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## September Milk Production up 0.2 Percent

**Milk production** in the 24 major States during September totaled 17.5 billion pounds, up 0.2 percent from September 2023. August revised production, at 18.2 billion pounds, was up 0.5 percent from August 2023. The August revision represented an increase of 85 million pounds or 0.5 percent from last month's preliminary production estimate.

**Production per cow** in the 24 major States averaged 1,966 pounds for September, 8 pounds above September 2023.

**The number of milk cows** on farms in the 24 major States was 8.89 million head, 20,000 head less than September 2023, but unchanged from August 2024.

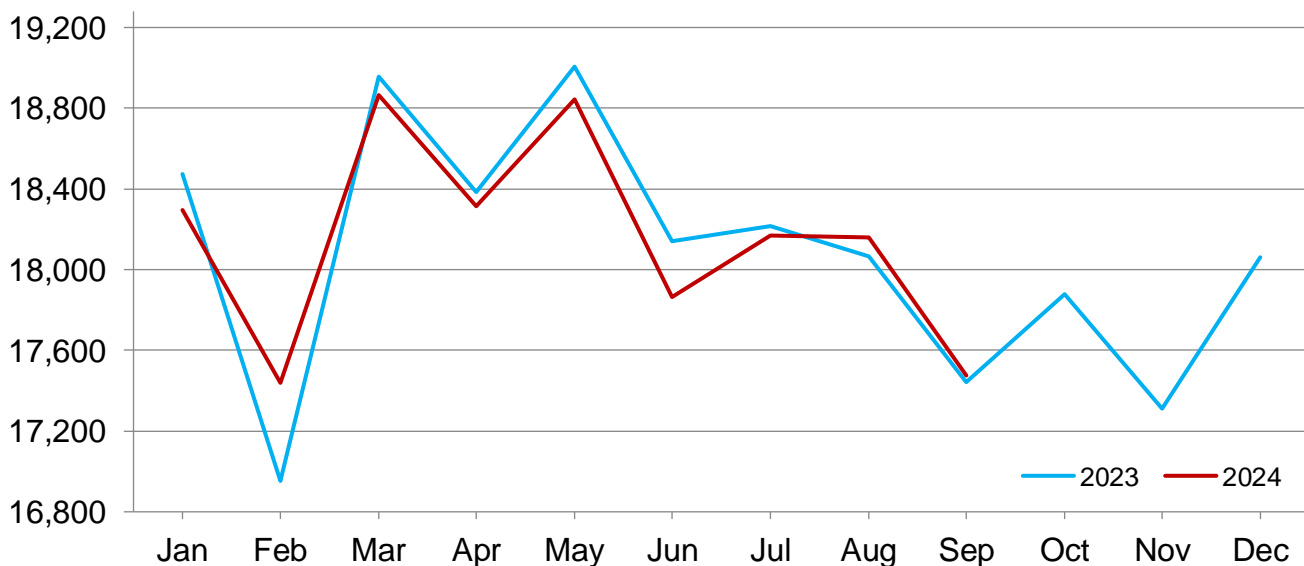
## July-September Milk Production up slightly

**Milk production** in the United States during the July - September quarter totaled 56.0 billion pounds, up slightly from the July - September quarter last year.

**The average number of milk cows** in the United States during the quarter was 9.33 million head, 3,000 head less than the April - June quarter, and 41,000 head less than the same period last year.

## Monthly Milk Production - 24 Selected States

Million pounds



## Milk Cows and Production by Quarter – United States: 2023-2024

[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>		Change from 2023
	2023	2024	2023	2024	2023	2024	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January-March .....	9,418	9,337	6,035	6,100	56,837	56,959	0.2
April-June .....	9,410	9,328	6,164	6,150	58,004	57,368	-1.1
July-September .....	9,366	9,325	5,978	6,006	55,994	56,009	(Z)
October-December .....	9,349		5,940		55,529		
Annual .....	9,386		24,117		226,364		

(Z) Less than half of the unit shown.

