

# Mineral Industry Surveys

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## LEAD IN JUNE 2020

Domestic mine production (recoverable) of lead in June 2020 was 24,600 metric tons (t). Average daily mine production in June 2020 was 820 t, 8% more than that in the previous month and 3% more than that in June 2019. Total secondary refined lead production in June 2020 was 98,100 t, 19% more than that in the previous month and slightly more than that in June 2019 (fig. 1; tables 1, 2).

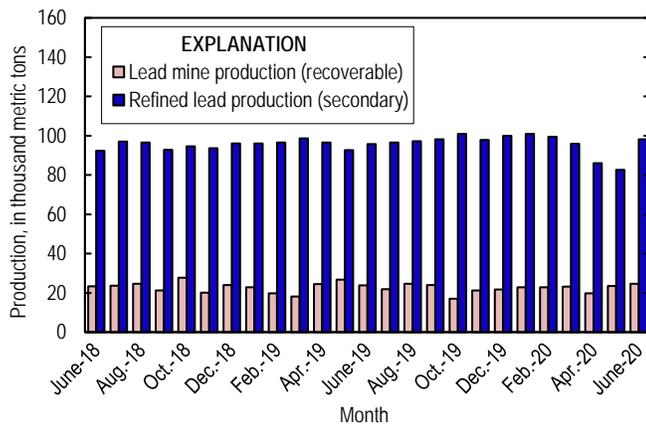


Figure 1. U.S. production of lead from June 2018 through June 2020. Source: U.S. Geological Survey.

The United States is a significant exporter of lead concentrates. U.S. exports of lead in ores and concentrates through June 2020 were 86,300 t, 6% more than those for the same period in 2019. Destinations in June 2020 were Germany (70%), Canada (15%), and China (15%) (table 8).

**Prices and Stocks**

The average London Metal Exchange, Ltd. (LME) cash price for lead in June 2020 was 78.9 cents per pound, 8% more than that in the previous month and 8% less than that in June 2019 (table 3). The Platts Metals Week average North American Market price for lead in June 2020 was 86.3 cents per pound,

7% more than that in the previous month and 9% less than that in June 2019.

The North American premium to the LME cash price in June 2020 averaged 7.40 cents per pound, slightly less than that in May 2020 and 19% less than that in June 2019 (fig. 2, table 3).

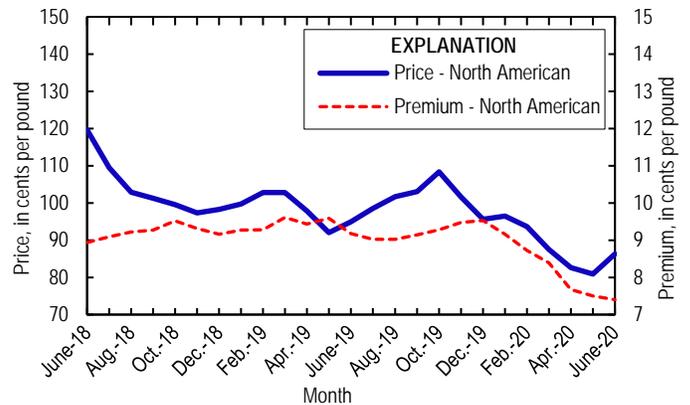


Figure 2. Average monthly North American price and premium for refined lead metal from June 2018 through June 2020. Source: Platts Metals Week.

The Platts average U.S. used lead-acid batteries (Midwest) price in June 2020 was 32 cents per pound, slightly less from that in May 2020 and slightly more than that in June 2019 (table 3). Most secondary lead is recovered from used lead-acid batteries.

Global LME lead stocks at the end of June 2020 were 66,500 t, 12% less than those at the end of May 2020 and slightly more than those at the end of June 2019 (table 11).

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TABLE 1  
SALIENT LEAD STATISTICS IN THE UNITED STATES<sup>1</sup>

(Metric tons, lead content, unless otherwise specified)

	2019 <sup>2</sup>		2020		
	January– December	January– June	May	June	January– June
<b>Production:</b>					
Mine (recoverable)	266,000	136,000	23,500 <sup>†</sup>	24,600	137,000
Secondary refinery, reported by smelters/refineries	1,170,000	576,000	82,600	98,100	563,000
Consumption of refined lead, apparent <sup>e, 3</sup>	1,640,000	820,000	109,000	132,000	760,000
<b>Imports for consumption:</b>					
Ore and concentrate	8	8	--	--	(4)
Bullion	75	75	48	--	217
Unwrought	501,000	261,000	27,300	34,800	205,000
<b>Exports:</b>					
Ore and concentrate	259,000	81,100	22,200	11,600	86,300
Bullion (gross weight)	1,230	243	54	223	870
Unwrought (gross weight)	25,500	16,600	909	1,370	7,900
Platts Metals Week North American Market price (cents per pound)	99.91	98.34	80.90	86.32	87.90

<sup>e</sup>Estimated. <sup>†</sup>Revised. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Smelter production plus imports for consumption minus domestic exports.

