



# Milk Production

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## February Milk Production up 4.6 Percent

**Milk production** in the 23 major States during February totaled 15.8 billion pounds, up 4.6 percent from February 2015. However, adjusting production for the additional day due to leap year causes February milk production to be up 1.0 percent on a per day basis. January revised production, at 16.6 billion pounds, was up 0.2 percent from January 2015. The January revision represented a decrease of 13 million pounds or 0.1 percent from last month's preliminary production estimate.

**Production per cow** in the 23 major States averaged 1,833 pounds for February, 79 pounds above February 2015. This is the highest production per cow for the month of February since the 23 State series began in 2003. When production is adjusted for the additional day due to leap year, February production per cow is 16 pounds above February 2015 on a per day basis.

**The number of milk cows** on farms in the 23 major States was 8.63 million head, 8,000 head more than February 2015, and 2,000 head more than January 2016.

## February Milk Production in the United States up 4.6 Percent

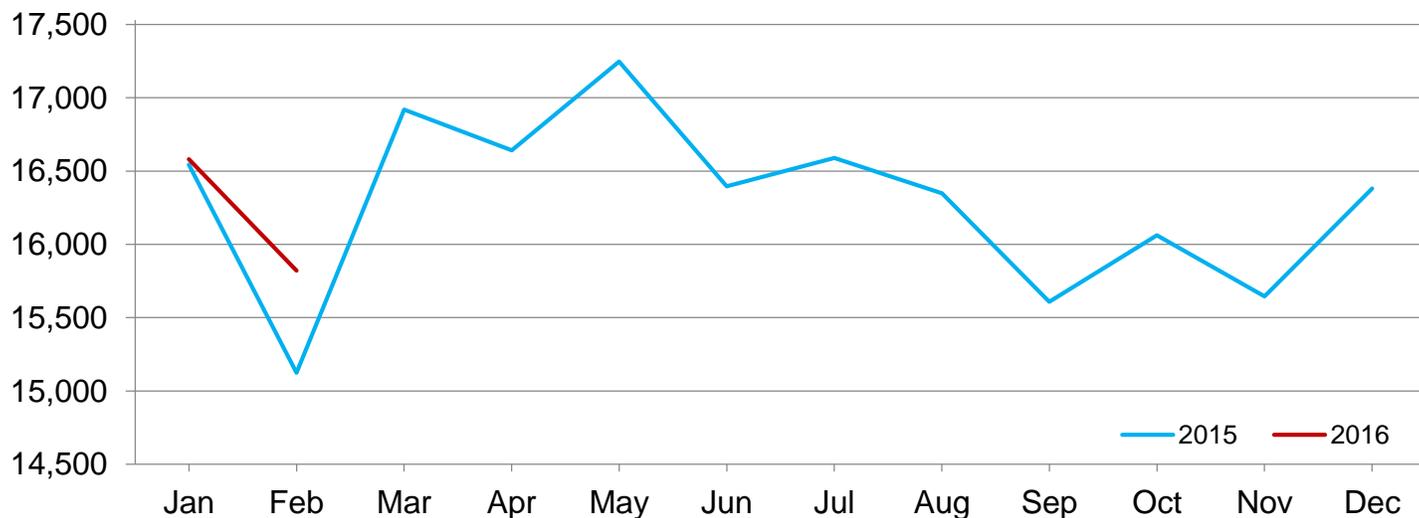
**Milk production** in the United States during February totaled 16.9 billion pounds, up 4.6 percent from February 2015.

**Production per cow** in the United States averaged 1,815 pounds for February, 78 pounds above February 2015.

**The number of milk cows** on farms in the United States was 9.31 million head, 4,000 head more than February 2015, and 2,000 head more than January 2016.