<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: 2023-2024

[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>		Change from 2023
	2023	2024	2023	2024	2023	2024	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January .....	8,922	8,870	2,071	2,062	18,474	18,294	-1.0
February .....	8,939	8,888	1,897	1,962	16,953	17,439	2.9
March .....	8,952	8,892	2,118	2,122	18,956	18,865	-0.5
April .....	8,941	8,888	2,056	2,061	18,386	18,314	-0.4
May .....	8,945	8,886	2,125	2,121	19,006	18,845	-0.8
June .....	8,925	8,875	2,033	2,013	18,141	17,863	-1.5
July .....	8,909	8,878	2,045	2,047	18,216	18,170	-0.3
August .....	8,906	8,887	2,028	2,044	18,065	18,161	0.5
September .....	8,907	8,887	1,958	1,966	17,444	17,475	0.2
October .....	8,900		2,009		17,880		
November .....	8,891		1,947		17,311		
December .....	8,894		2,031		18,061		
Annual .....	8,919		24,318		216,893		

<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: 2023-2024

[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>		Change from 2023
	2023	2024	2023	2024	2023	2024	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January .....	9,401	9,323	2,054	2,047	19,308	19,083	-1.2
February .....	9,419	9,343	1,881	1,947	17,718	18,195	2.7
March .....	9,433	9,346	2,100	2,106	19,811	19,681	-0.7
April .....	9,414	9,333	2,040	2,046	19,204	19,095	-0.6
May .....	9,418	9,331	2,108	2,106	19,852	19,648	-1.0
June .....	9,397	9,320	2,016	1,998	18,948	18,625	-1.7
July .....	9,368	9,319	2,027	2,029	18,985	18,911	-0.4
August .....	9,365	9,328	2,010	2,027	18,828	18,904	0.4
September .....	9,366	9,328	1,941	1,950	18,181	18,194	0.1
October .....	9,355		1,993		18,645		
November .....	9,345		1,932		18,051		
December .....	9,348		2,015		18,833		
Annual .....	9,386		24,117		226,364		

<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: September 2023 and 2024

[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 2023
	2023	2024	2023	2024	2023	2024	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona .....	201	192	1,835	1,835	369	352	-4.6
California .....	1,712	1,708	1,875	1,880	3,210	3,211	(Z)
Colorado .....	198	200	2,125	2,135	421	427	1.4
Florida .....	100	100	1,510	1,510	151	151	-
Georgia .....	90	85	1,680	1,800	151	153	1.3
Idaho .....	665	672	2,065	2,080	1,373	1,398	1.8
Illinois .....	79	77	1,705	1,680	135	129	-4.4
Indiana .....	191	189	1,910	1,930	365	365	-
Iowa .....	240	241	2,010	1,985	482	478	-0.8
Kansas .....	172	178	1,955	1,945	336	346	3.0
Michigan .....	439	436	2,240	2,235	983	974	-0.9
Minnesota .....	451	442	1,905	1,905	859	842	-2.0
New Mexico .....	265	239	1,960	1,975	519	472	-9.1
New York .....	630	630	2,070	2,095	1,304	1,320	1.2
Ohio .....	255	252	1,795	1,820	458	459	0.2
Oregon .....	120	118	1,715	1,715	206	202	-1.9
Pennsylvania .....	466	465	1,670	1,675	778	779	0.1
South Dakota .....	198	214	1,925	1,920	381	411	7.9
Texas .....	635	655	2,095	2,130	1,330	1,395	4.9
Utah .....	88	90	1,910	1,915	168	172	2.4
Vermont .....	116	113	1,750	1,750	203	198	-2.5
Virginia .....	69	66	1,650	1,640	114	108	-5.3
Washington .....	257	259	1,995	1,975	513	512	-0.2
Wisconsin .....	1,270	1,266	2,075	2,070	2,635	2,621	-0.5
24-State Total .....	8,907	8,887	1,958	1,966	17,444	17,475	0.2

- Represents zero.

