

After a small increase in 2003, global cigarette production declined 2.3 percent in 2004 to 5.5 trillion units.<sup>1</sup> (See Figure 1.) While total production has been about the same for the past decade, population growth during this period has reduced per capita output by 11 percent since 1994, to 868 cigarettes per person a year.<sup>2</sup> (See Figure 2.) Worldwide per capita production has not been this low since 1972.<sup>3</sup>

China, the United States, Russia, and Japan—the four largest producers—manufacture just over half of the world's supply.<sup>4</sup> In 2004, China produced 1.79 trillion cigarettes, 32 percent of the global total.<sup>5</sup> The United States produced 499 billion, 9 percent of the total.<sup>6</sup> This represents a substantial decline over years past. (In 1999, the United States produced 607 billion cigarettes, 22 percent more than in 2004.)<sup>7</sup> Unlike China, whose people smoked 99 percent of the cigarettes produced there, the United States exported 24 percent of its total production.<sup>8</sup>

Russia is currently the third largest producer, manufacturing 380 billion cigarettes in 2004—more than twice as many as in 1998.<sup>9</sup> Japan is the fourth largest, having produced 216 billion cigarettes.<sup>10</sup> Japan also imported a net 63 billion cigarettes, making this nation a leading smoker at 2,190 cigarettes per person—2.5 times the global average.<sup>11</sup> (See Figure 3.) But per person numbers mask the true smoking rates of most populations. In Japan, where 30 percent of people smoke, the average smoker actually goes through 7,228 cigarettes a year, about a pack a day.<sup>12</sup>

Today, 1.1 billion people smoke worldwide; 85 percent of these people live in low- or middle-income countries.<sup>13</sup> Future increases in smoking populations are expected to occur mainly in these regions, primarily because of higher rates of population growth and aggressive marketing campaigns by tobacco companies.<sup>14</sup>

Currently, smoking kills 4.8 million people a year prematurely—one in eight adults globally—mainly from cardiovascular diseases, chronic obstructive lung disease, and lung cancer.<sup>15</sup> Half of the victims live in industrial countries, and four fifths are men.<sup>16</sup> Experts project that smoking will become the world's leading cause

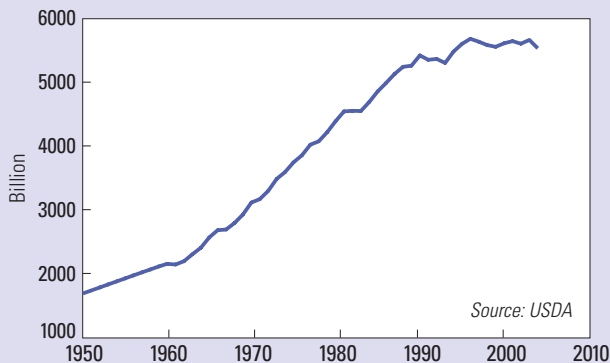
of death by 2030, killing 10 million people a year—but by then 7 of every 10 fatalities will occur in low- or middle-income countries.<sup>17</sup>

Recent years have seen several success stories in local, national, and global efforts to curb smoking rates. In March 2004, Ireland became one of the first countries to ban smoking in all restaurants and bars.<sup>18</sup> In the first few months, tobacco sales fell 16 percent.<sup>19</sup> Several nations have already followed suit, with Norway implementing a ban three months later, and Italy doing so seven months after that; in Scotland, a ban will go into effect in 2006.<sup>20</sup> These laws have shown themselves to be effective at reducing both smoking and exposure to secondhand smoke.<sup>21</sup> In 1998, California was one of the first regions to adopt this form of smoking ban—a measure that has helped cut cigarette consumption in that state by 60 percent and the number of smokers by 27 percent.<sup>22</sup>

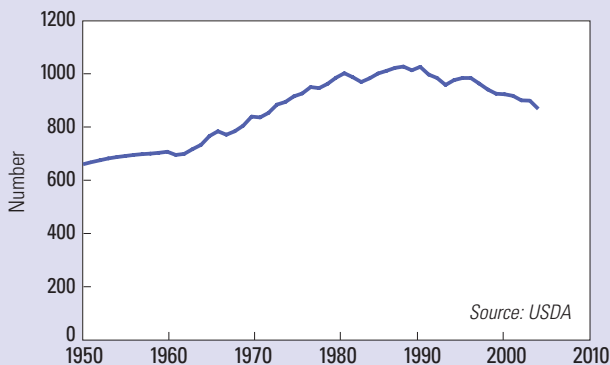
Poland, a country with one of the highest smoking rates in the world, has also cut cigarette consumption by 10 percent and the number of smokers by 29 percent.<sup>23</sup> In 1995 the Polish government passed legislation that banned sales to minors, severely restricted tobacco advertising, created prominent health warnings on cigarette packs, and prohibited smoking in enclosed workplaces.<sup>24</sup> This comprehensive response has helped to reduce annual smoking deaths by 10,000 and to decrease lung cancer rates by 30 percent among men aged 20 to 44.<sup>25</sup>