<sup>4</sup>Less than ½ unit.

TABLE 2  
MINE AND SECONDARY REFINERY PRODUCTION OF LEAD  
IN THE UNITED STATES<sup>1</sup>

(Metric tons)

Period	Mine		Secondary refinery <sup>c</sup>
	Lead in concentrate	Recoverable	
2019:			
June	24,500	23,900	95,800
July	22,600	21,900	96,600
August	25,300	24,600	97,200
September	24,700	24,000	98,200
October	17,400	17,000	101,000
November	21,900	21,300	97,800
December	22,300	21,700	100,000
January–December	274,000	266,000	1,170,000
2020:			
January	23,500	22,800	101,000
February	23,500	22,900	99,500
March	23,700	23,100	95,900
April	20,300 <sup>r</sup>	19,800 <sup>r</sup>	86,100
May	24,200	23,500 <sup>r</sup>	82,600
June	25,300	24,600	98,100
January–June	140,000	137,000	563,000

<sup>c</sup>Estimated. <sup>r</sup>Revised.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 3  
MONTHLY AVERAGE LEAD PRICES

	North	London Metal Exchange		Used lead-acid
	American Market <sup>1</sup>	cash		batteries <sup>2</sup>
	¢/lb	¢/lb	\$/t	¢/lb
<b>2019:</b>				
June	94.96	85.78	1,891.04	31.38
July	98.54	89.52	1,973.50	33.65
August	101.68	92.66	2,042.70	33.75
September	103.05	93.91	2,070.29	34.22
October	108.33	99.05	2,183.67	34.95
November	101.63	92.15	2,031.46	35.47
December	95.65	86.12	1,898.68	35.85
January–December	99.91	90.59	1,997.13	33.12
<b>2020:</b>				
January	96.46	87.30	1,924.69	36.75
February	93.63	84.90	1,871.75	36.44
March	87.50	79.11	1,744.14	34.78
April	82.59	74.91	1,651.53	32.50
May	80.90	73.40	1,618.16	32.25
June	86.32	78.92	1,739.86	32.00
January–June	87.90	79.76	1,758.35	34.12

<sup>1</sup>Platts Metals Week North American Market price. Reflects the LME lead cash price plus the Platts premium for 99.97% lead.

<sup>2</sup>Platts Metals Week assessment for used lead-acid automotive batteries (50% lead) picked up in U.S. Midwest, suitable for delivery to secondary smelters within 30 days.

Source: Platts Metals Week.

TABLE 4  
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN JUNE 2020<sup>1</sup>

(Metric tons, gross weight)

Item	Stocks May 31, 2020	Net receipts	Consumption	Stocks June 30, 2020
Battery-lead	W	66,600	67,700	W
Other <sup>2</sup>	W	5,970	6,040	W
Total	9,340	72,600	73,700	8,230
Percent change from preceding month <sup>3</sup>	XX	23.8	29.6	-11.8

W Withheld to avoid disclosing company proprietary data; included in "Total." XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes soft lead, solder, drosses and residues, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap.

<sup>3</sup>Based on unrounded data; preceding monthly data may have been revised.

TABLE 5  
LEAD, TIN, AND ANTIMONY RECOVERED FROM  
LEAD-BASE SCRAP IN JUNE 2020<sup>1</sup>

(Metric tons)

Product recovered	Secondary metal content		
	Lead	Tin	Antimony
Soft and calcium lead	81,200	--	--
Remelt lead	W	--	--
Antimonial lead	16,400	W	W
Other <sup>2</sup>	W	W	--
Total lead-base	98,100	186	W

W Withheld to avoid disclosing company proprietary data; included in "Total." -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 6  
U.S. APPARENT CONSUMPTION OF LEAD<sup>1</sup>

(Metric tons)