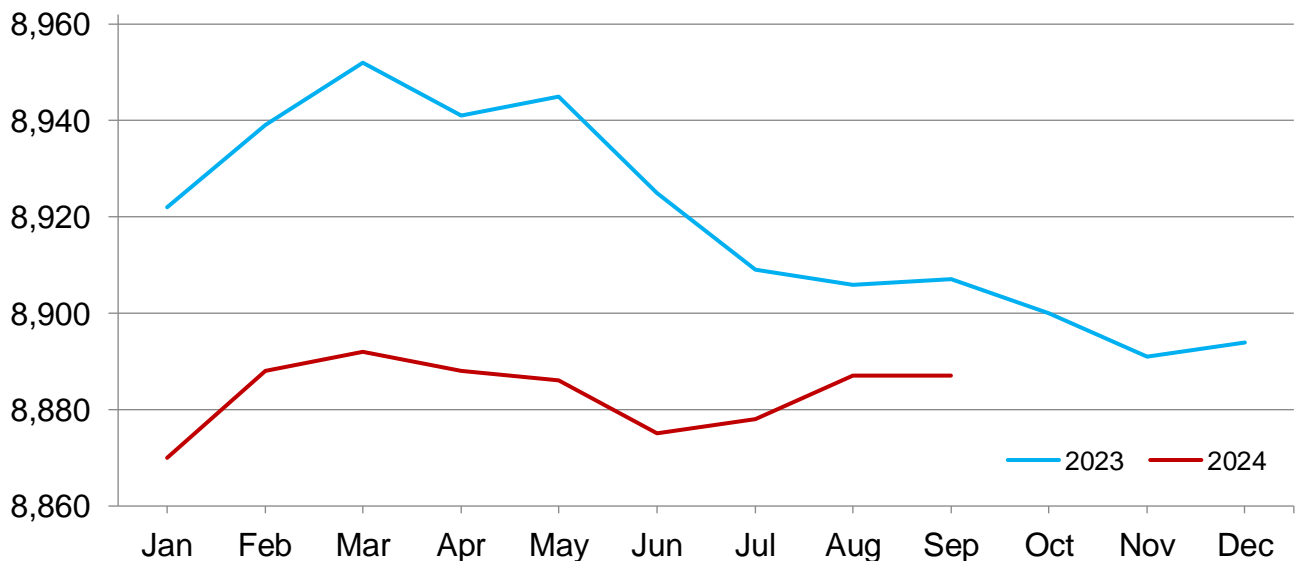
(Z) Less than half of the unit shown.

<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 – 24 Selected States: August 2023 and 2024

[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 2023
	2023	2024	2023	2024	2023	2024	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona .....	201	192	1,850	1,865	372	358	-3.8
California .....	1,713	1,708	1,930	1,980	3,306	3,382	2.3
Colorado .....	198	200	2,200	2,205	436	441	1.1
Florida .....	99	99	1,605	1,580	159	156	-1.9
Georgia .....	90	85	1,735	1,850	156	157	0.6
Idaho .....	666	672	2,175	2,200	1,449	1,478	2.0
Illinois .....	79	77	1,720	1,740	136	134	-1.5
Indiana .....	190	189	1,970	1,985	374	375	0.3
Iowa .....	240	241	2,065	2,060	496	496	-
Kansas .....	169	178	1,970	2,005	333	357	7.2
Michigan .....	439	436	2,335	2,325	1,025	1,014	-1.1
Minnesota .....	450	442	1,970	1,965	887	869	-2.0
New Mexico .....	270	239	2,005	2,010	541	480	-11.3
New York .....	630	630	2,195	2,160	1,383	1,361	-1.6
Ohio .....	253	252	1,890	1,910	478	481	0.6
Oregon .....	120	118	1,775	1,785	213	211	-0.9
Pennsylvania .....	466	465	1,755	1,725	818	802	-2.0
South Dakota .....	197	214	1,975	1,985	389	425	9.3
Texas .....	635	655	2,110	2,205	1,340	1,444	7.8
Utah .....	90	90	1,980	1,985	178	179	0.6
Vermont .....	117	113	1,845	1,815	216	205	-5.1
Virginia .....	68	66	1,730	1,720	118	114	-3.4
Washington .....	257	260	2,050	2,050	527	533	1.1
Wisconsin .....	1,269	1,266	2,155	2,140	2,735	2,709	-1.0
24-State Total .....	8,906	8,887	2,028	2,044	18,065	18,161	0.5