## Monthly Milk Production – 23 Selected States

Million pounds



## Milk Cows and Production by Quarter – United States: 2015-2016

[May not add due to rounding]

Quarter	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		
	2015	2016	2015	2016	2015	2016	Change from 2015
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January-March .....	9,309		5,579		51,936		
April-June .....	9,321		5,763		53,720		
July-September .....	9,315		5,549		51,685		
October-December .....	9,321		5,503		51,292		
Annual .....	9,317		22,393		208,633		

<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 – 23 Selected States: 2015-2016

Month	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		
	2015	2016	2015	2016	2015	2016	Change from 2015
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January .....	8,621	8,627	1,919	1,922	16,544	16,581	0.2
February .....	8,621	8,629	1,754	1,833	15,124	15,820	4.6
March .....	8,623		1,962		16,918		
April .....	8,627		1,929		16,641		
May .....	8,633		1,998		17,246		
June .....	8,630		1,900		16,397		
July .....	8,630		1,922		16,589		
August .....	8,633		1,894		16,349		
September .....	8,636		1,807		15,609		
October .....	8,638		1,860		16,063		
November .....	8,640		1,811		15,646		
December .....	8,638		1,896		16,381		
Annual .....	8,631		22,652		195,507		

<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: 2015-2016

Month	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		
	2015	2016	2015	2016	2015	2016	Change from 2015
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
January .....	9,308	9,310	1,900	1,903	17,685	17,717	0.2
February .....	9,308	9,312	1,737	1,815	16,166	16,905	4.6
March .....	9,311		1,942		18,085		
April .....	9,316		1,909		17,788		
May .....	9,324		1,976		18,428		
June .....	9,323		1,878		17,504		
July .....	9,314		1,897		17,665		
August .....	9,315		1,868		17,403		
September .....	9,317		1,784		16,617		
October .....	9,320		1,838		17,130		
November .....	9,322		1,790		16,689		
December .....	9,320		1,875		17,473		
Annual .....	9,317		22,393		208,633		

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

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

## Milk Cows and Production – 23 Selected States: February 2015 and 2016

[May not add due to rounding]

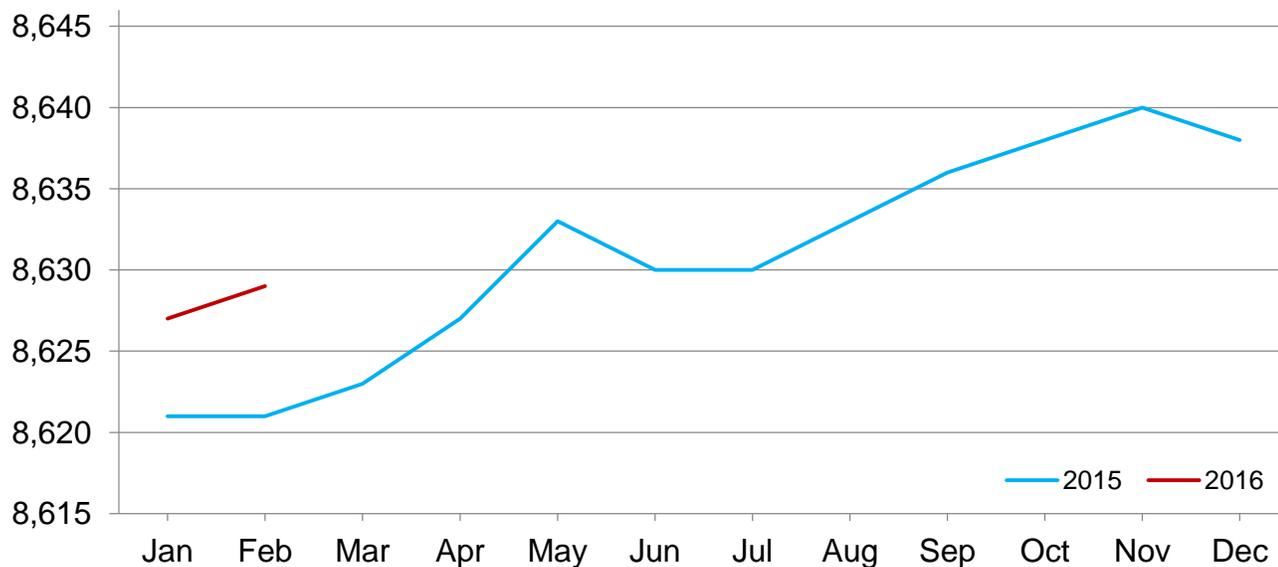
State	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		Change from 2015
	2015	2016	2015	2016	2015	2016	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona .....	195	195	1,990	2,070	388	404	4.1
California .....	1,779	1,774	1,845	1,860	3,282	3,300	0.5
Colorado .....	145	148	1,970	2,050	286	303	5.9
Florida .....	124	126	1,780	1,785	221	225	1.8
Idaho .....	581	588	1,810	1,890	1,052	1,111	5.6
Illinois .....	95	94	1,590	1,660	151	156	3.3
Indiana .....	181	184	1,705	1,815	309	334	8.1
Iowa .....	211	210	1,775	1,870	375	393	4.8
Kansas .....	143	142	1,740	1,825	249	259	4.0
Michigan .....	403	414	1,900	2,065	766	855	11.6
Minnesota .....	460	460	1,590	1,670	731	768	5.1
New Mexico .....	323	311	1,880	1,900	607	591	-2.6
New York .....	616	620	1,715	1,845	1,056	1,144	8.3
Ohio .....	268	266	1,570	1,655	421	440	4.5
Oregon .....	125	126	1,570	1,645	196	207	5.6
Pennsylvania .....	530	530	1,585	1,640	840	869	3.5
South Dakota .....	101	112	1,700	1,760	172	197	14.5
Texas .....	468	455	1,740	1,815	814	826	1.5
Utah .....	96	95	1,770	1,820	170	173	1.8
Vermont .....	132	131	1,545	1,650	204	216	5.9
Virginia .....	93	91	1,500	1,570	140	143	2.1
Washington .....	277	277	1,830	1,895	507	525	3.6
Wisconsin .....	1,275	1,280	1,715	1,860	2,187	2,381	8.9
23-State Total .....	8,621	8,629	1,754	1,833	15,124	15,820	4.6

