



Dear Participant,

Thank you in advance for taking the time to contribute to a project very important to the dairy industry and current research knowledge. We are veterinarians in the Population Medicine department at the Cornell Veterinary School and we are reaching out to NY dairy producers to ask for answers to a brief survey. Compensation will be provided to many participants.

More detail is found below about purpose, confidentiality, and compensation. We highly encourage the person with the most knowledge about decisions regarding antibiotic use on your dairy to fill out this questionnaire. This survey can be taken on-line or on paper. Again, your participation is greatly appreciated.

Informed Consent

Who are we: Cornell University College of Veterinary Medicine working closely with Quality Milk Production Services (QMPS).

We are asking you to participate in a research survey. We anticipate it should take you approximately 10-15 minutes of your time to complete.

Project title: "Survey of NY dairies: factors that influence antibiotic use"

What the study is about

The purpose of this research is to understand what factors influence treatment decisions when using antibiotics on dairies.

What we will ask you to do

If you choose to participate, you will be asked to answer questions about antibiotic use decision-making on your dairy, your thoughts on current regulations, along with collection of demographic information.

Benefits

The answers retrieved will help guide veterinarians and consultants to establish effective ways of implementing antibiotic protocols on dairies.

Compensation for participation

We would like to compensate you for your time filling out this questionnaire. Every 10th participant will receive a \$20 amazon gift card. You will be asked to provide your email address on a separate page so upon receipt the survey responses and email address will be separate and cannot be linked.

Privacy/Confidentiality/Data Security

The responses that you provide in this study will be kept completely confidential and anonymous (i.e., your name will not be associated with your responses in any way). We will not publish individual responses.

Taking part is voluntary

Your involvement in this study is voluntary. You may refuse to participate before the study begins, discontinue at any time, or skip any questions that may make you feel uncomfortable, with no penalty.

If you have questions

The main researcher conducting this study is Dr. Daryl Nydam at Cornell University. If you have questions, you may contact Daryl Nydam at dvn2@cornell.edu. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) for Human Participants at 607-255-6182 or access their website at <http://www.irb.cornell.edu>. You may also report your concerns or complaints anonymously through Ethicspoint online at www.hotline.cornell.edu or by calling toll free at 1-866-293-3077.

You may complete the attached survey on paper, or online by scanning the QR code or typing in the short URL below:

<https://goo.gl/VdR6NV>



Statement of Consent

I have read the above information, and have received answers to any questions I asked. I consent to take part in the study.

*By entering **your initials** in the box below, you are effectively providing your signature, indicating that all the information on this form is true and accurate, to the best of your knowledge.*

Date (MM/DD/YYYY)

Demographics

1. Job title of person filling in questionnaire?

- ☐ Owner
 - ☐ Manager
 - ☐ Non-management farm employee
 - ☐ Herd veterinarian
 - ☐ Other
-

2. What is your current age?

3. What is your highest level of education?

- ☐ Pre-High School
 - ☐ High School/GED
 - ☐ Some College
 - ☐ Bachelors Degree
 - ☐ Graduate/Professional School
 - ☐ Prefer not to answer
-

We would like to know a little more about the farm you represent

4. Pick one. My farm is:

- ☐ Organic
 - ☐ Conventional
-

5. How many years has this business been in operation?

6. How many lactating cows on all of your facilities?

7. What is the average fat corrected milk per cow per day across the herd?

- ☐ <70 lbs
- ☐ 71-80 lbs
- ☐ 81-90 lbs
- ☐ >90 lbs

8. What is your most recent bulk tank SCC (cells/ml)?

Example: 100,000

9. Do you participate in DHIA: Dairy Herd Improvement Association, testing?

☐ Yes

☐ No

10. What is the predominant type of housing for lactating cows on your dairy

☐ Freestall

☐ Tie Stall

☐ Pasture

☐ Bedded pack

☐ Other

11. The last time written treatment protocols were reviewed by a veterinarian was:

☐ In the last 3 months

☐ In the last 6 months

☐ In the last year

☐ In over a year

☐ Our dairy does not have written protocols

12. Do you treat all cows with clinical mastitis with antibiotics?

☐ Yes

☐ No

13. Do you treat all cows with antibiotics at dry off (dry tubes, for example)?

☐ Yes

☐ No

14. If you have routine/schedule times when a veterinarian visits how often are they?

☐ One time or more per week

☐ Twice per month

☐ Every other month

☐ Less than 6 times per year

☐ We do not have regular routine visits, only for sick cows/emergencies

Questionnaire

Loss of effectiveness of an antibiotic is one of the effects of antibiotic resistance. To preserve the effectiveness of an antibiotic by using it only to treat the affected animals that will benefit from the treatment, is also called "prudent use of antibiotics". This can be achieved by using diagnostics, using cattle records to determine which cows to treat and not treating suspect viral infections. Overall this might lead to a reduction of the use of antibiotics.