By far the most important tobacco control victory is the ratification of the Framework Convention on Tobacco Control (FCTC). This treaty entered into force on 27 February 2005, after having been ratified by over 40 countries.<sup>26</sup> The FCTC creates a strict international standard on tobacco control, obligating ratifying countries to increase tobacco taxes; ban advertising, sponsorship, and promotion; expand warning labels on tobacco products; increase protection from secondhand smoke; and implement measures to eliminate tobacco smuggling.<sup>27</sup>

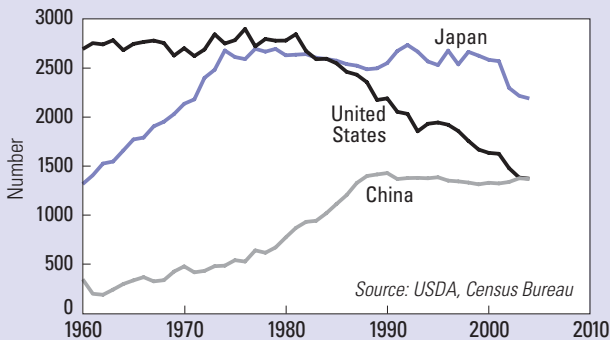
**Figure 1. World Cigarette Production, 1950–2004**



**Figure 2. World Cigarette Production Per Person, 1950–2004**



**Figure 3. Cigarette Consumption Per Person in the United States, China, and Japan, 1960–2004**



**World Cigarette Production, 1950–2004**

Year	Total (billion)	Per Person (number)
1950	1,686	660
1955	1,921	691
1960	2,150	707
1965	2,564	766
1970	3,112	839
1971	3,165	836
1972	3,295	853
1973	3,481	884
1974	3,590	894
1975	3,742	915
1976	3,852	926
1977	4,019	950
1978	4,072	946
1979	4,214	962
1980	4,388	985
1981	4,541	1,002
1982	4,550	987
1983	4,547	969
1984	4,689	983
1985	4,855	1,001
1986	4,987	1,011
1987	5,128	1,022
1988	5,240	1,027
1989	5,258	1,013
1990	5,419	1,026
1991	5,351	997
1992	5,363	984
1993	5,300	958
1994	5,478	976
1995	5,599	984
1996	5,680	984
1997	5,633	963
1998	5,581	941
1999	5,554	925
2000	5,609	923
2001	5,643	917
2002	5,602	900
2003	5,662	899
2004 (prel)	5,530	868

Source: USDA and U.S. Bureau of Census.