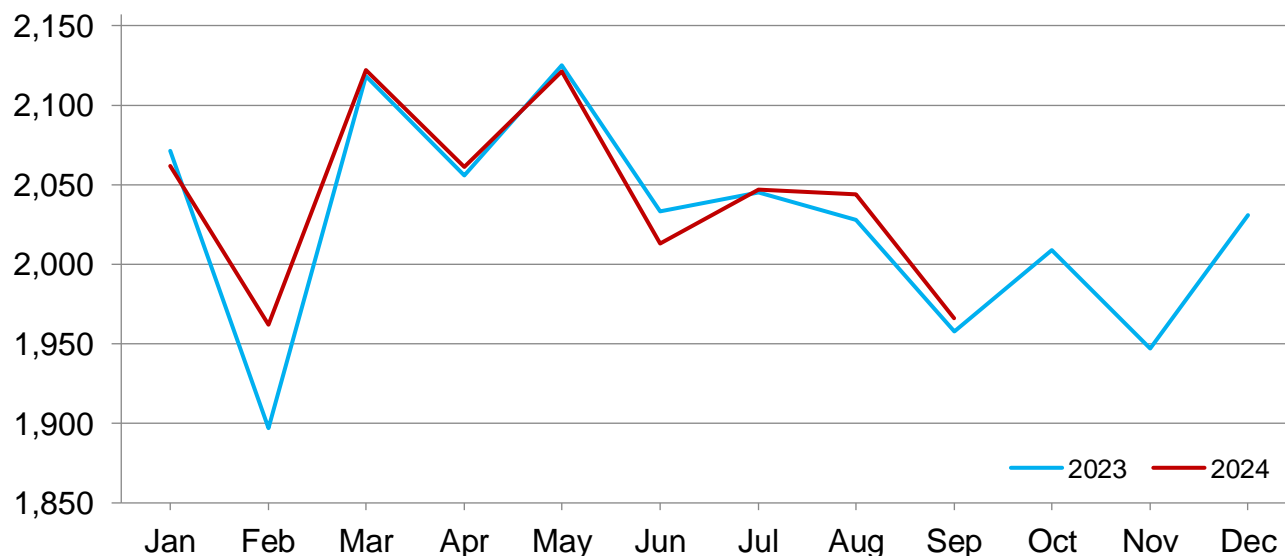
- Represents zero.

<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 – States and United States: Revised April - June 2023 and 2024

[May not add due to rounding]

