPACT, OTHER

SMOKE QUALITIES, AND CIGARETTE SALES

dxp ✓

CET to WDS



III. SMOKE pH AND "FREE" NICOTINE

In essence, a cigarette is a system for delivery of nicotine to the smoker in attractive, useful form. At "normal" smoke pH, at or below about 6.0, essentially all of the smoke nicotine is chemically combined with acidic substances, hence is non-volatile and relatively slowly absorbed by the smoker. As the smoke pH increases above about 6.0, an increasing proportion of the total smoke nicotine occurs in "free" form, which is volatile, rapidly absorbed by the smoker, and believed to be instantly perceived as nicotine "kick". Chart VIII shows how proportion of "free" nicotine increases as pH goes higher.

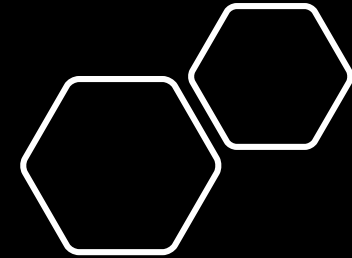
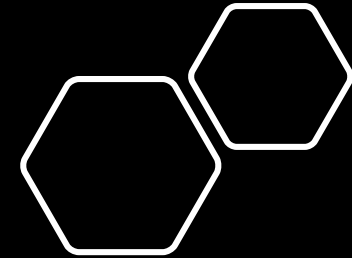
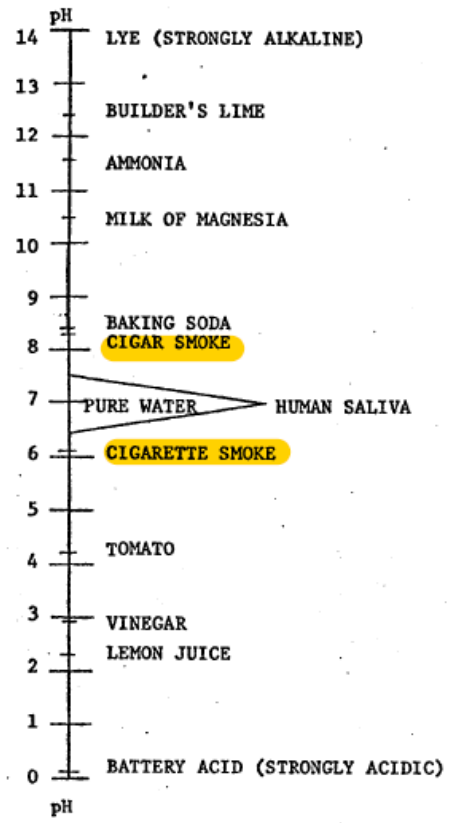


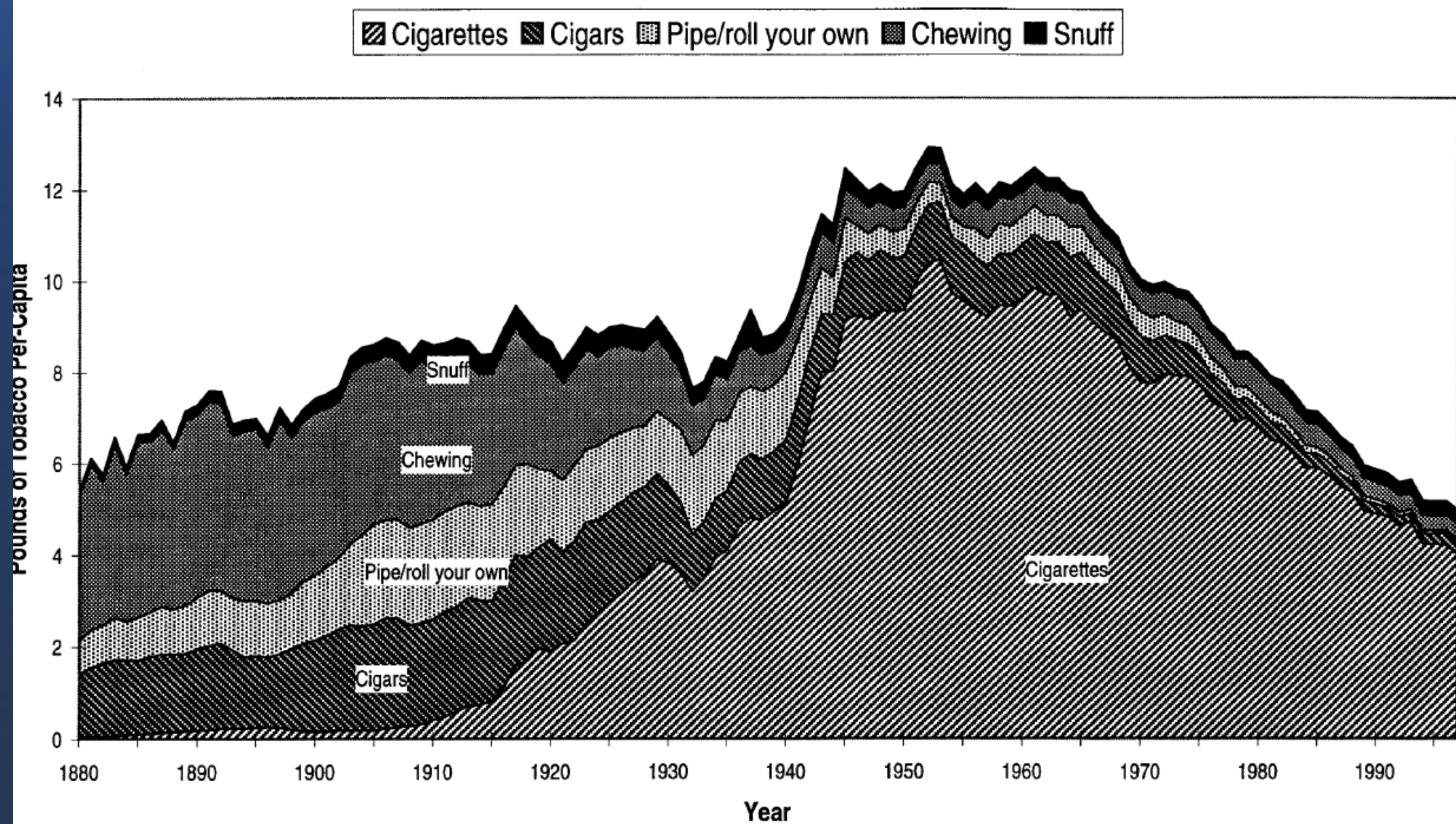
CHART I
pH CONCEPT AND SCALE

DEFINITION: pH IS A MEANS FOR EXPRESSING, ON A 0-14 SCALE, THE DEGREE
OF ACIDITY OR ALKALINITY OF A SYSTEM.

