



# Milk Production

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## June Milk Production up 0.1 Percent

**Milk production** in the 24 major States during June totaled 17.3 billion pounds, up 0.1 percent from June 2018. May revised production at 18.1 billion pounds, was down slightly from May 2018. The May revision represented an increase of 18 million pounds or 0.1 percent from last month's preliminary production estimate.

**Production per cow** in the 24 major States averaged 1,976 pounds for June, 15 pounds above June 2018.

**The number of milk cows** on farms in the 24 major States was 8.78 million head, 62,000 head less than June 2018, and 12,000 head less than May 2019.

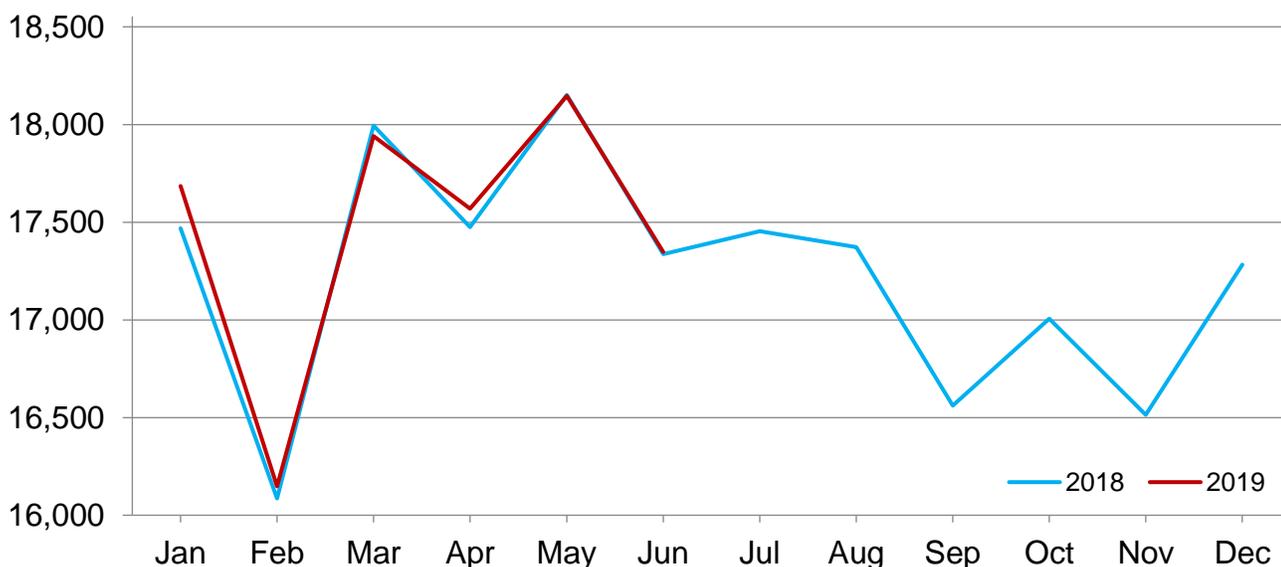
## April-June Milk Production down 0.1 Percent

**Milk production** in the United States during the April - June quarter totaled 55.8 billion pounds, down 0.1 percent from the April - June quarter last year.

**The average number of milk cows** in the United States during the quarter was 9.33 million head, 15,000 head less than the January - March quarter, and 89,000 head less than the same period last year.

