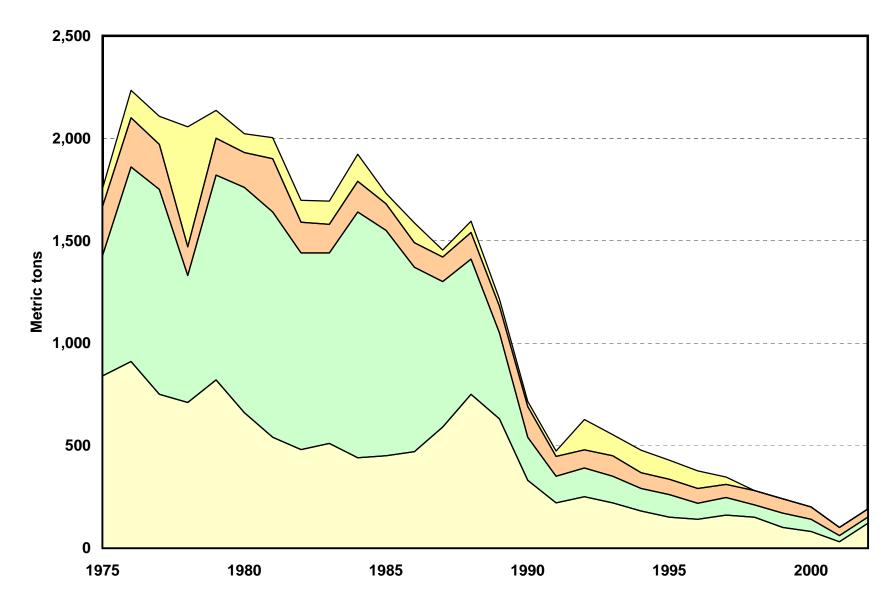
MERCURY END-USE STATISTICS¹ U.S. GEOLOGICAL SURVEY [Metric tons] Last modification: September 26, 2005

	Chemicals and allied products					Electrical and electronic instruments					Instruments and related products				
-	Chlorine/caustic			Other chemicals			Wiring				Measuring	Dental			
	soda	Laboratory		and allied		Electrical	devices and		Electrical		and control	equipment and			Apparent
Year	manufacturing	uses	Paint	products	Subtotal	lighting	switches	Batteries	apparatus	Subtotal	devices	supplies	Subtotal	Other	consumption
1975	520	12	240	65	840				590	590	160	81	240	88	1,750
1976	550	21	270	67	910				950	950	180	69	240	134	2,240
1977	370	14	290	73	750				1,000	1,000	180	42	220	137	/
1978	380	14	310		710	33	110			620	120	18	140	586	/
1979	420	14	340		820	21	110			1,000	130	49	180	136	
1980	330	13	300	26	660	41	110	960		1,100	110	61	170	92	
1981	250	11	240	31	540	36	91	1,000		1,100	200	56	260	103	
1982	220	10		18	480	28	69			960	110	35	150	107	/
1983	280	10			510	44	80			930	85	55	140	113	/
1984	250	9	100	12	440	51	94	1,000		1,200	98	49	150	132	/
1985	230	14		33		40	95	950		1,100	79	50	130	51	/
1986	260	20		18	470	49	100	750		900	63	52	120	97	
1987	310	20		59		45	130	530		710	59	56	120	34	
1988	450	26		86	750	31	180	450		660	77	53	130	55	
1989	380	18		40	630	31	140	250		420	87	39	130	35	/
1990	250	32		33	330	33	70			210	110	44	150	25	
1991	180	10	6	18	220	29	25	78		130	70	27	97	26	
1992	210	18		18	250	55	69			140	52	37	89	148	
1993	180	26		18	220	38	83	10		130	65	35	100	103	
1994	140	24		25	180	27	79	6		110	53	24	77	110	483
1995	150				150	30	84			110	43	32	75	93	
1996	140				140	29	49			78	41	31	72	86	
1997	160				160	29	57			86	24	40	64	36	
1998	150				150					60	40	30	70		300
1999	100				100					70	40	30	70		250
2000	80				80					60	30				200
2001	30				30					30	10	30	40		100
2002	120				120					30	10	30	40		190

¹Compiled by G.R. Matos and W.E. Brooks.

