

Table 1 Mean (SD) values* of tar, nicotine, carbon monoxide (CO) smoke yields, and ventilation of cigarettes purchased in 36 countries (1999–2000)

Brand name†	WHO Region	Country of purchase	tar(mg/cig)	Nicotine (mg/cig)	CO (mg/cig)	%Filter ventilation
High Society	AFRO	Nigeria	11.1 (0.8)	0.5 (0.04)	9.4 (0.6)	4.8 (0.2)
Marlboro (US)	AFRO	Kenya	14.0 (0.4)	1.1 (0.09)	10.4 (0.2)	11.1 (1.2)
Marlboro (US)	AFRO	Nigeria	12.6 (0.0)	0.9 (0.13)	9.8 (0.2)	12.3 (0.8)
Sportsman	AFRO	Kenya	13.4 (0.4)	1.0 (0.13)	10.6 (0.2)	4.4 (1.6)
Peter Stuyvesant	AFRO	South Africa	13.0 (0.2)	1.3 (0.15)	9.6 (0.2)	4.4 (0.9)
Marlboro (L)	AMRO	Mexico	15.8 (1.8)	0.89 (0.13)	13.9 (0.3)	0.8 (0.3)
Broadway	AMRO	Mexico	14.9 (0.7)	0.89 (0.37)	13.4 (1.8)	0.5 (0.1)
Boots	AMRO	Mexico	14.5 (0.8)	0.72 (0.16)	12.9 (0.8)	0.1 (0.1)
Derby	AMRO	Brazil	12.1 (0.6)	0.92 (0.15)	11.6 (0.5)	22.3 (1.8)
Hollywood	AMRO	Brazil	11.2 (0.2)	0.89 (0.03)	12.6 (0.5)	17.6 (3.6)
Free, low tar and nicotine	AMRO	Brazil	7.3 (2.3)	0.59 (0.01)	7.6 (0.2)	37.1 (3.9)
Marlboro (L)	AMRO	Brazil	12.9 (0.9)	1.00 (0.20)	12.5 (1.2)	9.7 (0.7)
Doral	AMRO	USA	12.6 (1.0)	0.9 (0.11)	10.8 (0.7)	16.4 (1.2)
Marlboro (US)	AMRO	USA	13.4 (0.4)	1.1 (0.13)	9.7 (0.5)	15.4 (0.9)
Marlboro (US)	EMRO	Yemen	14.7 (1.3)	0.83 (0.05)	12.1 (2.6)	9.0 (1.2)
Kamaran	EMRO	Yemen	11.5 (0.7)	0.89 (0.01)	11.7 (2.7)	2.8 (0.3)
Marlboro (US)	EMRO	Jordan	13.4 (1.0)	0.94 (0.14)	12.9 (0.8)	15.8 (2.9)
Palace Lights	EMRO	Jordan	8.9 (1.4)	0.67 (0.11)	7.0 (0.2)	36.5 (6.6)
Marlboro (US)	EMRO	Pakistan	13.5 (1.1)	0.89 (0.06)	10.9 (1.1)	11.9 (0.6)
John Player	EMRO	Pakistan	20.5 (0.8)	1.63 (0.09)	14.8 (1.2)	0.2 (0.2)