## Monthly Milk Production – 24 Selected States

Million pounds



## Milk Cows and Production by Quarter – United States: 2018-2019

[May not add due to rounding. Blank data cells indicate estimation period has not yet begun]

Quarter	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		
	2018	2019	2018	2019	2018	2019	Change from 2018
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January-March .....	9,435	9,344	5,766	5,827	54,399	54,450	0.1
April-June .....	9,418	9,329	5,928	5,976	55,831	55,752	-0.1
July-September .....	9,383		5,752		53,969		
October-December .....	9,359		5,703		53,376		
Annual .....	9,399		23,149		217,575		

<sup>1</sup> Includes dry cows. Excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

## Milk Cows and Production by Month – 24 Selected States: 2018-2019

[May not add due to rounding. Blank data cells indicate estimation period has not yet begun]

Month	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		
	2018	2019	2018	2019	2018	2019	Change from 2018
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January .....	8,856	8,805	1,973	2,009	17,469	17,685	1.2
February .....	8,855	8,805	1,817	1,834	16,086	16,148	0.4
March .....	8,849	8,788	2,033	2,041	17,994	17,940	-0.3
April .....	8,844	8,788	1,976	1,999	17,475	17,570	0.5
May .....	8,848	8,790	2,051	2,064	18,151	18,146	-
June .....	8,840	8,778	1,961	1,976	17,336	17,348	0.1
July .....	8,829		1,977		17,454		
August .....	8,826		1,968		17,372		
September .....	8,807		1,880		16,561		
October .....	8,807		1,931		17,005		
November .....	8,802		1,876		16,514		
December .....	8,798		1,964		17,282		
Annual .....	8,830		23,407		206,699		

- Represents zero.

<sup>1</sup> Includes dry cows. Excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

## Estimated Milk Cows and Production by Month – United States: 2018-2019

[May not add due to rounding. Blank data cells indicate estimation period has not yet begun]

Month	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		
	2018	2019	2018	2019	2018	2019	Change from 2018
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January .....	9,438	9,352	1,953	1,989	18,437	18,600	0.9
February .....	9,436	9,350	1,799	1,816	16,973	16,981	-
March .....	9,430	9,330	2,014	2,022	18,989	18,869	-0.6
April .....	9,418	9,330	1,955	1,978	18,412	18,458	0.2
May .....	9,422	9,333	2,030	2,043	19,131	19,064	-0.4
June .....	9,414	9,323	1,943	1,955	18,288	18,230	-0.3
July .....	9,392		1,952		18,329		
August .....	9,389		1,943		18,245		
September .....	9,368		1,857		17,395		
October .....	9,367		1,908		17,873		
November .....	9,358		1,854		17,348		
December .....	9,353		1,941		18,155		
Annual .....	9,399		23,149		217,575		

- Represents zero.

<sup>1</sup> Includes dry cows. Excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

## Milk Cows and Production – 24 Selected States: June 2018 and 2019

[May not add due to rounding]

State	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		Change from 2018
	2018	2019	2018	2019	2018	2019	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona .....	206	196	2,005	2,010	413	394	-4.6
California .....	1,735	1,728	1,905	1,935	3,305	3,344	1.2
Colorado .....	177	187	2,160	2,165	382	405	6.0
Florida .....	120	115	1,675	1,695	201	195	-3.0
Georgia .....	82	82	1,715	1,715	141	141	-
Idaho .....	610	619	2,095	2,105	1,278	1,303	2.0
Illinois .....	93	84	1,720	1,750	160	147	-8.1
Indiana .....	184	177	1,885	1,910	347	338	-2.6
Iowa .....	220	217	1,975	1,995	435	433	-0.5
Kansas .....	159	162	1,935	1,935	308	313	1.6
Michigan .....	423	425	2,240	2,280	948	969	2.2
Minnesota .....	453	447	1,835	1,875	831	838	0.8
New Mexico .....	332	321	2,130	2,140	707	687	-2.8
New York .....	623	627	2,050	2,040	1,277	1,279	0.2
Ohio .....	260	246	1,800	1,820	468	448	-4.3
Oregon .....	121	122	1,750	1,760	212	215	1.4
Pennsylvania .....	521	490	1,720	1,710	896	838	-6.5
South Dakota .....	122	123	1,875	1,875	229	231	0.9
Texas .....	536	565	2,020	2,025	1,083	1,144	5.6
Utah .....	101	98	1,975	1,970	199	193	-3.0
Vermont .....	127	126	1,785	1,795	227	226	-0.4
Virginia .....	84	75	1,610	1,650	135	124	-8.1
Washington .....	277	278	2,050	2,045	568	569	0.2
Wisconsin .....	1,274	1,268	2,030	2,030	2,586	2,574	-0.5
24-State Total .....	8,840	8,778	1,961	1,976	17,336	17,348	0.1