State	April - June milk cows <sup>1</sup>		April - June milk production <sup>2</sup>		Change from 2023
	2023	2024	2023	2024	
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama .....	2.5	2.5	8.0	7.0	-12.5
Alaska .....	(D)	(D)	(D)	(D)	(NA)
Arizona .....	198.0	191.0	1,268.0	1,223.0	-3.5
Arkansas .....	3.0	2.0	9.0	7.0	-22.2
California .....	1,715.0	1,708.0	10,600.0	10,464.0	-1.3
Colorado .....	205.0	203.0	1,342.0	1,316.0	-1.9
Connecticut .....	18.0	17.5	109.0	108.0	-0.9
Delaware .....	2.7	2.6	12.7	12.3	-3.1
Florida .....	94.0	100.0	499.0	537.0	7.6
Georgia .....	93.0	85.0	533.0	490.0	-8.1
Hawaii .....	(D)	(D)	(D)	(D)	(NA)
Idaho .....	670.0	668.0	4,329.0	4,275.0	-1.2
Illinois .....	79.0	78.0	443.0	440.0	-0.7
Indiana .....	189.0	189.0	1,151.0	1,139.0	-1.0
Iowa .....	240.0	243.0	1,503.0	1,520.0	1.1
Kansas .....	178.0	173.0	1,070.0	1,036.0	-3.2
Kentucky .....	45.0	43.0	244.0	225.0	-7.8
Louisiana .....	8.0	7.5	29.0	25.0	-13.8
Maine .....	25.0	24.0	142.0	141.0	-0.7
Maryland .....	40.0	38.0	216.0	200.0	-7.4
Massachusetts .....	9.0	9.0	47.0	47.0	-
Michigan .....	437.0	437.0	3,065.0	3,044.0	-0.7
Minnesota .....	453.0	445.0	2,659.0	2,625.0	-1.3
Mississippi .....	6.0	5.5	20.0	18.0	-10.0
Missouri .....	63.0	58.0	240.0	218.0	-9.2
Montana .....	9.5	8.5	55.0	50.0	-9.1
Nebraska .....	55.0	50.0	345.0	314.0	-9.0
Nevada .....	34.0	31.0	199.0	195.0	-2.0
New Hampshire .....	9.5	9.5	53.0	52.0	-1.9
New Jersey .....	4.0	4.0	22.0	22.0	-
New Mexico .....	279.0	237.0	1,757.0	1,495.0	-14.9
New York .....	630.0	630.0	4,102.0	4,095.0	-0.2
North Carolina .....	38.0	38.0	229.0	225.0	-1.7
North Dakota .....	12.0	9.5	71.0	57.0	-19.7
Ohio .....	252.0	253.0	1,436.0	1,437.0	0.1
Oklahoma .....	39.0	40.0	179.0	190.0	6.1
Oregon .....	122.0	118.0	655.0	633.0	-3.4
Pennsylvania .....	466.0	465.0	2,544.0	2,500.0	-1.7
Rhode Island .....	0.5	0.5	2.5	2.3	-8.0
South Carolina .....	8.5	8.0	40.0	39.0	-2.5
South Dakota .....	192.0	212.0	1,114.0	1,229.0	10.3
Tennessee .....	25.0	24.0	119.0	115.0	-3.4
Texas .....	642.0	644.0	4,188.0	4,177.0	-0.3
Utah .....	91.0	90.0	539.0	536.0	-0.6
Vermont .....	118.0	114.0	649.0	627.0	-3.4
Virginia .....	67.0	67.0	362.0	357.0	-1.4
Washington .....	259.0	260.0	1,591.0	1,602.0	0.7
West Virginia .....	4.5	4.0	17.0	15.0	-11.8
Wisconsin .....	1,269.0	1,271.0	8,134.0	8,225.0	1.1
Wyoming .....	9.5	9.0	60.8	59.4	-2.3
Other States <sup>3</sup> .....	0.9	0.9	1.8	2.0	11.1
United States .....	9,410.0	9,328.0	58,004.0	57,368.0	-1.1

- Represents zero.

(D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

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

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

<sup>3</sup> Other States includes Alaska and Hawaii.

# Milk Cows and Production – States and United States: Preliminary July - September 2023 and 2024

[May not add due to rounding]