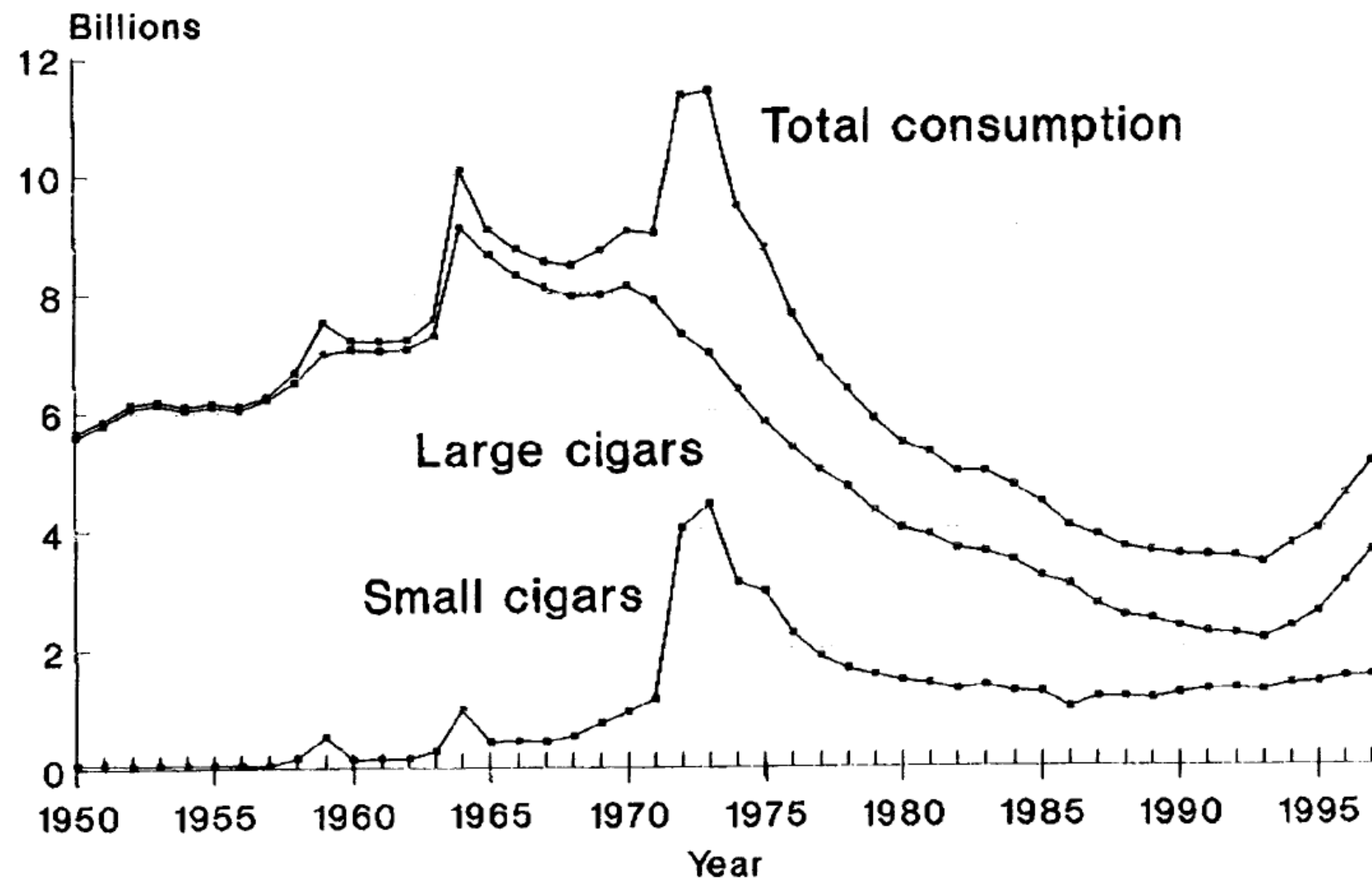


Cigar prevalence and patterns of use

Per-capita consumption of different forms of tobacco in the US 1880-1997



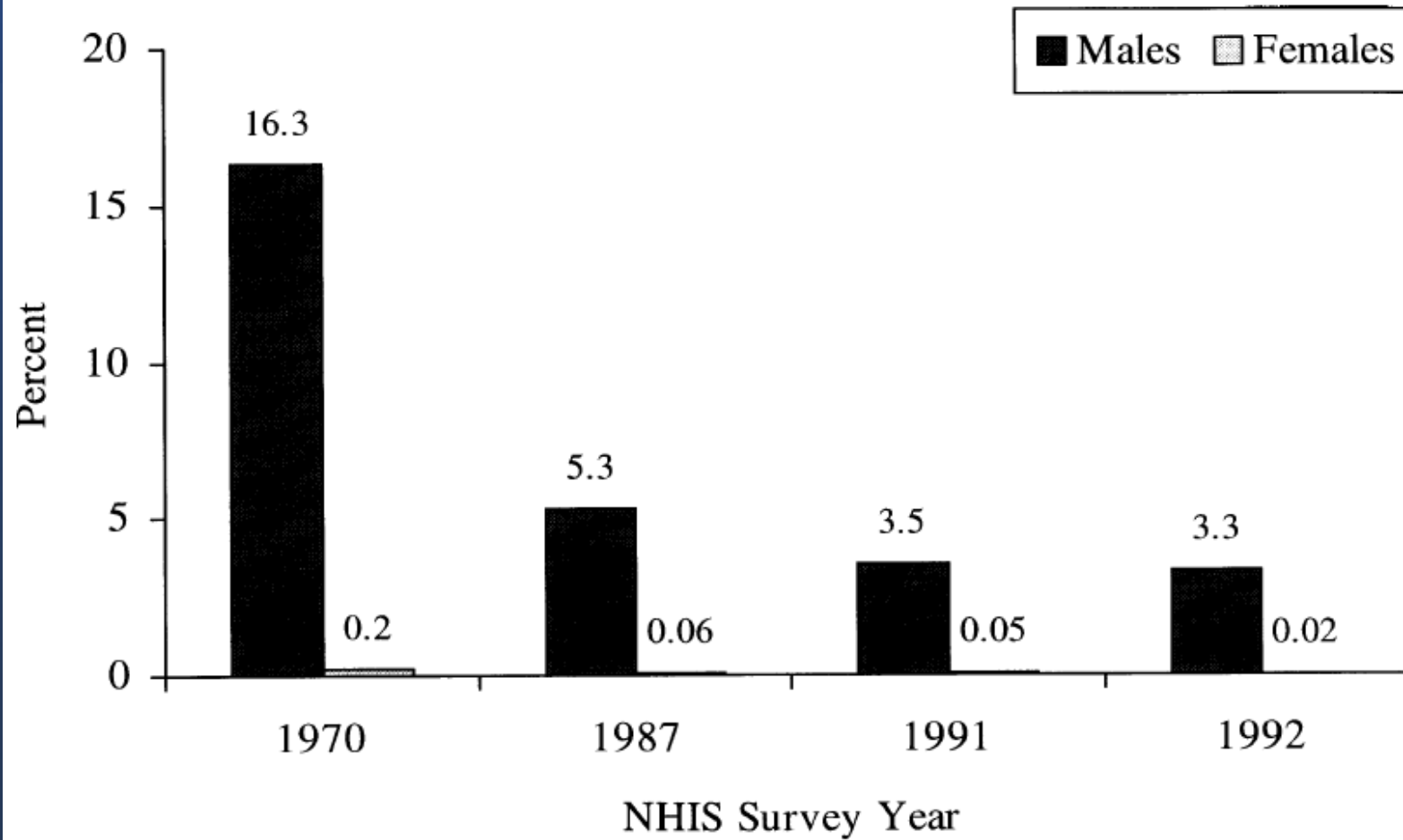
U.S. estimated consumption of cigars 1950 to 1997



1997 figure subject to revision

Figure 3

Percentage of adults (18+ years of age) who currently use cigars* by sex,
National Health Interview Surveys, 1970, 1987, 1991, and 1992



* Current use identified those persons who had smoked 50+ cigars in their lifetime who currently smoke cigars



Original investigation

US Adult Cigar Smoking Patterns, Purchasing Behaviors, and Reasons for Use According to Cigar Type: Findings From the Population Assessment of Tobacco and Health (PATH) Study, 2013–2014

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Elizabeth Lambert MSc⁴, Jennifer L. Pearson PhD⁵,
Eva Sharma PhD⁶, Cindy Tworek PhD¹, Andrew J. Hyland PhD³,
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Cigar smoking
patterns varied
by cigar type

Table 1. Demographic Characteristics of Adult Current Established Traditional Cigar (Premium, Nonpremium), Cigarillo, Filtered Cigar, and Cigarette Smokers, PATH Study Wave 1, 2013–2014

	Premium cigars ^a (<i>n</i> = 377)	Nonpremium cigars ^a (<i>n</i> = 489)	Cigarillos (<i>n</i> = 1186)	Filtered cigars (FCs) (<i>n</i> = 551)	Cigarettes (<i>n</i> = 11 402)
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
Overall adult prevalence	0.7 (0.6–0.7)	0.8 (0.7–0.8)	1.7 (1.5–1.8)	0.9 (0.8–1.0)	18.1 (17.6–18.6)
Sex					
Male	95.8 (93.5–98.0)	83.9 (80.2–87.6)	72.7 (70.1–75.4)	68.6 (64.6–72.7)	55.3 (54.2–56.4)
Female	4.2 (2.0–6.5)	16.1 (12.4–19.8)	27.3 (24.6–29.9)	31.4 (27.3–35.4)	44.7 (43.6–45.8)