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

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

## Monthly Milk Cows – 23 Selected States

Thousand head



## Milk Cows and Production – 23 Selected States: January 2015 and 2016

[May not add due to rounding]

	Milk cows <sup>1</sup>		Milk per cow <sup>2</sup>		Milk production <sup>2</sup>		Change from 2015
	2015	2016	2015	2016	2015	2016	
	(1,000 head)	(1,000 head)	(pounds)	(pounds)	(million pounds)	(million pounds)	(percent)
Arizona .....	195	195	2,135	2,140	416	417	0.2
California .....	1,779	1,774	1,985	1,935	3,531	3,433	-2.8
Colorado .....	145	148	2,140	2,160	310	320	3.2
Florida .....	124	126	1,875	1,810	233	228	-2.1
Idaho .....	580	588	1,990	2,005	1,154	1,179	2.2
Illinois .....	95	94	1,725	1,745	164	164	-
Indiana .....	181	184	1,890	1,915	342	352	2.9
Iowa .....	211	210	1,995	1,985	421	417	-1.0
Kansas .....	143	142	1,890	1,905	270	271	0.4
Michigan .....	403	413	2,100	2,170	846	896	5.9
Minnesota .....	460	460	1,745	1,770	803	814	1.4
New Mexico .....	323	310	2,070	1,900	669	589	-12.0
New York .....	616	620	1,905	1,960	1,173	1,215	3.6
Ohio .....	268	266	1,750	1,765	469	469	-
Oregon .....	125	126	1,680	1,720	210	217	3.3
Pennsylvania .....	530	530	1,730	1,735	917	920	0.3
South Dakota .....	100	112	1,880	1,890	188	212	12.8
Texas .....	470	455	1,905	1,835	895	835	-6.7
Utah .....	96	95	1,965	1,930	189	183	-3.2
Vermont .....	132	131	1,710	1,755	226	230	1.8
Virginia .....	93	91	1,650	1,645	153	150	-2.0
Washington .....	277	277	2,005	2,005	555	555	-
Wisconsin .....	1,275	1,280	1,890	1,965	2,410	2,515	4.4
23-State Total .....	8,621	8,627	1,919	1,922	16,544	16,581	0.2