11. Laure Belot, "Le Sida, Un Risque Croissant Pour Les Entreprises En Afrique," *Le Monde*, 22 May 2004.
12. Estimate of 15 percent is from PAI and is based on the following: T. Butcher, "HIV and Lack of Funds Paralyse S. Africa's Army," at news.telegraph.co.uk, 16 July 2002; L. Heineken, "Strategic Implications of HIV/AIDS in South Africa," *Conflict, Security and Development*, vol. 1, no. 1 (2001), pp. 109–15; UNAIDS, *AIDS and the Military: UNAIDS Point of View* (Geneva: May 1998); International Crisis Group, *HIV/AIDS as a Security Issue* (Washington, DC: June 2001); "AIDS: An Intelligence Issue," *The Namibian*, 13 February 2001; and Armed Forces Medical Intelligence Center, *Impact of HIV/AIDS on Military Forces: Sub-Saharan Africa* (Washington, DC: Defense Intelligence Agency, 2000).
13. Exceeding civilian rates from Ugboaga Adaji Nwokoji and Ademola J Ajuwon, "Knowledge of AIDS and HIV Risk-Related Sexual Behavior Among Nigerian Naval Personnel," *BMC Public Health*, 21 June 2004; Poverty Reduction Forum, *Zimbabwe Human Development Report 2003* (Mt. Pleasant, Zimbabwe: Institute of Development Studies, University of Zimbabwe, 2004), p. 17.
14. International Labour Organization (ILO), *HIV/AIDS and Work: Global Estimates, Impact and Response* (Geneva: July 2004).
15. Cincotta, Engelman, and Anastasion, op. cit. note 4.
16. ILO, op. cit. note 14, p. 13.
17. UNAIDS, op. cit. note 2.
18. By definition, an AIDS orphan is under 15 years of age and has lost his or her mother or both parents from an AIDS-related cause, per UNAIDS, *Children and Young People in a World of AIDS* (Geneva: 2001); UNICEF, UNAIDS, and USAID, *Children on the Brink 2004: A Joint Report of New Orphan Estimates and a Framework for Action* (New York: July 2004).
19. U.N. Population Division, op. cit. note 7.
20. Barbara Crossette, "AIDS Catastrophe Looms in India," *U.N. Wire*, 14 July 2004; UNAIDS, op. cit. note 3.
21. UNAIDS, op. cit. note 2, p. 2.
22. Peter Baken, "Russia Sees an AIDS 'Explosion'," *Washington Post*, 13 June 2004.
23. C. Ruhl et al., *Computer-based Model: The Economic Consequences of HIV in Russia* (Moscow: World Bank Group in Russia, June 2002); Cincotta, Engelman, and Anastasion, op. cit. note 4.
24. UNAIDS, op. cit. note 2, p. 5.
25. Ibid.

#### CIGARETTE PRODUCTION DROPS (pages 70–71)

1. U.S. Department of Agriculture (USDA), *Production, Supply, and Distribution*, electronic database, updated 30 September 2004.
2. Ibid.; population data from U.S. Bureau of the Census, *International Data Base*, electronic database, Suitland, MD, updated 30 September 2004.
3. USDA, op. cit. note 1; Census Bureau, op. cit. note 2.
4. USDA, op. cit. note 1.
5. Ibid.
6. Ibid.
7. Ibid.
8. Ibid. Consumption of cigarettes is a residual number based on total production plus imports minus exports. Thus, this number includes stockpiled cigarettes and cannot factor in discrepancies due to smuggling.
9. USDA, op. cit. note 1.
10. Ibid.
11. Ibid.; Census Bureau, op. cit. note 2. Japan imported 83 billion cigarettes and exported 20 billion in 2004.
12. Figure of 30 percent from Masaoki Nagahama, "Japan: Tobacco and Products Annual 2004," *Global Agriculture Information Network Report* (Washington, DC: USDA, Foreign Agricultural Service, 1 May 2004).
13. Majid Ezzati and Alan Lopez, "Estimates of Global Mortality Attributable to Smoking in 2000," *The Lancet*, 13 September 2003, pp. 847–52.
14. Population from Judith Mackay and Michael Erikson, *The Tobacco Atlas* (Geneva: World Health Organization (WHO), 2002), p. 36; aggressive marketing from Pan American Health Organization, *Profits Over People: Tobacco Industry Activities to Market Cigarettes and Undermine Public Health in Latin America and the Caribbean* (Washington, DC: November 2002).
15. Ezzati and Lopez, op. cit. note 13.
16. Ibid.
17. Deaths in 2030 from Richard Peto and Alan D. Lopez, "Future Worldwide Health Effects of Current Smoking Patterns," in C. Everett Koop, Clarence E. Pearson, and M. Roy Schwarz, eds., *Critical Issues in Global Health* (San Francisco, CA: Jossey-Bass, 2001), pp. 154–61; 7 in 10 from C. K. Gajalakshmi et al., "Global Patterns of Smoking and Smoking-attributable Mortality," in Prabhat Jha and Frank