Age group (years) ^b					
18–24	17.5 (12.3–22.6)	22.1 (18.3–25.9)	35.9 (32.5–39.3)	18.0 (14.2–21.7)	14.1 (13.3–14.8)
25–34	25.5 (20.0–31.0)	24.7 (20.3–29.2)	28.6 (25.2–31.9)	16.0 (12.4–19.6)	24.3 (23.4–25.1)
35–54	34.4 (29.3–39.6)	32.9 (27.7–38.2)	27.1 (23.9–30.2)	39.8 (35.3–44.3)	39.0 (38.0–40.1)
55+	22.6 (17.6–27.6)	20.2 (15.8–24.6)	8.5 (6.6–10.4)	26.3 (22.0–30.5)	22.7 (21.8–23.5)
Race/ethnicity					
White, non-Hispanic	77.2 (71.9–82.4)	58.2 (53.3–63.2)	41.7 (38.3–45.0)	66.2 (61.5–70.9)	69.8 (68.6–71.0)
Black/AA, non-Hispanic	5.3 (2.3–8.3)	24.2 (19.5–28.9)	35.7 (32.1–39.2)	15.7 (11.0–20.4)	12.9 (12.2–13.7)
Other or multi-race, non-Hispanic	6.6 (3.6–9.6)	5.9 (3.5–8.2)	6.6 (5.3–7.9)	6.6 (4.3–8.9)	6.0 (5.5–6.5)
Hispanic	10.9 (7.3–14.6)	11.7 (8.6–14.8)	16.0 (14.0–18.0)	11.5 (8.7–14.3)	11.2 (10.6–11.9)
Education					
Less than high school diploma	5.4 (3.1–7.8)	14.2 (10.7–17.8)	16.0 (13.9–18.1)	17.7 (14.5–21.0)	15.9 (15.2–16.7)
GED	4.6 (2.3–6.8)	12.2 (9.3–15.1)	11.7 (10.0–13.5)	11.7 (8.8–14.6)	10.8 (10.1–11.6)
High school diploma	16.2 (12.0–20.4)	28.4 (24.2–32.5)	26.3 (23.2–29.3)	29.8 (25.3–34.3)	28.1 (26.9–29.4)
Some college/associate degree	34.9 (29.6–40.3)	38.5 (34.0–43.0)	38.2 (35.0–41.4)	33.0 (29.2–36.9)	33.8 (32.7–35.0)
Completed college or more	38.9 (33.2–44.5)	6.7 (4.3–9.2)	7.8 (6.1–9.6)	7.8 (5.1–10.4)	11.2 (10.6–11.9)
Household poverty					
<100% FPL	14.2 (10.7–17.7)	41.2 (36.4–46.0)	47.1 (43.6–50.5)	44.9 (40.1–49.8)	34.2 (32.9–35.4)
100–<200% FPL	15.4 (11.4–19.3)	22.2 (18.6–25.9)	23.6 (20.9–26.3)	27.4 (23.1–31.8)	25.1 (24.2–26.0)
≥200% FPL	62.7 (57.3–68.0)	29.0 (24.3–33.6)	22.6 (19.1–26.0)	18.4 (15.2–21.7)	32.3 (30.9–33.6)
Missing FPL	7.8 (4.7–10.8)	7.6 (5.1–10.1)	6.8 (4.9–8.7)	9.2 (6.2–12.2)	8.5 (7.8–9.2)