End Uses of Mercury



Chemicals and allied products Electrical and electronic instruments Instruments and related products Other

Mercury End-Use Worksheet Notes

Data Sources

The sources of data for the mercury end-use worksheet are the Mineral Commodity Summaries (MCS), a publication of the U.S. Geological Survey; the Minerals Yearbook, an annual collection, compilation, and analysis of mineral industry data, published by the U.S. Bureau of Mines and the U.S. Geological Survey; and the eighth annual report to the U.S. Environmental Protection Agency (EPA) by The Chlorine Institute, Inc.

End Use

End use is defined as the use of the mineral commodity in a particular industrial sector or product. For mercury, end-use categories are:

- Chemicals and allied products
 - Chlorine/caustic soda manufacturing
 - o Laboratory uses
 - o Paint (mercury is used as a fungicide and mildewcide component, discontinued in the early 1990s)
 - Other chemicals and allied products that include catalysts, pharmaceuticals, agricultural chemicals, and other miscellaneous uses
- Electrical and electronic instruments
 - o Electrical lighting
 - Wiring devices and switches
 - o Batteries
 - Electrical apparatus
- Instruments and related products
 - Measuring and control devices
 - o Dental equipment and supplies
- Other uses

Data in the chlorine/caustic soda manufacturing category, for the years 1998 through 2002, comes from the Chlorine Institute, eighth annual report to EPA, 2005. The numbers reported are mercury purchased by the industry and do not necessarily reflect mercury used because some purchased mercury may be set aside for storage.

Data for electrical and electronic instruments, and instruments and related products for the years 1998 through 2000 were derived by splitting the difference from the total of apparent consumption and the chemicals and allied products (which is just the chlorine/caustic soda manufacturing category). For the years 2001 and 2002, the percentages of mercury used, reported in MCS 2000, were applied.

Data on the dental equipment and supplies category for the years 1998 through 2002 were from EPA (L. Barr, economist, oral communication, February 2, 2005). The difference between the total of instruments and related products and the dental equipment category is assumed to be used in the measuring and control devices category.

For the years prior to 1998, apparent consumption reproduces reported consumption values from the MYB. For consistency within the Historical Statistics series, the column is titled apparent consumption. For the years 1998 and 1999, apparent consumption has been estimated using the fill series, linear type function in Excel. For the year 2000, apparent consumption was derived using several assumptions described in Brooks and Matos (2005). For the years, 2001 and 2002 the apparent consumption is a total of the other categories.

Blank cells in the spreadsheet indicate that data were not available and consumption in these uses may be included in the "Other" uses category. W indicates information withheld to avoid disclosing company proprietary data; data included in the "Other" uses category. End-use data are rounded to no more than two significant digits; data may not add to totals shown. Apparent consumption data are rounded to no more than three significant digits.

References

Brooks, W.E., and Matos, G.R., 2005, Mercury recycling in the United States in 2000: U.S. Geological Survey Open File report 2005-1236, available only online at http://pubs.usgs.gov/of/2005/1236. (Accessed September 26, 2005.)

- Chlorine Institute, Inc., The, 2005, Eighth annual report to EPA for the year 2004.
- U.S. Bureau of Mines, 1977–96, Minerals Yearbook, v. I, 1975–94.
- U.S. Geological Survey, 1997–2005, Minerals Yearbook, v. I, 1995–2003.
- U.S. Geological Survey, 1999–2005, Mineral Commodity Summaries, 1999–2005.

Recommended Citation Format:

(1) If taken from CD version:

U.S. Geological Survey, [year of last update, e.g., 2005], [Mineral commodity, e.g., Gold] statistics, *in* Kelly, T.D., and Matos, G.R., comps., Historical statistics for mineral and material commodities in the United States: U.S. Geological Survey Data Series 140, one CD-ROM. (Also available online at http://pubs.usgs.gov/ds/2005/140/.)

(2) If taken from online version:

U.S. Geological Survey, [year of last update, e.g., 2005], [Mineral commodity, e.g., Gold] statistics, *in* Kelly, T.D., and Matos, G.R., comps., Historical statistics for mineral and material commodities in the United States: U.S. Geological Survey Data Series 140, available online at http://pubs.usgs.gov/ds/2005/140/. (Accessed [date].)

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