## Notes

---

- Chaloupka, eds., *Tobacco Control in Developing Countries* (Oxford: Oxford University Press, 2000), p. 35.
18. "All Eyes on Ireland's Smoking Ban," *BBC News*, 29 March 2004.
  19. "Scotland Smoking Ban To Go Ahead," *BBC News*, 11 November 2004.
  20. *Ibid.*; "Norwegians Ban Smoking in Bars," *BBC News*, 1 June 2004; Elisabetta Povoledo, "Italy's Ban On Smoking Gets Off To a Fuming Start," *International Herald Tribune*, 11 January 2005.
  21. David P. Hopkins et al., "Reviews of Evidence Regarding Interventions to Reduce Tobacco Use and Exposure to Environmental Tobacco Smoke," *American Journal of Preventive Medicine*, vol. 20, issue 2S (2001), pp. 16–66.
  22. "Living in an Anti-Smoking Climate," *BBC News*, 10 November 2004.
  23. "Curbing Tobacco Use in Poland," in Ruth Levine et al., eds., *Millions Saved: Proven Successes in Global Health* (Washington, DC: Center for Global Development, 2004), pp. 113–20.
  24. *Ibid.*
  25. *Ibid.*
  26. WHO, "WHO Tobacco Treaty Set to Become Law, Making Global Public Health History," press release (Geneva: 1 December 2004).
  27. United Nations, *WHO Framework Convention on Tobacco Control*, adopted by Fifty-sixth World Health Assembly, Geneva, 21 May 2003.

### VIOLENT CONFLICTS UNCHANGED (pages 74–75)

1. Arbeitsgemeinschaft Kriegsursachenforschung (AKUF), "Die 'Normalität' des Kriegsgeschehens. Zahl der Kriege Konstant Geblieben," press release (Hamburg, Germany: University of Hamburg, 13 December 2004); Wolfgang Schreiber, AKUF, e-mail to author, 22 December 2004.
2. AKUF, op. cit. note 1; Schreiber, op. cit. note 1.
3. AKUF, op. cit. note 1; AKUF, "Das Kriegsgeschehen 2003 im Überblick," at [www.sozialwiss.uni-hamburg.de/publish/Ipw/Akuf/kriege\\_aktuell.htm](http://www.sozialwiss.uni-hamburg.de/publish/Ipw/Akuf/kriege_aktuell.htm), viewed 21 December 2004; Schreiber, op. cit. note 1.
4. AKUF, op. cit. note 1.
5. *Ibid.*
6. *Ibid.*
7. Taylor B. Seybolt, "Measuring Violence: An Introduction to Conflict Data Sets," in Stockholm International Peace Research Institute, *SIPRI Yearbook 2002: Armaments, Disarmament and International Security* (New York: Oxford University Press, 2002), pp. 84–85.
8. Nils Petter Gleditsch et al., "Armed Conflict: 1946–2001: A New Dataset," *Journal of Peace Research*, vol. 39, no. 5 (2002), pp. 615–37, with updates for 2002 and 2003 from International Peace Research Institute, Oslo, Web site, at [www.prio.no/cwp/armedconflict/current/conflict\\_list\\_1946-2003.pdf](http://www.prio.no/cwp/armedconflict/current/conflict_list_1946-2003.pdf). In Figure 2, armed conflicts are the sum of "minor armed conflicts" (at least 25 battle-related deaths in a year), "intermediate conflicts" (more than 1,000 battle-related deaths during the course of the conflict), and "wars" (at least 1,000 battle-related deaths in a given year). For most of the "unclear cases," there is uncertainty about whether fatalities during the reporting year surpassed 25 (in addition to other outstanding definitional questions).
9. Heidelberger Institut für Internationale Konfliktforschung (HIK), *Konfliktbarometer 2004* (Heidelberg, Germany: Institute for Political Science, University of Heidelberg, 2004), p. 3.
10. *Ibid.*
11. *Ibid.*, p. 5.
12. *Ibid.*, p. 7.
13. *Ibid.*
14. *Ibid.*, p. 8.
15. *Ibid.*
16. Bethany Lacina and Nils Petter Gleditsch, *Monitoring Trends in Global Combat: A New Dataset of Battle Deaths* (Oslo: Centre for the Study of Civil War, International Peace Research Institute, Oslo, 2004).
17. International Rescue Committee and Burnet Institute, *Mortality in the Democratic Republic of Congo: Results from a Nationwide Survey* (New York and Melbourne: December 2004), p. iii.
18. Lacina and Gleditsch, op. cit. note 16, p. 23.
19. *Ibid.*, p. 32.
20. David Nabarro, "Sudan: Mortality Projections for Darfur," media briefing notes (Geneva: World Health Organization, 15 October 2004).
21. Les Roberts et al., "Mortality Before and After the 2003 Invasion of Iraq: Cluster Sample Survey," *The Lancet*, 6 November 2004, p. 1857.
22. *Ibid.*

### MILITARY EXPENDITURES SURGE (pages 76–77)

1. Unless otherwise noted, all monetary terms are expressed in 2003 dollars. Elisabeth Sköns et al.,