CI, Wald confidence interval; AA, African-American; GED, General Education Development certificate; FPL, federal poverty level.

^aAmong traditional established cigar smokers 3% (*n* = 24) could not be assigned as either a premium or nonpremium smoker after assessing responses to usual brand (Supplementary Table A).

^bWhen respondent age was missing, imputed values for age were used as described in the PATH Restricted Use File User Guide (United States Department of Health and Human Services, 2017).

Table 2. Smoking Patterns Among Adult Current Established Traditional Cigar (Premium, Nonpremium), Cigarillo, Filtered Cigar, and Cigarette Smokers, PATH Study Wave 1, 2013–2014

	Premium cigars	Nonpremium cigars	Cigarillos	Filtered cigars (FCs)	Cigarettes ^a
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
Lifetime cigars smoked					
<1–10 cigars	4.9 (2.8–7.1)	16.8 (13.5–20.1)	7.8 (6.2–9.4)	8.1 (5.3–10.8)	NA
11–50 cigars	23.4 (18.3–28.6)	21.2 (17.4–25.1)	20.9 (18.4–23.4)	21.1 (17.0–25.1)	NA
51 or more cigars	71.6 (66.5–76.8)	62.0 (57.9–66.0)	71.3 (68.6–74.1)	70.9 (67.0–74.8)	NA
Now smoke product every day	6.7 (4.1–9.3)	25.3 (21.3–29.3)	22.0 (19.7–24.2)	37.3 (31.9–42.7)	79.5 (78.5–80.6)
Days smoked in past 30 days ^b (median, IQR)	1.7 (0.0–4.8)	9.2 (1.5–28.5)	7.5 (1.3–29.1)	14.0 (0.8–28.8)	29.4 (29.1–29.7)
Number of cigars or cigarettes/day ^c (median, IQR)	0.1 (0.0–0.2)	0.4 (0.1–2.0)	0.3 (0.1–2.0)	1.6 (0.1–9.5)	10.1 (5.0–19.6)
Age (years) at first regular use ^d (median, IQR)	24.5 (18.8–32.6)	19.5 (16.6–29.6)	18.0 (15.9–23.3)	26.8 (17.8–44.3)	16.6 (14.7–18.7)
Duration (years) since first regular ^d use (median, IQR)	8.7 (3.4–16.8)	10.9 (4.3–18.0)	7.3 (3.3–13.9)	5.4 (1.7–14.4)	21.8 (10.8–35.3)
Currently use ≥1 other cigar type(s) ^{e,f}	16.8 (12.4–21.3)	64.0 (58.7–69.3)	37.7 (34.1–41.2)	41.6 (36.3–46.8)	9.0 (8.4–9.7)
Currently use ≥1 noncigar, nongarette product(s) ^g	33.7 (29.5–38.0)	31.4 (26.7–36.1)	28.8 (26.0–31.6)	27.1 (23.1–31.1)	15.8 (15.0–16.6)
Cigarette smoking status ^h					
Current established smoker	29.9 (25.5–34.3)	59.5 (54.6–64.4)	58.0 (54.4–61.6)	66.0 (61.3–70.7)	NA
Former established smoker	28.3 (23.0–33.6)	15.6 (11.9–19.3)	10.6 (8.4–12.8)	10.6 (7.5–13.8)	NA
Never smoker	41.8 (36.9–46.7)	24.9 (21.0–28.9)	31.4 (28.2–34.6)	23.4 (18.9–27.8)	NA

Smoking Patterns— Quantity

Among those cigar smokers who reported that they had smoked cigars regularly in 1987, 56.4 percent (95 percent CI, 54.3-58.6 percent) reported smoking 1-2 cigars per day; 26.4 percent (95 percent CI, 24.5-28.3 percent) reported smoking between 3 and 5 cigars per day, and 12.7 percent (95 percent CI, 11.3-14.0 percent) reported smoking 6 or more cigars per day. Unfortunately, most recent surveys have not collected information on quantity of cigars smoked making it impossible to assess trends on this important exposure variable.

