

### 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?

	What is your most recent bulk tank SCC (cells/ml)? Example: 100,000
L	
9. [	Do you participate in DHIA: Dairy Herd Improvement Association, testing?
0	Yes No
10.	. What is the predominant type of housing for lactating cows on your dairy
00000	Freestall Tie Stall Pasture Bedded pack Other
11.	The last time written treatment protocols were reviewed by a veterinarian was:
00000	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?
0	Yes No
13.	Do you treat all cows with antibiotics at dry off (dry tubes, for example)?
0	Yes No
14.	If you have routine/schedule times when a veterinarian visits how often are they?
00000	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:

Jsing antibiotics prudently will:					
	Not at all likely		>> >>		Very likely
	1	2	3	4	5
Increase milk production;	0	0	0	0	0
Be cost-effective;	0	0	0	0	0
Add to your job satisfaction;	0	$\circ$	0	$\circ$	$\circ$
Increase the health of your herd;	0	0	0	$\circ$	0
Enhance your reputation in the dairy industry;	0	0	0	0	0
Increase the profitability of your farm;	0	0	0	0	0
Decrease the risk of residues in the bulk tank;	0	0	0	$\circ$	0
Decrease the risk of antibiotic resistance on your farm.	0	0	0	0	0
6. How important are the following mo	tives for using	antibiotic	s prudently:		
	Not at all important -2	-1	<< >>	1	Extremely important 2
Increased milk production of your cows;	0	0	0	0	0
Cost-effectiveness;	0	0	0	0	0
Your job satisfaction;	0	0	0	0	0
The health of your herd;	0	0	0	0	0
Your reputation in the dairy industry;	0	0	0	0	0
The profitability of your farm;	0	0	0	0	0
Decreased risk of residues in the bulk tank;	0	0	0	0	0

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

00000

Advantageous

Satisfying

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

Disadvantageous

Unsatisfying

Unim	essary	$\circ$	$\circ$	Necessa	ГУ		
Offilli	portant O	00	00	Importan	t		
Unp	leasant O	0 0	0 0	Pleasant			
Questions 18 and 19 are line 18. Do you think the following pe	eople would a		or disap	prove of	you usin		cs prudently?
	Strong disappro -2		<< 1	0	1	Strongly approve 2	Don't know
Family members and/or friends;	0			0	0	0	0
Neighboring farmers;	0			0	0	0	$\bigcirc$
Veterinarians;	0			0	0	0	0
Your milk plant;	0			0	0	0	0
Milk consumers;	0			0	0	0	0
Scientists/researchers;	0			0	0	0	0
Government regulators.	0			0	0	0	0
							5
Family members and/or friends; Neighboring farmers; Veterinarians; Your milk buyer; Milk consumers; Scientists/researchers;		0 0 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0
Neighboring farmers; Veterinarians; Your milk buyer; Milk consumers; Scientists/researchers; Government regulators.	agreement w	o o o	ollowing Strongly disagree	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0	0 0 0
Neighboring farmers; Veterinarians; Your milk buyer; Milk consumers; Scientists/researchers; Government regulators.  20. Please indicate your level of	Ū	o o o	•	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	O O O O O O
Neighboring farmers; Veterinarians; Your milk buyer; Milk consumers; Scientists/researchers; Government regulators.	ng to do with	o o o	Strongly disagree	O O O O Stateme	0 0 0 0 0	0 0 0 0 0 0	O O O O O O O O O O O O O O O O O O O
Neighboring farmers; Veterinarians; Your milk buyer; Milk consumers; Scientists/researchers; Government regulators.  20. Please indicate your level of	ng to do with prudently;	ith the fo	Strongly disagree -2	O O O O stateme	0 0 0 0 0 0	O O O O O	O O O O O O O O O O O O O O O O O O O