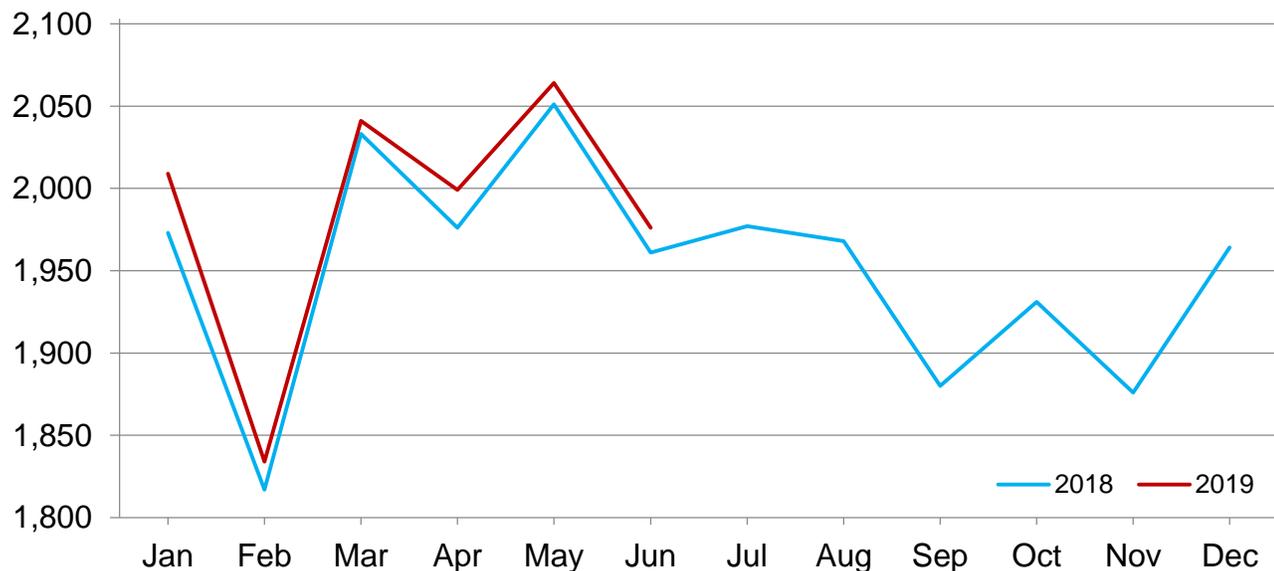
- Represents zero.

<sup>1</sup> Includes dry cows. Excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

## Monthly Milk per Cow – 24 Selected States

Pounds



## Milk Cows and Production – 24 Selected States: May 2018 and 2019

[May not add due to rounding]