Table 1

Number of subjects in smoking groups in CPS-I Study, white male subjects

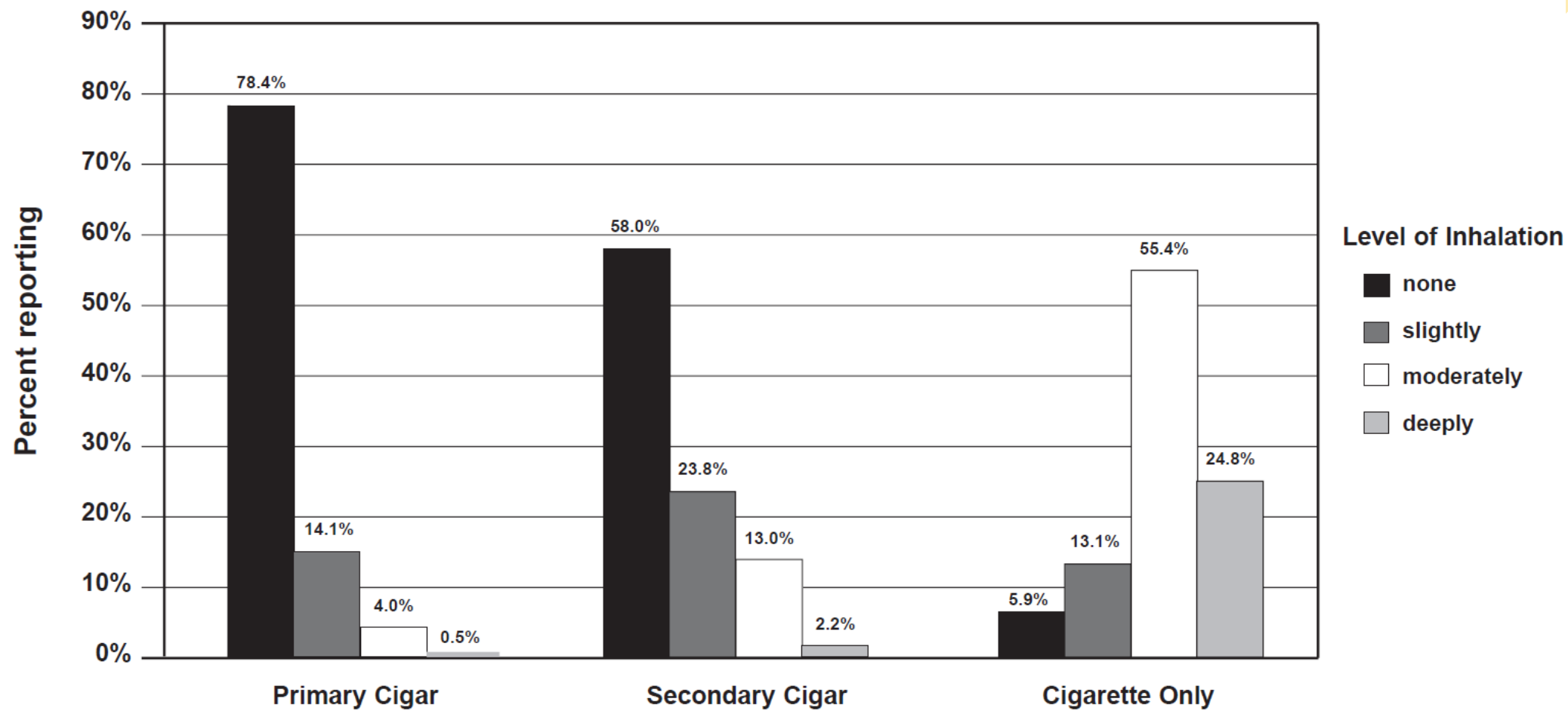
Smoking Group	N
Neversmokers	92,307
Current Primary Cigar Smokers	15,191
Current Primary Pipe Smokers	9,623
Current Cigarette Only Smoker	174,997
Current Cigar, Pipe & Cigarette Smokers	3,471
Current Mixed Cigar & Pipe Smokers	6,767
Current Mixed Cigar & Cigarette Smokers	10,294
Current Mixed Pipe & Cigarette Smokers	11,470
Current Secondary Cigar Smokers	7,404
Current Secondary Pipe Smokers	7,033
Former Primary Cigar Smokers	5,446
Former Primary Pipe Smokers	3,549
Former Cigarette Only Smokers	42,225
Former Mixed Cigar & Cigarette	4,649
Former Mixed Pipe & Cigarette	10,724
Former Mixed Cigar & Pipe	3,952
Former Cigar, Pipe & Cigarette Smokers	6,921
Total White Male Subjects	442,455



A **primary cigar smoker** is a smoker who smokes only cigars and who has never smoked cigarettes or a pipe; these subjects give us the purest estimation of the effect of cigar smoking. A **secondary cigar smoker** currently smokes only cigars, but previously smoked cigarettes and/or a pipe, either in combination with cigars or exclusively. Because of earlier use of other tobaccos, the health effects of cigar smoking derived from secondary cigar smokers may be affected by the earlier pattern of smoking.



Levels of inhalation from CPS-1 study



Cigar health effects

All cause mortality and cigar smoking: mortality ratios by type of smoking (males only, except as noted)

Prospective Studies	Sample Size*	Never-Smoker	Rate Ratio (RR)		
			Cigar	Mixed, Cigar & Cigarette	Cigarette
Hammond & Horn (1958)	187,783	1.0	1.22	1.36	1.68
Doll & Peto (1976)	41,000	1.0	1.09**	1.20	1.64
Best (1966)	78,000	1.0	1.06	1.22	1.54
Kahn (1966)	293,000	1.0	1.10	1.51	1.84
Hammond (1966)	440,559	1.0	1.25	1.57	1.86
Carstensen (1987)	25,129/1,256/131	1.0	1.39 (1.16-1.65)		1.45 (1.36-1.54)
Sandler (1989)	46,926/1,671/504	1.0	1.20** (1.07-1.35)		1.41 (1.29-1.55)
Lange (1992) male	6,511/808/326	1.0	1.6 (1.3-2.0)		1.9 (1.6-2.4) plain 1.8 (1.4-2.3) filter
Lange (1992) female	7,703/770/185	1.0	1.8 (1.4-2.2)		2.4 (2.0-2.9) plain 1.7 (1.4-2.1) filter
Ben-Shlomo (1994) secondary	19,018/658/132	1.0	1.20 (1.01-1.43)		2.00 (1.92-2.07)
Wald & Watt (1997) primary	21,520/1,309/113	1.0	1.23** (0.99-1.75)		2.26 (1.97-2.58)
secondary	21,520/522/69		1.33** (1.03-1.73)		
CPS-I primary	442,455/15,072/3,754	1.0	1.08 (1.05-1.12)	1.47 (1.41-1.53)	1.66 (1.64-1.68)
secondary	442,455/7,349/1,462		1.12 (1.06-1.18)		

* for prospective studies reviewed, the number of cigar smokers and number of deaths in this group are also given.