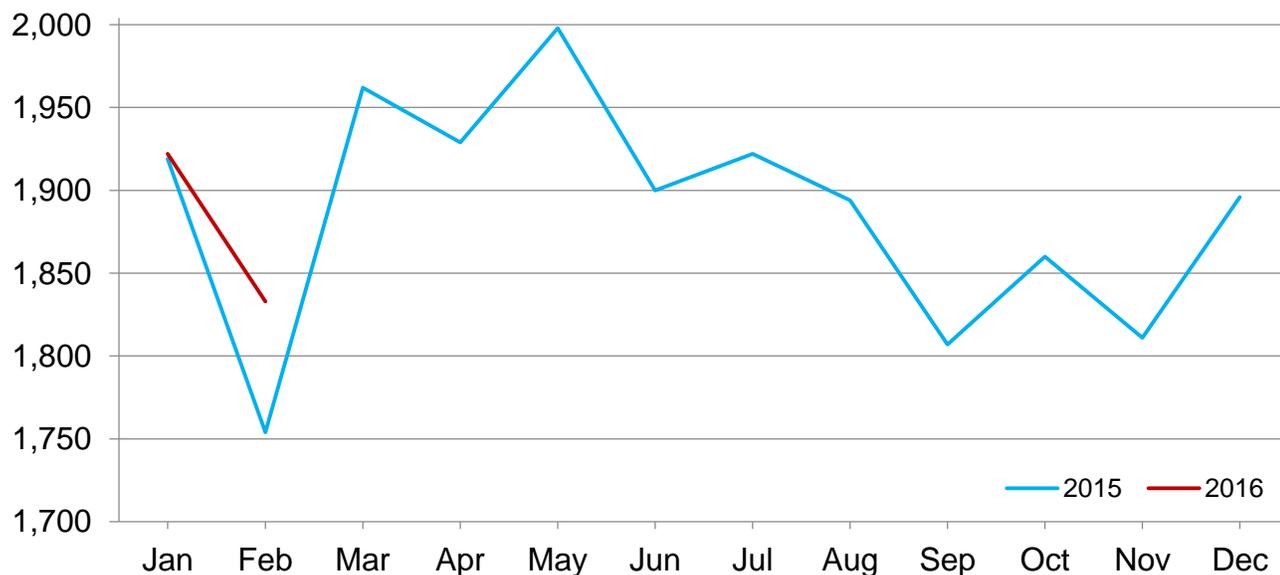
- Represents zero.

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

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

## Monthly Milk per Cow – 23 Selected States

Pounds



## 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 Survey.

**Estimation Procedures:** State 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 in the table below. 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 the 23 State milk production estimates over the past 24 months 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 15.8 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 Monthly Milk Production Estimates

[Based on data for the past 24 months]

Item	Root mean square error	90 percent confidence level	Difference between first and latest estimate				
			Average	Smallest	Largest	Months	
						Below latest	Above latest
	(percent)	(percent)	(1,000)	(1,000)	(1,000)	(number)	(number)
Milk production .....	0.2	0.3	28	7	71	19	5
All Milk cows .....	0.1	0.1	5	0	16	19	2

## 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@nass.usda.gov](mailto:nass@nass.usda.gov).

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Doug Bounds – Hogs and Pigs .....	(202) 720-3106
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Donnie Fike – Dairy Products .....	(202) 690-3236
Michael Klamm – Cattle, Cattle on Feed .....	(202) 720-3040
Mike Miller – Milk Production and Milk Cows .....	(202) 720-3278

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For more information on NASS surveys and reports, call the NASS Agricultural Statistics Hotline at (800) 727-9540, 7:30 a.m. to 4:00 p.m. ET, or e-mail: [nass@nass.usda.gov](mailto:nass@nass.usda.gov).

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