	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		Change from 2018
	2018	2019	2018	2019	2018	2019	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona .....	208	198	2,145	2,145	446	425	-4.7
California .....	1,735	1,728	2,035	2,070	3,531	3,577	1.3
Colorado .....	177	185	2,215	2,220	392	411	4.8
Florida .....	122	115	1,830	1,850	223	213	-4.5
Georgia .....	83	83	1,885	1,870	156	155	-0.6
Idaho .....	610	619	2,170	2,170	1,324	1,343	1.4
Illinois .....	93	84	1,890	1,860	176	156	-11.4
Indiana .....	184	179	2,010	2,010	370	360	-2.7
Iowa .....	220	217	2,060	2,090	453	454	0.2
Kansas .....	158	162	2,050	2,020	324	327	0.9
Michigan .....	423	425	2,330	2,350	986	999	1.3
Minnesota .....	454	448	1,895	1,925	860	862	0.2
New Mexico .....	332	322	2,190	2,230	727	718	-1.2
New York .....	624	627	2,100	2,110	1,310	1,323	1.0
Ohio .....	262	248	1,900	1,900	498	471	-5.4
Oregon .....	121	122	1,810	1,835	219	224	2.3
Pennsylvania .....	523	493	1,825	1,800	954	887	-7.0
South Dakota .....	121	123	1,940	1,910	235	235	-
Texas .....	535	565	2,120	2,115	1,134	1,195	5.4
Utah .....	101	98	2,015	2,010	204	197	-3.4
Vermont .....	127	126	1,845	1,855	234	234	-
Virginia .....	84	76	1,760	1,750	148	133	-10.1
Washington .....	277	278	2,110	2,115	584	588	0.7
Wisconsin .....	1,274	1,269	2,090	2,095	2,663	2,659	-0.2
24-State Total .....	8,848	8,790	2,051	2,064	18,151	18,146	-

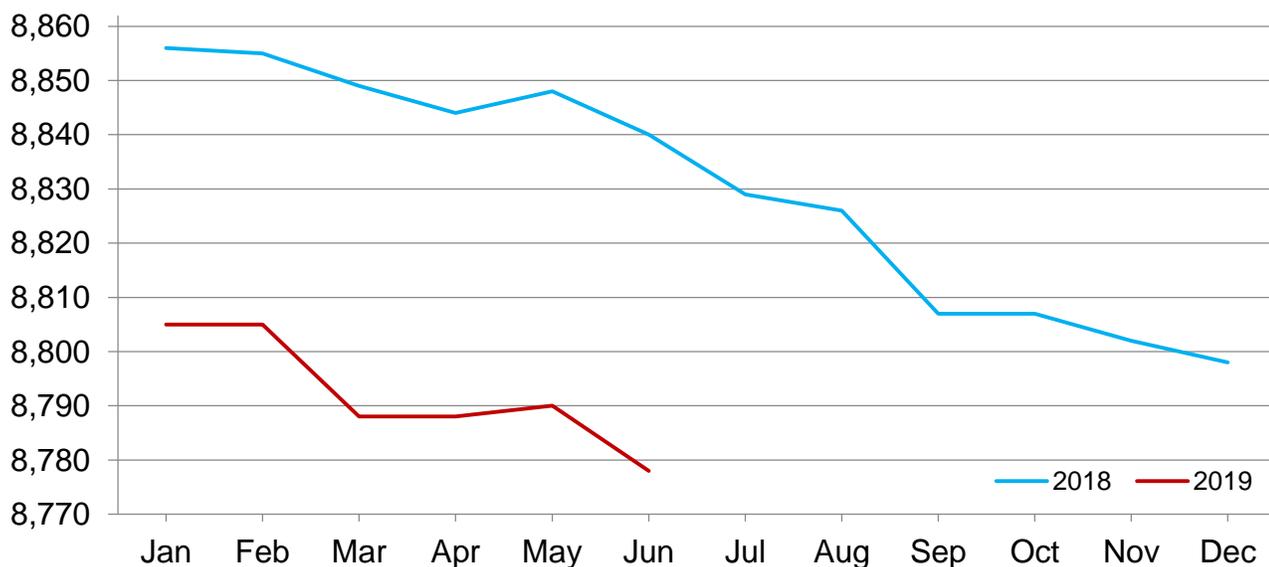
- Represents zero.