**cigar and pipe combined

Rate ratio of cancer of the lung and bronchus by level of cigar/cigarettes per day

Daily Use	Age (years)				Combined (95% CI)		Deaths*
	35-49	50-64	65-79	80+			
PRIMARY CIGAR							73/191
1-2		0.83	1.27	0.66	0.9	(0.54,1.66)	
3-4		2.35	3.02	1.02	2.36	(1.49,3.54)	
5 +	13.71	3.86	3.19	2.10	3.40	(2.34,4.77)	
Combined	4.04	2.24	2.34	1.09	2.10	(1.63,2.65)	
SECONDARY CIGAR							83/191
1-2	7.86	2.18	3.20	4.16	3.18	(1.78,5.24)	
3-4		6.78	10.84	6.54	8.52	(5.87,11.97)	
5 +		11.92	5.97		7.21	(5.02,10.03)	
Combined	2.93	6.98	6.54	4.98	6.29	(5.01,7.79)	
CIGAR & CIGARETTE							182/191
1-19	5.35	6.92	8.22	7.57	7.64	(5.87,9.77)	
20	12.03	14.31	17.24	19.69	16.73	(13.24,20.85)	
21 +	8.56	19.18	15.46		13.37	(9.55,18.21)	
Combined	8.51	11.81	11.78	9.69	11.31	(9.72,13.07)	
CIGARETTE ONLY							3,166/191
1-19	5.17	7.17	8.38	2.39	6.75	(6.18,7.37)	
20	12.51	13.03	14.72	8.15	12.86	(12.14,13.60)	
21 +	13.09	19.48	23.36	14.62	20.23	(19.20,21.30)	
Combined	11.18	13.97	14.28	5.61	12.39	(11.97,12.83)	

Based on data from CPS-I Study. Age-standardized rate ratio for smoking group compared to neversmokers.

* Number of deaths in subject group/neversmokers group.

Rate ratio of all-cause mortality by level of cigar/cigarettes per day

Daily Use	Age (years)				Combined (95% CI)	Deaths*
	35-49	50-64	65-79	80+		
PRIMARY CIGAR						3,698/19667
1-2	0.72	1.10	1.02	0.97	1.02 (0.97, 1.07)	
3-4	1.98	1.18	1.10	0.95	1.08 (1.02, 1.15)	
5 +	1.64	1.38	1.17	0.98	1.17 (1.10, 1.24)	
Combined	1.32	1.21	1.09	0.97	1.08 (1.05, 1.12)	
SECONDARY CIGAR						1,452/19667
1-2	0.94	1.08	1.05	0.93	1.02 (0.93, 1.12)	
3-4	1.37	1.57	1.26	0.74	1.17 (1.07, 1.28)	
5 +	1.66	1.66	1.16	0.86	1.18 (1.08, 1.29)	
Combined	1.29	1.43	1.15	0.84	1.12 (1.06, 1.18)	
CIGAR & CIGARETTE						2,225/19667
1-19	1.65	1.68	1.29	1.06	1.31 (1.23, 1.39)	
20	2.73	2.09	1.55	1.49	1.66 (1.55, 1.78)	
21 +	2.73	2.15	1.99	1.11	1.78 (1.61, 1.97)	
Combined	2.30	1.91	1.44	1.15	1.47 (1.41, 1.53)	
CIGARETTE ONLY						38,220/19667
1-19	1.92	1.73	1.50	1.16	1.46 (1.43, 1.49)	
20	2.45	2.15	1.70	1.29	1.69 (1.66, 1.71)	
21 +	2.81	2.48	1.95	1.26	1.88 (1.85, 1.91)	
Combined	2.49	2.17	1.68	1.21	1.66 (1.64, 1.68)	

Based on data from CPS-I Study. Age-standardized rate ratio for smoking group compared to never smokers.

* Number of deaths in subject group/never smoker group.

Systematic review of cigar smoking and all cause and smoking related mortality

Cindy M Chang^{*}, Catherine G Corey, Brian L Rostron and Benjamin J Apelberg

The information in this article is not a formal dissemination of information by the FDA and does not represent agency position or policy. The contents are the responsibility of the authors alone.

Abstract

Background: Cigars are a growing public health concern, given the changes in cigar use patterns in the US and elsewhere since the 1960s. We conducted a systematic review of published studies on current cigar smoking and all-cause and cause-specific mortality risks to inform potential regulatory approaches and future research that would strengthen the body of evidence.

Methods: Using 3 different databases and handsearching, we identified epidemiological studies published prior to June 2014 that examined the association between cigar smoking and all-cause mortality and smoking-related mortality. Detailed study characteristics as well as association-level characteristics, including effect estimates and 95% confidence intervals, were abstracted or calculated from each selected study.

Results: A total of 22 studies from 16 different prospective cohorts were identified. Primary cigar smoking (current, exclusive cigar smoking with no history of previous cigarette or pipe smoking) was associated with all cause-mortality, oral cancer, esophageal cancer, pancreatic cancer, laryngeal cancer, lung cancer, coronary heart disease (CHD), and aortic aneurysm. Strong dose trends by cigars per day and inhalation level for primary cigar smoking were observed for oral, esophageal, laryngeal, and lung cancers. Among primary cigar smokers reporting no inhalation, relative mortality risk was still highly elevated for oral, esophageal, and laryngeal cancers.

Conclusions: In summary, cigar smoking carries many of the same health risks as cigarette smoking. Mortality risks from cigar smoking vary by level of exposure as measured by cigars per day and inhalation level and can be as high as or exceed those of cigarette smoking. The body of evidence would be strengthened by future studies that focus on the health effects of primary cigar smoking and incorporate more contemporary and diverse study populations to better reflect the current patterns of cigar use in the US. Ideally, these studies would also collect detailed information on cigar type, exposure level, and biomarkers of exposure and potential harm.