Period	Production	Imports <sup>2,3</sup>	Exports <sup>2,3</sup>	Apparent consumption <sup>4</sup>
2019: <sup>p</sup>				
June	95,800	41,400	1,860	135,000
July	96,600	32,000	1,770	127,000
August	97,200	58,500	1,130	154,000
September	98,200	45,300	1,290	142,000
October	101,000	35,500	2,360	134,000
November	97,800	28,700	1,460	125,000
December	100,000	40,200	805	140,000
January–December	1,170,000	501,000	25,500	1,640,000
2020:				
January	101,000	42,000	1,580	141,000
February	99,500	26,400	1,290	125,000
March	95,900	33,400	1,460	128,000
April	86,100	41,100	1,290	126,000
May	82,600	27,300	909	109,000
June	98,100	34,800	1,370	132,000
January–June	563,000	205,000	7,900	760,000

<sup>p</sup>Preliminary.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Import and export data are for Harmonized Tariff Schedule of the United States (HTS) codes 7801.10.0000, 7801.91.0000, 7801.99.9030, 7801.99.9050.

<sup>3</sup>Source: U.S. Census Bureau.

<sup>4</sup>Smelter production plus imports for consumption minus domestic exports.

TABLE 7  
U.S. EXPORTS OF LEAD, BY CLASS<sup>1</sup>

(Metric tons, gross weight, unless otherwise specified)

	2019 <sup>2</sup>		2020		
	January– December	January– June	May	June	January– June
Ores and concentrate (lead content)	259,000	81,100	22,200	11,600	86,300
Bullion	1,230	243	54	223	870
Unwrought:					
Refined lead	9,450	8,730	19	18	328
Refined lead containing antimony as the principal alloying element	651	334	26	48	261
Lead alloys	13,700	6,430	515	1,260	6,570
Other	1,620	1,150	349	48	738
Total	25,500	16,600	909	1,370	7,900
Wrought:					
Bars, rods, profiles, and wire	615	343	41	32	301
Pipes and tubes, including fittings	167	38	21	--	27
Plates, sheets, strip, foil	3,460	2,020	119	122	1,080
Other	2,360	713	229	127	1,290
Total	6,600	3,120	410	282	2,700
Powders and flakes	297	174	13	2	119
Tetraethyl lead and tetramethyl lead	507	379	7	16	106
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	27,300,000	13,100,000	1,450,000	2,180,000	11,800,000
Lead waste and scrap obtained from lead-acid storage batteries	--	--	--	--	--
Other lead waste and scrap	39,100	20,100	4,170	4,510	25,100

-- Zero.

<sup>1</sup>Data are rounded to more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 8  
U.S. EXPORTS OF LEAD ORES AND CONCENTRATES, BY COUNTRY OR LOCALITY<sup>1</sup>

(Metric tons, lead content)

	2019 <sup>2</sup>		2020		
	January– December	January– June	May	June	January– June
Australia	--	--	7,710	--	15,700
Canada	52,400	28,300	1,360	1,770	8,430
China	62,300	7,300	3,840	1,730	7,000
Dominican Republic	34	29	--	--	4
Germany	--	--	--	8,060	8,060
Indonesia	5	--	--	--	--
Italy	23,400	7,360	--	--	16,000
Japan	25,100	5,590	--	--	4,170
Korea, Republic of	51,300	18,700	5,210	--	18,700
Laos	11	11	--	--	--
Mexico	24,700	8,430	--	--	196
Netherlands	15,000	5,340	4,050	--	8,050
Thailand	3,390	--	--	--	--
Vietnam	1,760	18	--	11	28
Total	259,000	81,100	22,200	11,600	86,300

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revisions to previously published data.

Source: U.S. Census Bureau.

TABLE 9  
U.S. IMPORTS FOR CONSUMPTION OF LEAD, BY CLASS<sup>1</sup>

(Metric tons, gross weight, unless otherwise specified)

	2019 <sup>2</sup>		2020		
	January– December	January– June	May	June	January– June
Ores and concentrate (lead content)	8	8	--	--	(3)
Bullion (lead content)	75	75	48	--	217
Unwrought:					
Refined lead	406,000	213,000	24,300	28,400	172,000
Refined lead containing antimony as the principal alloying element (lead content)	27,000	13,900	1,260	1,860	10,100
Lead alloys (lead content)	23,200	9,660	647	2,210	8,820
Other (lead content)	44,000	24,400	1,090	2,350	14,400
Total	501,000	261,000	27,300	34,800	205,000
Wrought:					
Bars, rods, profiles, and wire	3,420	1,190	575	419	1,880
Pipes and tubes, including fittings	77	70	(3)	81	90
Plates, sheets, strip, foil	1,760	911	142	123	924
Other	2,770	1,660	102	155	810
Total	8,020	3,840	820	778	3,700
Powders and flakes	315	173	22	3	122
Tetraethyl lead and tetramethyl lead	139	61	12	1	195
Waste and scrap:					
Spent lead-acid storage batteries for starting engines (units)	528,000	270,000	48,300	71,100	3,640,000
Lead waste and scrap obtained from lead-acid storage batteries (lead content)	2,320	959	81	177	832
Other lead waste and scrap (lead content)	2,100	852	70	98	931

-- Zero.