State	July - September milk cows <sup>1</sup>		July - September milk production <sup>2</sup>		
	2023	2024	2023	2024	Change from 2023
	(1,000 head)	(1,000 head)	(million pounds)	(million pounds)	(percent)
Alabama .....	2.0	2.5	6.0	6.0	-
Alaska .....	(D)	(D)	(D)	(D)	(NA)
Arizona .....	200.0	191.0	1,119.0	1,072.0	-4.2
Arkansas .....	2.5	2.0	7.0	6.0	-14.3
California .....	1,713.0	1,708.0	9,841.0	9,907.0	0.7
Colorado .....	199.0	200.0	1,298.0	1,299.0	0.1
Connecticut .....	17.5	17.5	105.0	105.0	-
Delaware .....	2.6	2.6	11.2	10.8	-3.6
Florida .....	99.0	99.0	476.0	473.0	-0.6
Georgia .....	90.0	85.0	467.0	467.0	-
Hawaii .....	(D)	(D)	(D)	(D)	(NA)
Idaho .....	666.0	670.0	4,284.0	4,343.0	1.4
Illinois .....	79.0	77.0	414.0	403.0	-2.7
Indiana .....	190.0	189.0	1,120.0	1,121.0	0.1
Iowa .....	241.0	241.0	1,486.0	1,476.0	-0.7
Kansas .....	170.0	178.0	1,004.0	1,057.0	5.3
Kentucky .....	44.0	42.0	215.0	205.0	-4.7
Louisiana .....	7.0	7.0	20.0	19.0	-5.0
Maine .....	25.0	24.0	136.0	136.0	-
Maryland .....	40.0	38.0	207.0	195.0	-5.8
Massachusetts .....	9.0	9.0	44.0	44.0	-
Michigan .....	439.0	436.0	3,044.0	3,015.0	-1.0
Minnesota .....	451.0	442.0	2,648.0	2,586.0	-2.3
Mississippi .....	5.5	5.0	15.0	14.0	-6.7
Missouri .....	60.0	56.0	203.0	186.0	-8.4
Montana .....	9.0	8.5	52.0	49.0	-5.8
Nebraska .....	54.0	50.0	329.0	306.0	-7.0
Nevada .....	32.0	31.0	192.0	196.0	2.1
New Hampshire .....	9.5	9.5	52.0	50.0	-3.8
New Jersey .....	3.9	3.9	21.0	20.0	-4.8
New Mexico .....	268.0	239.0	1,599.0	1,443.0	-9.8
New York .....	630.0	630.0	4,073.0	4,054.0	-0.5
North Carolina .....	38.0	37.0	213.0	208.0	-2.3
North Dakota .....	11.0	9.5	66.0	57.0	-13.6
Ohio .....	254.0	252.0	1,417.0	1,424.0	0.5
Oklahoma .....	37.0	40.0	149.0	164.0	10.1
Oregon .....	120.0	118.0	635.0	624.0	-1.7
Pennsylvania .....	466.0	465.0	2,414.0	2,397.0	-0.7
Rhode Island .....	0.5	0.5	2.4	2.1	-12.5
South Carolina .....	8.0	8.0	32.0	35.0	9.4
South Dakota .....	197.0	214.0	1,161.0	1,258.0	8.4
Tennessee .....	25.0	24.0	111.0	108.0	-2.7
Texas .....	635.0	654.0	4,010.0	4,259.0	6.2
Utah .....	90.0	90.0	528.0	532.0	0.8
Vermont .....	117.0	113.0	634.0	610.0	-3.8
Virginia .....	68.0	66.0	350.0	336.0	-4.0
Washington .....	257.0	260.0	1,567.0	1,575.0	0.5
West Virginia .....	4.5	4.0	16.0	15.0	-6.3
Wisconsin .....	1,269.0	1,267.0	8,136.0	8,075.0	-0.7
Wyoming .....	9.5	9.0	62.5	63.9	2.2
Other States <sup>3</sup> .....	0.8	0.9	1.7	2.1	23.5
United States .....	9,366.0	9,325.0	55,994.0	56,009.0	(Z)

- Represents zero.

(D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

(Z) Less than half of the unit shown.

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

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

<sup>3</sup> Other States includes Alaska and Hawaii.

## 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 0.2 percent. This means that chances are 2 out of 3 that the final estimate will not be above or below the current estimate of 56.0 billion pounds by more than 0.2 percent. Chances are 9 out of 10 that the difference will not exceed 0.3 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 .....	0.2	0.3	77	0	216	8	11
All milk cows .....	0.1	0.2	9	1	29	9	11

## 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).

Travis Averill, Chief, Livestock Branch .....	(202) 692-0069
Scott Hollis, Head, Livestock Section .....	(202) 690-2424
Sherry Bertramsen – Livestock Slaughter .....	(202) 690-8632
Ryan Cowen – Cattle, Cattle on Feed .....	(202) 720-3040
Kim DaPra – Milk Production and Milk Cows .....	(202) 720-3278
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