<sup>1</sup> Includes dry cows. Excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

## Monthly Milk Cows – 24 Selected States

Thousand head



## Milk Cows and Production – States and United States: Revised January - March 2018 and 2019

[May not add due to rounding]

State	January - March milk cows <sup>1</sup>		January - March milk production <sup>2</sup>		
	2018	2019	2018	2019	Change from 2018
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama .....	5.5	5.0	21.0	19.0	-9.5
Alaska .....	0.3	0.2	0.7	0.5	-28.6
Arizona .....	212.0	202.0	1,325.0	1,262.0	-4.8
Arkansas .....	6.0	5.0	21.0	17.0	-19.0
California .....	1,738.0	1,730.0	10,307.0	10,361.0	0.5
Colorado .....	171.0	181.0	1,096.0	1,160.0	5.8
Connecticut .....	19.0	19.5	108.0	109.0	0.9
Delaware .....	5.0	4.5	25.2	21.6	-14.3
Florida .....	124.0	116.0	664.0	625.0	-5.9
Georgia .....	85.0	82.0	479.0	472.0	-1.5
Hawaii .....	2.1	1.1	10.2	1.7	-83.3
Idaho .....	606.0	615.0	3,647.0	3,723.0	2.1
Illinois .....	93.0	85.0	496.0	457.0	-7.9
Indiana .....	186.0	181.0	1,057.0	1,027.0	-2.8
Iowa .....	220.0	219.0	1,312.0	1,318.0	0.5
Kansas .....	156.0	163.0	910.0	934.0	2.6
Kentucky .....	57.0	52.0	277.0	253.0	-8.7
Louisiana .....	12.0	11.0	46.0	40.0	-13.0
Maine .....	30.0	29.0	151.0	156.0	3.3
Maryland .....	46.0	43.0	246.0	218.0	-11.4
Massachusetts .....	11.5	10.5	50.0	48.0	-4.0
Michigan .....	427.0	424.0	2,758.0	2,792.0	1.2
Minnesota .....	455.0	449.0	2,442.0	2,465.0	0.9
Mississippi .....	9.0	8.5	37.0	35.0	-5.4
Missouri .....	84.0	79.0	313.0	285.0	-8.9
Montana .....	12.5	11.5	70.0	64.0	-8.6
Nebraska .....	60.0	59.0	366.0	355.0	-3.0
Nevada .....	32.0	33.0	180.0	190.0	5.6
New Hampshire .....	12.5	11.5	63.0	61.0	-3.2
New Jersey .....	6.0	5.0	30.0	26.0	-13.3
New Mexico .....	334.0	323.0	2,116.0	2,036.0	-3.8
New York .....	625.0	627.0	3,613.0	3,705.0	2.5
North Carolina .....	45.0	43.0	249.0	236.0	-5.2
North Dakota .....	15.5	14.5	82.0	80.0	-2.4
Ohio .....	262.0	252.0	1,399.0	1,337.0	-4.4
Oklahoma .....	41.0	41.0	190.0	190.0	-
Oregon .....	123.0	124.0	613.0	637.0	3.9
Pennsylvania .....	525.0	498.0	2,739.0	2,564.0	-6.4
Rhode Island .....	0.8	0.7	3.0	2.6	-13.3
South Carolina .....	15.0	13.0	68.0	59.0	-13.2
South Dakota .....	119.0	124.0	651.0	689.0	5.8
Tennessee .....	39.0	33.0	178.0	150.0	-15.7
Texas .....	530.0	553.0	3,146.0	3,363.0	6.9
Utah .....	99.0	99.0	557.0	559.0	0.4
Vermont .....	128.0	126.0	667.0	674.0	1.0
Virginia .....	87.0	77.0	437.0	385.0	-11.9
Washington .....	275.0	278.0	1,636.0	1,640.0	0.2
West Virginia .....	7.0	6.5	30.0	24.0	-20.0
Wisconsin .....	1,275.0	1,270.0	7,482.0	7,588.0	1.4
Wyoming .....	6.0	6.0	34.8	35.9	3.2
United States .....	9,435.0	9,344.0	54,399.0	54,450.0	0.1

- Represents zero.