<sup>1</sup>Data are rounded to more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 10  
U.S. IMPORTS FOR CONSUMPTION OF UNWROUGHT LEAD, BY COUNTRY OR LOCALITY<sup>1</sup>

(Metric tons, lead content)

Material and country or locality of origin	2019 <sup>2</sup>		2020		
	January– December	January– June	May	June	January– June
Refined lead:					
Argentina	4,300	2,420	100	--	1,800
Australia	--	--	2,710	690	8,180
Brazil	9,920	3,510	2,060	2,120	10,700
Burma	1,500	400	50	--	350
Canada	159,000	81,400	6,400	6,860	54,600
China	101	1	--	--	--
Colombia	801	801	--	175	799
Dominican Republic	50	50	--	26	26
Ecuador	19,800	10,800	600	1,110	4,660
Germany	50	50	--	--	--
Ghana	--	--	223	198	421
Hong Kong	100	--	--	--	--
India	4,090	3,320	250	--	3,760
Indonesia	--	--	--	--	76
Israel	2,200	1,360	--	692	1,270
Kazakhstan	17,800	10,400	--	--	--
Korea, Republic of	76,000	40,800	6,100	10,800	33,400
Mexico	96,700	53,000	4,480	5,620	35,800
Nigeria	994	149	1,270	74	3,440
Panama	400	--	--	--	--
Peru	3,030	1,350	--	--	1,230
Russia	6,070	779	--	--	10,100
South Africa	20	20	--	--	--
Sri Lanka	--	--	--	--	200
Thailand	1,250	1,160	46	--	192
United Kingdom	404	196	--	--	491
Venezuela	2,080	554	--	--	24
<b>Total</b>	<b>406,000</b>	<b>213,000</b>	<b>24,300</b>	<b>28,400</b>	<b>172,000</b>
Other unwrought lead: <sup>3</sup>					
Argentina	2,080	1,260	--	--	--
Bolivia	183	--	--	--	--
Brazil	276	--	--	--	173
Canada	86,800	43,700	2,500	5,940	31,300
China	2	--	--	--	--
Costa Rica	19	19	--	--	--
Dominican Republic	--	--	--	306	306
Ecuador	378	245	--	15	163
France	--	--	30	--	30
Germany	1	--	--	--	--
Ghana	--	--	198	--	198
India	321	111	18	--	150
Korea, Republic of	14	5	--	--	--
Mexico	2,700	1,950	249	110	789
Paraguay	49	--	--	--	--
Peru	221	--	--	--	--
Russia	(4)	(4)	--	--	--
Sweden	11	--	--	--	--
Taiwan	(4)	(4)	--	--	--

See footnotes at end of table.

TABLE 10-Continued  
 U.S. IMPORTS FOR CONSUMPTION OF UNWROUGHT LEAD, BY COUNTRY OR LOCALITY<sup>1</sup>

(Metric tons, lead content)

Material and country or locality of origin	2019 <sup>2</sup>		2020		
	January– December	January– June	May	June	January– June
United Kingdom	1,040	603	--	46	133
Venezuela	185	54	--	--	105
Total	94,300	48,000	2,990	6,420	33,300
Grand total	500,000	261,000	27,300	34,800	205,000

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>May include revisions to previously published data.

<sup>3</sup>Includes the lead content (Quantity 2) of Harmonized Tariff Schedule of the United States (HTS) codes 7801.91.0000, 7801.99.9030, 7801.99.9050. Excludes bullion.

<sup>4</sup>Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 11  
LONDON METAL EXCHANGE (LME) STOCKS OF LEAD, END OF PERIOD

(Metric tons)

Period	United States	Asia	Europe	Total
2019:				
June	--	19,050	46,700	65,750
July	--	27,850	50,650	78,500
August	--	30,875	46,650	77,525
September	--	27,425	42,075	69,500
October	--	27,400	42,675	70,075
November	--	26,250	40,875	67,125
December	--	26,050	40,150	66,200
2020:				
January	--	26,000	40,800	66,800
February	--	25,750	42,350	68,100
March	--	26,250	44,650	70,900
April	3,725	26,100	43,825	73,650
May	5,875	25,625	44,325	75,825
June	5,875	24,625	36,000	66,500

-- Zero.

Source: London Metal Exchange, Ltd.