Keywords: Cigars, Mortality, Systematic review

Background

The 2009 Family Smoking Prevention and Tobacco Control Act (FSPTCA) provided the US Food and Drug Administration (FDA) with regulatory authority over the manufacture, distribution, and marketing of cigarettes, roll-your-own tobacco, and smokeless tobacco. In April 2014, the FDA issued a proposed rule to assert jurisdiction over

growing public health concern [1]. The US Centers for Disease Control and Prevention (CDC) has reported that from 2000 to 2011, cigar consumption more than doubled in the US from slightly less than 6.2 billion sticks in 2000 to more than 13.7 billion in 2011 [2]. Cigarette consumption, on the other hand, declined by 33% in the US during this period. In the US, the current cigar product landscape varies widely

Cigars carry the same risk as cigarettes

Regulation of Cigars

Federal policies on tobacco products

	Cigarettes	Smokeless Tobacco	Cigars
1. Labeling Requirements	Package and Print Ads Four Rotational Health Warnings	Package and Print Ads Three Rotational Health Warnings	None
2. Advertising Restrictions	Prohibits Advertising on TV and Radio	Prohibits Advertising on TV and Radio	Prohibits Little Cigar Advertising on TV and Radio
3. Report to Congress	Biennial	Biennial	None
4. Nicotine/Toxic Constituent Disclosure	Nicotine, Tar, CO	Nicotine	None
5. Additive Reporting	Confidential List to DHHS	Confidential List to DHHS	None
6. Regulation as a Drug Delivery Device	FDA	FDA	None
7. Youth Access	Synar Amendment FDA 21CFR801	Synar Amendment FDA 21CFR801	Synar Amendment
8. Taxation	\$0.24 Per Pack of 20	\$0.027 per container (1.2 oz)	0.00125 small cigar 12.75% of wholesale price of large cigar but not more than \$0.03 a cigar

State and local policies on tobacco products

	Cigarettes	Smokeless Tobacco	Cigars
1. Labeling Requirements	Preempted	Preempted	California
2. Advertising Restriction	Preempted	Preempted	None
3. Nicotine Disclosure	MA, TX	MA, TX	TX
4. Nicotine/Toxic Constituent Reporting	MA, TX, MN	MA, TX, MN	TX, MN
5. Youth Access			
6. Taxation	50 States (average \$0.317 per pack or 37.8% of wholesale price)	42 States (40 state average of 25.3% of wholesale price)	41 States (36 state tax average 21.7% of wholesale price)

Wholesale price and federal tax per pound of various tobacco products

Products	Wholesale Price per Pound of Tobacco	Federal Tax per Pound of Tobacco	Tax as a % of Wholesale Price
Cigarettes	\$19.05	\$3.432	28.6%
Small Cigar	\$15.87	\$0.51	3.2%
Tiparillo	\$19.66	\$1.95	12.75%
Manufactured Cigar	\$19.21	\$1.59	8.3%
Premium Cigar	\$34.09	\$0.68	2%

State tax rates on cigars

State	Tax rates	States with no tax rates on cigars
Alabama	Cigars, retailing for: (a) 3 1/2 cents each or less, \$1.50 per thousand; (b) More than 3 1/2 and not more than 5 cents each, \$3.00 per thousand; (c) More than 5 and not more than 8 cents each, \$4.50 per thousand; (d) More than 8 and not more than 10 cents each, \$7.50 per thousand; (e) More than 10 and not more than 20 cents each, \$15 per thousand; (f) More than 20 cents each, \$20.25 per thousand. Little Cigars: 2 cents for each 10 or fraction thereof.	District of Columbia Florida Kentucky Maryland Pennsylvania Virginia West Virginia Wyoming
Alaska	75% of wholesale price.	
Arizona	Cigars retailing for: (a) 5 cents each or less, 6.4 cents for each 3 cigars; (b) More than 5 cents, 6.4 cents each Little cigars: 12.9 cents for each 20 or fraction thereof.	
Arkansas	23% of manufacturers' invoice price.	
California	29.37% of wholesale price effective 7/1/97-6/30/98.*	
Colorado	20% of manufacturers' price.	
Connecticut	20% of wholesale price – all OTP.	
Delaware	15% of wholesale price.	
Georgia	Little cigars: weighing not more than 3 pounds per 1,000: 2 mills each. All other cigars: 13% wholesale price.	
Hawaii	40% of wholesale price.	
Idaho	40% of wholesale sales price.	
Illinois	18% of wholesale price.	
Indiana	15% of wholesale price.	
Iowa	22% effective 6/1/91 of wholesale sales price.	
Kansas	15% of original invoice price from the manufacturer to the wholesaler.	
Louisiana	Cigars with a list price of \$120 per thousand or less, tax is 8% of net invoice price; Cigars with a list price of over \$120 per thousand, tax is 20% of net invoice price.	
Maine	16% of wholesale sales price.	
Massachusetts	15% of wholesale price.	
Michigan	16% of wholesale price.	
Minnesota	35% of wholesale price.	
Mississippi	15% of manufacturers' list price.	