<sup>1</sup> Includes dry cows. Excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

## Milk Cows and Production – States and United States: Preliminary April - June 2018 and 2019

[May not add due to rounding]

State	April - June milk cows <sup>1</sup>		April - June milk production <sup>2</sup>		
	2018	2019	2018	2019	Change from 2018
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama .....	5.5	5.0	21.0	18.0	-14.3
Alaska .....	0.3	0.2	0.7	0.5	-28.6
Arizona .....	208.0	198.0	1,307.0	1,242.0	-5.0
Arkansas .....	6.0	5.0	21.0	17.0	-19.0
California .....	1,735.0	1,728.0	10,289.0	10,463.0	1.7
Colorado .....	176.0	185.0	1,152.0	1,208.0	4.9
Connecticut .....	19.5	19.5	111.0	108.0	-2.7
Delaware .....	4.9	4.3	25.1	19.2	-23.5
Florida .....	121.0	115.0	641.0	614.0	-4.2
Georgia .....	83.0	83.0	454.0	453.0	-0.2
Hawaii .....	2.1	0.8	10.7	0.8	-92.5
Idaho .....	609.0	619.0	3,837.0	3,925.0	2.3
Illinois .....	93.0	84.0	503.0	454.0	-9.7
Indiana .....	184.0	178.0	1,078.0	1,045.0	-3.1
Iowa .....	220.0	217.0	1,330.0	1,323.0	-0.5
Kansas .....	158.0	162.0	944.0	960.0	1.7
Kentucky .....	56.0	51.0	272.0	250.0	-8.1
Louisiana .....	11.5	10.5	43.0	37.0	-14.0
Maine .....	30.0	30.0	160.0	166.0	3.8
Maryland .....	46.0	43.0	245.0	219.0	-10.6
Massachusetts .....	11.5	10.5	53.0	49.0	-7.5
Michigan .....	423.0	425.0	2,869.0	2,918.0	1.7
Minnesota .....	454.0	448.0	2,510.0	2,522.0	0.5
Mississippi .....	9.0	8.5	36.0	34.0	-5.6
Missouri .....	83.0	79.0	335.0	303.0	-9.6
Montana .....	12.5	11.5	70.0	65.0	-7.1
Nebraska .....	60.0	58.0	367.0	352.0	-4.1
Nevada .....	32.0	33.0	186.0	190.0	2.2
New Hampshire .....	12.5	11.5	65.0	62.0	-4.6
New Jersey .....	6.0	4.8	29.0	26.0	-10.3
New Mexico .....	333.0	321.0	2,157.0	2,100.0	-2.6
New York .....	624.0	627.0	3,823.0	3,869.0	1.2
North Carolina .....	44.0	43.0	245.0	234.0	-4.5
North Dakota .....	15.5	14.5	85.0	83.0	-2.4
Ohio .....	261.0	248.0	1,445.0	1,377.0	-4.7
Oklahoma .....	40.0	42.0	185.0	192.0	3.8
Oregon .....	121.0	122.0	642.0	654.0	1.9
Pennsylvania .....	523.0	493.0	2,780.0	2,589.0	-6.9
Rhode Island .....	0.7	0.7	3.0	2.8	-6.7
South Carolina .....	14.5	12.0	66.0	55.0	-16.7
South Dakota .....	121.0	123.0	687.0	692.0	0.7
Tennessee .....	38.0	32.0	170.0	145.0	-14.7
Texas .....	535.0	564.0	3,315.0	3,511.0	5.9
Utah .....	100.0	98.0	596.0	579.0	-2.9
Vermont .....	127.0	126.0	684.0	687.0	0.4
Virginia .....	84.0	76.0	429.0	387.0	-9.8
Washington .....	277.0	278.0	1,712.0	1,721.0	0.5
West Virginia .....	7.0	6.0	29.0	23.0	-20.7
Wisconsin .....	1,274.0	1,269.0	7,778.0	7,771.0	-0.1
Wyoming .....	6.0	6.0	35.8	36.5	2.0
United States .....	9,418.0	9,329.0	55,831.0	55,752.0	-0.1

<sup>1</sup> Includes dry cows. Excludes heifers not yet fresh.