The following questions refer to decisions made on your farm over the next two years.

15. Please indicate how likely:

Using antibiotics prudently will:

	Not at all likely 1	2	>> 3	>> 4	Very likely 5
Increase milk production;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be cost-effective;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Add to your job satisfaction;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase the health of your herd;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhance your reputation in the dairy industry;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase the profitability of your farm;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decrease the risk of residues in the bulk tank;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decrease the risk of antibiotic resistance on your farm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. How important are the following motives for using antibiotics prudently:

	Not at all important -2	-1	<< 0	>> 1	Extremely important 2
Increased milk production of your cows;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost-effectiveness;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your job satisfaction;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The health of your herd;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your reputation in the dairy industry;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The profitability of your farm;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decreased risk of residues in the bulk tank;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Decreased risk of antibiotic resistance on your farm.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions refer to decisions made on your farm over the next two years.

17. Please indicate on the scale below whether using antibiotics prudently would be:

Disadvantageous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Advantageous
Unsatisfying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Satisfying
Unnecessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Necessary
Unimportant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Important
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant

Questions 18 and 19 are linked.

18. Do you think the following people would approve or disapprove of you using antibiotics prudently?

	Strongly disapprove -2	-1	<< 0 >>	1	Strongly approve 2	Don't know
Family members and/or friends;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neighboring farmers;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Veterinarians;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your milk plant;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Milk consumers;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists/researchers;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government regulators.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. How important is their opinion to you in regards to your prudent use of antibiotics?

	Not at all important 1	2	>> 3 >>	4	Extremely important 5
Family members and/or friends;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neighboring farmers;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Veterinarians;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your milk buyer;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Milk consumers;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists/researchers;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government regulators.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. Please indicate your level of agreement with the following statements:

	Strongly disagree -2	-1	<< 0 >>	1	Strongly agree 2
Most people who have something to do with my farm expect me to use antibiotics prudently;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The people in the dairy industry whose opinions I value would approve of me using antibiotics prudently;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most people who are important to me think that I should use antibiotics prudently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions refer to decisions made on your farm over the next two years.

21. Do you expect that the following people are going to use antibiotics prudently:

	Unlikely -2	-1	<< 0 >>	1	Extremely likely 2	Don't know
Leading dairy farms;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your farmer friends/neighbors;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farms serviced by my veterinarian;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other livestock (non-dairy) farms;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farms in other countries.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. How important are the successful actions of the following people in your considerations to use antibiotics prudently:

	Not at all important 1	2	>> 3 >>	4	Extremely important 5
Leading dairy farms;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your farmer friends/neighbors;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farms serviced by my veterinarian;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other livestock (non-dairy) farms;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Farms in other countries.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Please indicate how likely using antibiotics prudently will:

	Not very likely 1	2	>> 3 >>	4	Extremely likely 5
Fit into your daily work routine;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Save money on treatment and labor;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be feasible as you know exactly what should be improved;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Would be easy to see changes in animal health in the short term;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Would be easy to see changes in revenue flow in the short term;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Only be effective with veterinary or consultant guidance;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Be compensated with premiums.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Will the following points make it easier or more difficult for you to use antibiotics prudently:

	Extremely difficult -2	-1	<< 0 >>	1	Extremely easy 2
Fitting into daily work routine;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Labor/money that is saved;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowing exactly what should be improved;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Achieving animal health benefits in the short term;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Achieving economic benefits in the short term;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Availability of veterinary or consultant guidance;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compensation with premiums;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having protocols computer automated.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The following questions refer to decisions made on your farm over the next two years.

25. Please indicate your level of agreement with the following statements:

	Strongly disagree		<<	>>	Strongly agree
	-2	-1	0	1	2
I have the possibility to use antibiotics prudently;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I wanted to, I could use antibiotics prudently;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is up to me whether I use antibiotics prudently;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can use antibiotics prudently;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will try to use antibiotics prudently;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I intend to use antibiotics prudently;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I plan to use antibiotics prudently.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. When you think about being a dairy farmer and managing all aspects of your dairy farm, how important are the following:

	Very unimportant		<<	>>	Very Important
	-2	-1	0	1	2
Getting as much profit from the herd as I can;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a satisfying job;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improving the herd's physical performance;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having the highest herd welfare standards;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Managing the farm more cost-effectively;	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Being seen as a dairy farmer/employee with a good reputation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. Approximately how many milking cows are treated with antibiotics for mastitis per week?

28. If you have any additional comments we would like to read them. Please write below:

Thank you for your time and patience in filling out this questionnaire.

All data provided in this survey will be confidential. Your survey responses and email address will not be linked.

Please turn the page for your chance to win a \$20 Amazon gift card!



Project title: "Survey of NY dairies: factors that influence antibiotic use"

Principal Investigator: Daryl Nydam,
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Cornell University College of Veterinary Medicine
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Compensation for participation

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Your Name (First, Last)

Your Email Address