Brand name†	WHO Region	Country of purchase	tar(mg/cig)	Nicotine (mg/cig)	CO (mg/cig)	%Filter ventilation
Marlboro (US)	ERMO	Lebanon	11.3 (1.3)	0.87 (0.10)	11.0 (0.3)	21.6 (2.8)
Marlboro (L)	ERMO	Egypt	16.1 (0.2)	0.77 (0.04)	13.9 (0.1)	9.5 (1.8)
Cleopatra	ERMO	Egypt	17.3 (4.1)	0.92 (0.02)	15.4 (0.6)	3.8 (3.7)
Marlboro (US)	ERMO	Cyprus	13.5 (1.2)	0.94 (0.11)	13.4 (0.4)	8.5 (1.8)
Prima, non-filtered	EURO	Lithuania	15.0 (0.1)	0.96 (0.07)	8.3 (0.0)	NA
Marlboro (L)	EURO	Lithuania	13.9 (0.1)	0.58 (0.03)	12.2 (0.5)	10.9 (0.9)
Marlboro (L)	EURO	Poland	12.0 (0.4)	0.94 (0.01)	11.8 (0.1)	11.6 (1.5)
Klublowe	EURO	Poland	14.0 (0.6)	0.82 (0.01)	10.8 (0.1)	4.2 (0.3)
Marlboro (L)‡‡	EURO	France	12.4 (1.1)	0.89 (0.02)	9.6 (2.0)	17.8 (1.2)
Gauloises Blondes Legères	EURO	France	9.9 (0.4)	0.61 (0.04)	10.9 (1.9)	29.8 (2.1)
Marlboro (L)	EURO	Romania	12.6 (2.2)	0.87 (0.18)	12.0 (0.7)	14.8 (0.8)
Carpati, non-filtered	EURO	Romania	20.1 (0.7)	0.95 (0.17)	8.6 (1.2)	NA
Petterøøe's	EURO	Norway	15.4 (0.2)	0.79 (0.02)	13.5 (0.8)	25.4 (2.5)
RBA	EURO	Russia	8.8 (0.1)	0.74 (0.00)	9.2 (0.5)	17.6 (3.9)
Marlboro (US)	EURO	Russia	14.3 (0.6)	1.09 (0.09)	14.2 (0.1)	13.3 (3.2)
London	SEARO	Myanmar	15.0 (3.2)	0.79 (0.13)	13.2 (1.0)	1.5 (1.8)
Marlboro (US)	SEARO	Myanmar	12.7 (0.8)	1.00 (0.03)	9.3 (1.1)	22.5 (4.9)
Khukuri	SEARO	Nepal	20.9 (2.1)	0.96 (0.02)	15.7 (0.1)	1.9 (0.3)
Yak	SEARO	Nepal	21.4 (1.2)	0.93 (0.12)	12.3 (0.0)	4.0 (1.6)
Marlboro (L)	SEARO	Nepal	13.7 (0.5)	0.70 (0.00)	11.6 (0.3)	10.5 (1.0)
Surya	SEARO	Nepal	18.2 (0.5)	1.31 (0.16)	13.7 (1.3)	0.1 (0.2)

Brand name†	WHO Region	Country of purchase	tar(mg/cig)	Nicotine (mg/cig)	CO (mg/cig)	%Filter ventilation
Marlboro (US)	SEARO	India	12.9 (0.1)	1.03 (0.04)	12.9 (0.3)	11.7 (0.4)
Marlboro Lights (L)	SEARO	India	7.4 (0.3)	0.57 (0.08)	8.7 (0.2)	25.5 (1.8)
State Express 555‡‡	SEARO	India	13.5 (1.0)	1.19 (0.04)	13.5 (0.2)	1.0 (0.5)
Marlboro (L)	WPRO	Philippines	18.8 (1.2)	1.27 (0.11)	17.4 (0.4)	1.0 (0.2)
Marlboro (US)	WPRO	Marshall Islands	13.4 (0.3)	0.92 (0.03)	12.1 (1.2)	11.4 (0.7)
Benson&Hedges, menthol	WPRO	Marshall Islands	14.5 (0.5)	0.50 (0.16)	12.6 (0.6)	16.5 (2.5)
Winfield, super mild	WPRO	Australia	7.6 (1.6)	0.73 (0.01)	7.1 (0.8)	33.7 (1.9)
Marlboro (L)§§	WPRO	Australia	15.1 (0.7)	1.07 (0.08)	8.6 (0.6)	17.8 (1.9)
Marlboro (L)	WPRO	Malaysia	15.9 (1.3)	0.75 (0.04)	12.1 (0.7)	10.9 (1.0)
Dunhill	WPRO	Malaysia	17.0 (0.0)	1.06 (0.10)	10.2 (0.3)	10.7 (3.5)
Alpine Menthol	WPRO	Kiribati	12.6 (1.8)	0.84 (0.15)	7.6 (0.3)	19.4 (1.2)
A, soft pack	WPRO	Lao P.D.R.	20.9 (0.7)	1.05 (0.37)	15.8 (0.9)	0.6 (0.8)
A, red-top hard pack	WPRO	Lao P.D.R.	21.6 (2.5)	1.11 (0.67)	15.3 (1.3)	1.5 (1.3)
Qionghua, medium tar	WPRO	Lao P.D.R.	18.3 (2.1)	1.04 (0.12)	12.0 (0.1)	0.9 (1.0)
Marlboro Lights (US)	WPRO	Lao P.D.R.	9.5 (0.3)	0.69 (0.05)	10.1 (1.7)	27.3 (1.3)
Marlboro (US)	WPRO	Lao P.D.R.	14.0 (0.7)	0.83 (0.10)	10.7 (1.8)	19.9 (2.1)
Dunhill	WPRO	Fiji	11.6 (1.1)	1.01 (0.37)	12.4 (1.5)	13.3 (1.7)
Benson&Hedges	WPRO	Fiji	14.2 (0.5)	0.85 (0.14)	13.2 (0.1)	2.5 (0.5)
Windfield, extra mild	WPRO	Fiji	8.0 (0.0)	0.79 (0.14)	8.2 (1.3)	14.5 (2.2)