State	Tax rates	States with no tax rates on cigars
Missouri	10% of manufacturers' price.	
Montana	12.5% of wholesale price.	
Nebraska	15% of wholesale price.	
Nevada	30% of wholesale price.	
New Jersey	48% of wholesale price.	
New Mexico	25% of product value.	
New York	20% of wholesale price – all OTP.	
North Carolina	2% of wholesale price.	
North Dakota	28% of wholesale price.	
Ohio	17% of wholesale price.	
Oklahoma	Cigars, cheroots, stogies, etc., weighing more than 3 pounds per thousand, retailing for: (a) 4 cents each or less, \$10 per thousand; (b) More than 4 cents each, \$30 per thousand; Little cigars: 2 cents for each 8 or fraction thereof.	
South Dakota	10% of wholesale price.	
Tennessee	6% of wholesale price.	
Texas	Tax on cigars is based on weight per 1,000 and retail selling price. (a) Cigars weighing not more than 3 pounds per 1,000, 1 cent for each 10 cigars; (b) Cigars weighing more than 3 pounds per 1,000 and retailing for not more than 3.3 cents each, \$7.50 per 1,000; (c) Cigars of all descriptions weighing more than 3 pounds per 1,000 and retailing for over 3.3 cents each, containing no substantial amount of nontobacco ingredients, \$11.00 per \$1,000; (d) Cigars of all description weighing more than 3 pounds per 1,000 and retailing for over 3.3 cents each, containing a substantial amount of nontobacco ingredients, \$15.00 per \$1,000.	
Utah	35% of manufacturers' selling price exclusive of any trade discount, special discount, or deal.	
Vermont	41% of distributors' price.	
Washington	74.9% of wholesale price.	
Wisconsin	20% of wholesale price.	

Source: Tobacco Institute, Washington, D.C.

FTC Announces Settlements Requiring Disclosure of Cigar Health Risks

June 26, 2000

Landmark Agreements Require Strong Warnings On Both Packaging and Advertisements

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FOR RELEASE

The seven largest U.S. cigar companies have agreed to include warnings about significant adverse health risks of cigar use in their advertising and packaging in a settlement announced today by Federal Trade Commission Chairman Robert Pitofsky at a joint press conference with Surgeon General David Satcher and California Attorney General Bill Lockyer. According to FTC allegations, the failure of cigar companies to disclose the health risks of cigar smoking has been deceptive and unfair, in violation of the FTC Act.

The landmark settlements represent the first national requirements for health warnings on cigar products, and follow a report by the National Cancer Institute detailing the health risks of cigar smoking. The Commission efforts were assisted by the Office of the Surgeon General of the United States and the California Attorney General's Office.

Chairman Pitofsky said: "Cigar smoking is considered by many consumers to be a harmless alternative to cigarette smoking. According to the Surgeon General and scientific evidence to the contrary, they are dead wrong. These



EVENTS
CALENDAR

Related Cases

[Consolidated Cigar Corporation](#)

[Swisher International, Inc.](#)

[General Cigar Holdings, Inc.](#)

[Havatampa, Inc.](#)

[John Middleton, Inc.](#)

[Lane Limited](#)

[Swedish Match North America, Inc.](#)

Under the agreements, which the Commission has accepted for public comment, virtually every cigar package and advertisement will be required to clearly and conspicuously display one of the following warnings on a rotating basis:

SURGEON GENERAL WARNING: Cigar Smoking Can Cause Cancers Of The Mouth And Throat, Even If You Do Not Inhale.

SURGEON GENERAL WARNING: Cigar Smoking Can Cause Lung Cancer And Heart Disease.

SURGEON GENERAL WARNING: Tobacco Use Increases The Risk Of Infertility, Stillbirth And Low Birth Weight.

SURGEON GENERAL WARNING: Cigars Are Not A Safe Alternative To Cigarettes.

SURGEON GENERAL WARNING: Tobacco Smoke Increases The Risk Of Lung Cancer And Heart Disease, Even In Nonsmokers.

Conclusions

Some in the cigar trade have made the claim that cigar smokers experience little or no increased disease risk. This claim is not supported by the available scientific evidence and misleads cigar smokers to believe that cigar smoke is less harmful than cigarette smoke. We believe an accurate statement is that **the risks of tobacco smoke exposure are similar for all sources of tobacco smoke, and the magnitude of the risks experienced by cigar smokers is proportionate to the nature and intensity of their exposure.**

Conclusions

Differences in the intensity of tobacco smoke exposure between cigarette and cigar smokers result from differences in the inhalation of the smoke and differences in the proportion of smokers who smoke every day. While almost all cigarette smokers inhale, the majority of cigar smokers do not. This may be due to differences in the pH of the smoke produced by these two products. Cigar smoke contains a substantial fraction of its nicotine as free nicotine, which can be readily absorbed across the oral mucosa. In contrast, cigarette smoke is more acidic, and the protonated form of nicotine it contains is much less readily absorbed by the oral mucosa. As a result, cigarette smokers must inhale to get their desired quantity of nicotine, whereas cigar smokers can ingest sufficient quantities of nicotine without inhaling. This reduction in inhalation is one of the reasons for the difference in disease risks between cigarette and cigar smokers.

Conclusions

However, even those who do not inhale have disease risks higher than those who have never smoked any tobacco product. As this monograph clearly demonstrates, regular cigar smokers who have never smoked cigarettes, even those who do not inhale, experience significantly elevated risks for cancers of the larynx, oral cavity (including pharynx), and esophagus.

Another reason for a difference in risk between cigarette and cigar smokers is a difference in the frequency with which the two products are used. Most cigarette smokers smoke every day. In contrast, as many as three-quarters of cigar smokers smoke only occasionally, and some may only smoke a few cigars per year. This difference in frequency of exposure translates into lower disease risks.

Conclusions

We do not know the risk of addiction posed by cigar smoking. But the difference in smoking patterns suggests a potential difference in addictive properties between cigarettes and cigars.

Conclusions

Of special concern are the risks for those individuals who are mixed smokers (current smokers of both cigars and cigarettes), or who switch to smoking cigars from smoking cigarettes. A sizable fraction of today's cigar smokers are current or past cigarette smokers. These individuals are much more likely to continue to inhale when they switch to smoking cigars, and may therefore remain at much higher risk for all the major smoking related diseases than are cigar smokers who have never smoked cigarettes.

Lots of action in
the non-premium
cigar sector

Cigar marketers in the US



Mergers and acquisitions

- John Middleton Cigars purchased by Altria in 2007
- Altadis USA purchased Consolidated Cigars in 2000 and Havatampa
- Altadis USA purchased a 50% share of Habanos SA, a Cuban state cigar company
- Altadis purchased JR Cigars Inc, one of the largest cigar retailers in the US in 2003
- In 2008 Altadis purchased Imperial Tobacco Group (ITG)
- In 2019 ITG announced it was selling of its \$2.6 billion interest in premium cigars