<sup>2</sup> Excludes milk sucked by calves.

## Statistical Methodology

**Survey Procedures:** Primary data used to determine these estimates were obtained from a sample of producers. Individual States maintain a list of all known milk producers and information on the size of their herd. States use all known sources of producers to ensure that their lists are as complete as possible. Generally, all large producers and a sample of small producers are included in the survey. Questionnaires are mailed to producers near the end of the month to obtain data for the first day of the month. Additional reports are obtained by telephone, as needed, to supplement the mail response. Where feasible, States utilize state and federal administrative data to estimate milk production. This eliminates duplication of data gathering by different government agencies. Indications of milk cow inventory are also obtained in the January Cattle Surveys.

**Estimation Procedures:** Regional Field Offices prepare these estimates by using a combination of survey indications, historic trends, and any available administrative data. Individual State estimates are reviewed by the Agricultural Statistics Board for reasonableness.

**Revision Policy:** Milk production, milk per cow, and number of milk cows are subject to revision the following month after initial publication for monthly States or the following quarter for the quarterly States. Normally, administrative data from Federal Market Orders, State Departments of Agriculture, or other sources are the main basis for revisions. However, administrative data for all States may not be available in time for these revisions. Estimates are again subject to revisions in February each year based on additional administrative data. In the event that additional changes are necessary, a third revision is possible in February the following year. Estimates are again reviewed after data from the five-year Census of Agriculture are available. No revisions are made after that date.

**Reliability:** Since all operations with dairy animals are not included in the sample, survey estimates are subject to sampling variability. Survey results are also subject to non-sampling errors such as omissions, duplications, and mistakes in reporting, recording, and processing the data. The effects of these errors cannot be measured directly. They are minimized through rigid quality controls in the data collection process and through a careful review of all reported data for consistency and reasonableness.

To assist users in evaluating the reliability of the estimates in this report, the "Root Mean Square Error" is shown for selected items on the next page. The "Root Mean Square Error" is a statistical measure based on past performance and is computed using the differences between first and final estimates. The "Root Mean Square Error" for milk production estimates over the past 20 quarters is 0.1 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 55.8 billion pounds by more than 0.1 percent. Chances are 9 out of 10 that the difference will not exceed 0.2 percent.

### Reliability of Quarterly Milk Production Estimates

[Based on data for the past 20 quarters]

Item	Root mean square error	90 percent confidence level	Difference between first and latest estimate				
			Average	Smallest	Largest	Quarters	
						Below latest	Above latest
	(percent)	(percent)	(1,000)	(1,000)	(1,000)	(number)	(number)
Milk production .....	0.1	0.2	40	3	124	14	6
All milk cows .....	0.1	0.2	9	0	28	15	4

## Information Contacts

Listed below are the commodity specialists in the Livestock Branch of the National Agricultural Statistics Service to contact for additional information. E-mail inquiries may be sent to [nass@usda.gov](mailto:nass@usda.gov).

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Sherry Bertramsen – Livestock Slaughter .....	(202) 690-8632
Holly Brenize – Sheep and Goats .....	(202) 720-0585
Donnie Fike – Dairy Products .....	(202) 720-4448
Heidi Lanouette – Cattle, Cattle on Feed .....	(202) 720-3040
Mike Miller – Milk Production and Milk Cows .....	(202) 720-3278
Seth Riggins – Hogs and Pigs .....	(202) 720-3106

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For your convenience, you may access NASS reports and products the following ways:

- All reports are available electronically, at no cost, on the NASS web site: [www.nass.usda.gov](http://www.nass.usda.gov)
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