Brand name†	WHO Region	Country of purchase	tar(mg/cig)	Nicotine (mg/cig)	CO (mg/cig)	%Filter ventilation
Marlboro (US)	WPRO	China	12.3 (0.1)	1.06 (0.07)	11.7 (0.5)	12.2 (0.6)
Hongtashan	WPRO	China	15.0 (0.4)	1.24 (0.02)	12.8 (0.2)	10.9 (0.6)
Marlboro (L)	WPRO	Tonga	14.6 (0.5)	1.16 (0.32)	7.9 (1.5)	17.0 (0.8)
Winfield, extra mild	WPRO	Tonga	9.9 (1.5)	0.51 (0.03)	7.7 (0.5)	13.4 (1.3)
Peter Jackson, super mild	WPRO	Australia	6.8 (0.9)	0.68 (0.10)	5.9 (0.9)	24.2 (1.3)
Benson&Hedges	WPRO	Solomon Islands	11.6 (0.3)	0.90 (0.02)	10.4 (0.5)	0.5 (0.6)
Marlboro (US)	WPRO	Solomon Islands	13.6 (0.5)	1.05 (0.12)	9.3 (0.1)	20.6 (3.2)
Longbeach	WPRO	New Zealand	11.1 (0.1)	0.92 (0.08)	11.5 (0.1)	0.4 (0.3)
Marlboro (US)	WPRO	New Zealand	10.3 (1.0)	0.88 (0.05)	12.5 (0.1)	14.1 (3.7)
Marlboro (L)	WPRO	Japan	12.8 (1.0)	1.19 (0.01)	11.1 (0.0)	24.8 (2.6)
Marlboro (US)	WPRO	Mongolia	12.5 (2.1)	0.68 (0.12)	11.8 (0.3)	11.3 (1.5)
Rothmans	WPRO	Western Samoa	14.5 (1.1)	1.12 (0.17)	12.3 (0.2)	0.7 (0.4)
Dunhill	WPRO	Vietnam	15.8 (1.9)	1.08 (0.20)	10.4 (1.2)	0.5 (0.3)
Marlboro Lights (L)	WPRO	Vietnam	10.3 (1.0)	0.58 (0.13)	11.0 (0.2)	15.7 (0.5)
Marlboro (L)	WPRO	Vietnam	13.0 (0.4)	0.96 (0.10)	11.8 (0.5)	9.5 (0.3)
Vinataba	WPRO	Vietnam	15.7 (3.3)	1.05 (0.18)	16.0 (0.7)	0.2 (0.3)
Edes Herbal, menthol	WPRO	Philippines	9.8 (3.4)	0.00 (0.00)	16.5 (0.5)	6.3 (3.0)

*Mean values for two replicated samples. A total of 10 cigarettes of each variety were smoked to get the reported values. In contrast, the official tar, nicotine, and CO ratings determined from the FTC method and periodically reported to the US Congress are obtained after smoking 100 cigarettes of each variety. Units for tar, nicotine, and CO are

milligrams per cigarette (mg/cig). A total of 5 cigarettes were measured to obtain average filter ventilation levels.

†Use of trade names is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services or CDC.

(L), manufactured outside the USS; (US), imported (manufactured in the USA).

NA, unfiltered cigarettes