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

21. Do you expect that the following people ar	e going to	use ar	ntibiotics	prudentl	y:	
	Unlikely		<< >	>>	Extreme likely	ely
Leading dairy farms;	-2	-1	0	1	2	Don't know
	0	0	0	0	0	0
Your farmer friends/neighbors;	0	0	0	0	0	0
Farms serviced by my veterinarian;	0	0	0	0	0	0
Other livestock (non-dairy) farms;	0	0	0	0	0	0
Farms in other countries.	0	0	0	0	0	0
22. How important are the successful actions antibiotics prudently:	of the follo	wing p	eople in	your con	sideratio	ns to use
	Not at all mportant 1	2	>> 3	>>	4	Extremely important 5
Leading dairy farms;	$\circ$	0		)	0	0
Your farmer friends/neighbors;	0	0		)	0	0
Farms serviced by my veterinarian;	0	0	C	)	0	0
Other livestock (non-dairy) farms;	0	0	C	)	0	0
Farms in other countries.	0	0	C	)	0	0
23. Please indicate how likely using antibiotic	e nrudentl	v will:				
25. I lease maiotic new interfacing antibiotic		Not very				Extremely
		likely			<b>&gt;&gt;</b>	likely
Fit into your daily work routine;		1	2	3	4	5 O
Save money on treatment and labor;		0	0	0	0	0
Be feasible as you know exactly what should be impro	ved.	0	0	0	0	0
Would be easy to see changes in animal health in the		0	0	0	0	0
Would be easy to see changes in revenue flow in the	·	0	0	0	0	0
Only be effective with veterinary or consultant guidance		0	0	0	0	0
Be compensated with premiums.		0	0	0	0	0
24. Will the following points make it easier or	more diffic	ult for	vou to us	e antihi	otice prud	ently:
24. Will the following points make it easier of			you to us	c antibio	otios pruu	•
	Extreme difficult -2	ly -	<< 1	>> 0	1	Extremely easy 2
Fitting into daily work routine;	0			0	0	0
Labor/money that is saved;	0			0	0	0
Knowing exactly what should be improved;	0			0	0	0
Achieving animal health benefits in the short term;	0			0	0	0
Achieving economic benefits in the short term;	0			0	0	0
Availability of veterinary or consultant guidance;	0			0	0	0
Compensation with premiums;	0		)	0	0	0

Having protocols computer automated.

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

		Strongly disagree			>	Strongly agree	
		-2	-1	0	1	2	
I have the possibility to use antibiotics prudently;		0	0	0	0	0	
If I wanted to, I could use antibiotics prudently;		0	0	0	0	0	
It is up to me whether I use antibiotics prudently;		0	0	0	0	0	
I am confident that I can use antibiotics prudently;		0	0	0	0	0	
I will try to use antibiotics prudently;		0	0	0	0	0	
I intend to use antibiotics prudently;		0	0	0	0	0	
I plan to use antibiotics prudently.		0	0	0	0	0	
26. When you think about being a dairy far	mer and ma	naging all	aspects	of your	dairy farr	m, how	
mportant are the following:	Very	5 5	•	,	,	Very	
	unimportant -2	-1	<< 0	>>	1	Important 2	
Getting as much profit from the herd as I can;	0	0	0		0	0	
Having a satisfying job;	0	0	0		0	0	
Improving the herd's physical performance;	0	$\circ$	0		0	0	
Having the highest herd welfare standards;	0	0	0		0	0	
Managing the farm more cost-effectively;	0	$\circ$	0		0	0	
Being seen as a dairy farmer/employee with a good reputation.	0	0	0		0	0	
27. Approximately how many milking cows	are treated	with antih	viotics for	r mastitis	s ner wee	∆k?	
Tripproximately flow many mining cowo	are treated	with anti-	101100 101	mastitic	per wee	, K.;	
28. If you have any additional comments we	e would like	to read th	em. Ple	ase write	e below:		
20. II you have any additional comments we							
20. II you have any additional comments we							
20. II you have any additional comments we							

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!

Your Email Address

Project title: "Survey of NY dairies: factors that influence antibiotic use" Principal Investigator: Daryl Nydam, Population Medicine and Diagnostic Sciences Cornell University College of Veterinary Medicine dvn2@cornell.edu **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. Please provide your email address so upon receipt the survey responses and email address will be separate and cannot be linked. Your Name (First, Last)