Montana Producer Antibiotic Use 2024 Survey

Frequencies and Marginal Percentages

Survey Information

Survey data collection period:

July 25, 2024 - March 31, 2025

Data collected by:

Social Data Collection and Analysis Services (Social Data), Montana State University-Bozeman

Notes:

This survey resulted in 213 responses from a population of 8,756 for a margin of error of 6.63%.

Summary of Variables

Variable Names: lcattle, lsheep, lgoats, lbison, lhorse

Question Text: Which of the following species of livestock do you raise, own, or manage? (Select all that apply.)

Note: Frequencies do not total to 100% as respondents could select multiple options. Some respondents did not select any of the options. The percentage represents the percent of respondents who chose the option out of 213 respondents.

Frequencies and Marginal Percentages:

Table 1: Frequencies and marginal percentages table for ***lcattle, lsheep, lgoats, lbison, lhorse*** *variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Cattle	203	95.31%
Sheep	38	17.84%
Goats	14	6.57%
Bison	1	0.47%
Horses	104	48.83%

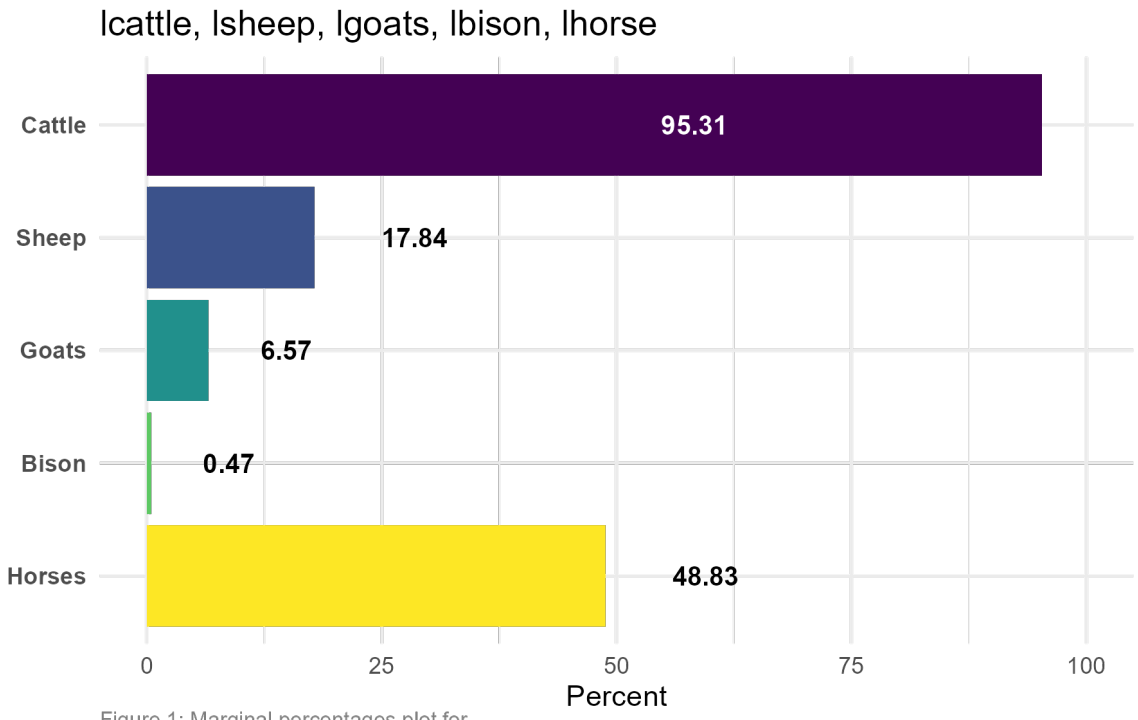

Figure 1: Marginal percentages plot for **typeOfLivestock** variable

Variable Name: size

Question Text: Which best describes the size of your herd? (If more than one type of herd, combine number of animals.)

Frequencies and Marginal Percentages:

*Table 2: Frequencies and marginal percentages table for **size** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
1-100	43	20.28%
101-250	53	25.00%
251-500	66	31.13%
501+	50	23.58%
TOTAL	212	

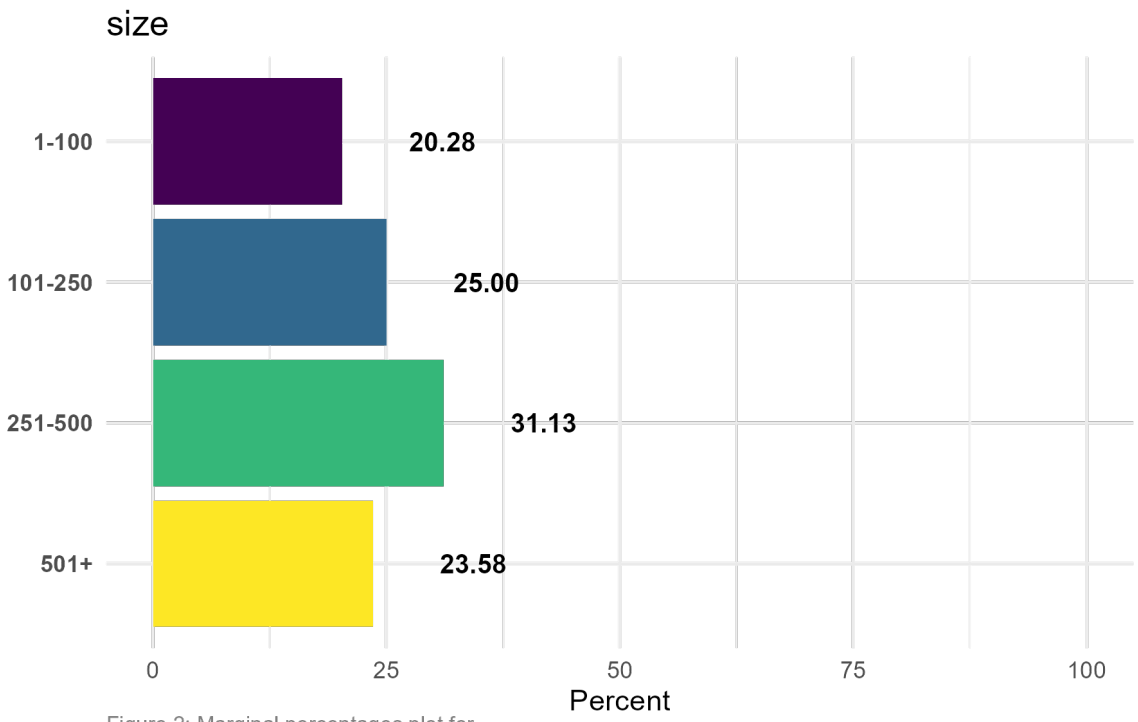

Figure 2: Marginal percentages plot for **size** variable

Variable Names: cmcalf, cmwean, cmyear, cmowner, cmbred, cmseed, cmother

Question Text: Which classes of livestock do you market? (Select all that apply.)

Note: Frequencies do not total to 100% as respondents could select multiple options. Some respondents did not select any of the options. The percentage represents the percent of respondents who chose the option out of 213 respondents.

Frequencies and Marginal Percentages:

*Table 3: Frequencies and marginal percentages table for **cmcalf, cmwean, cmyear, cmowner, cmbred, cmseed, cmother** variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Calves/lambs/kids (straight off the dam)	149	69.95%
Weaned stock	94	44.13%
Yearlings	68	31.92%
Retained ownership to slaughter	27	12.68%
Bred stock	52	24.41%
Seedstock	34	15.96%
Other:	8	3.76%

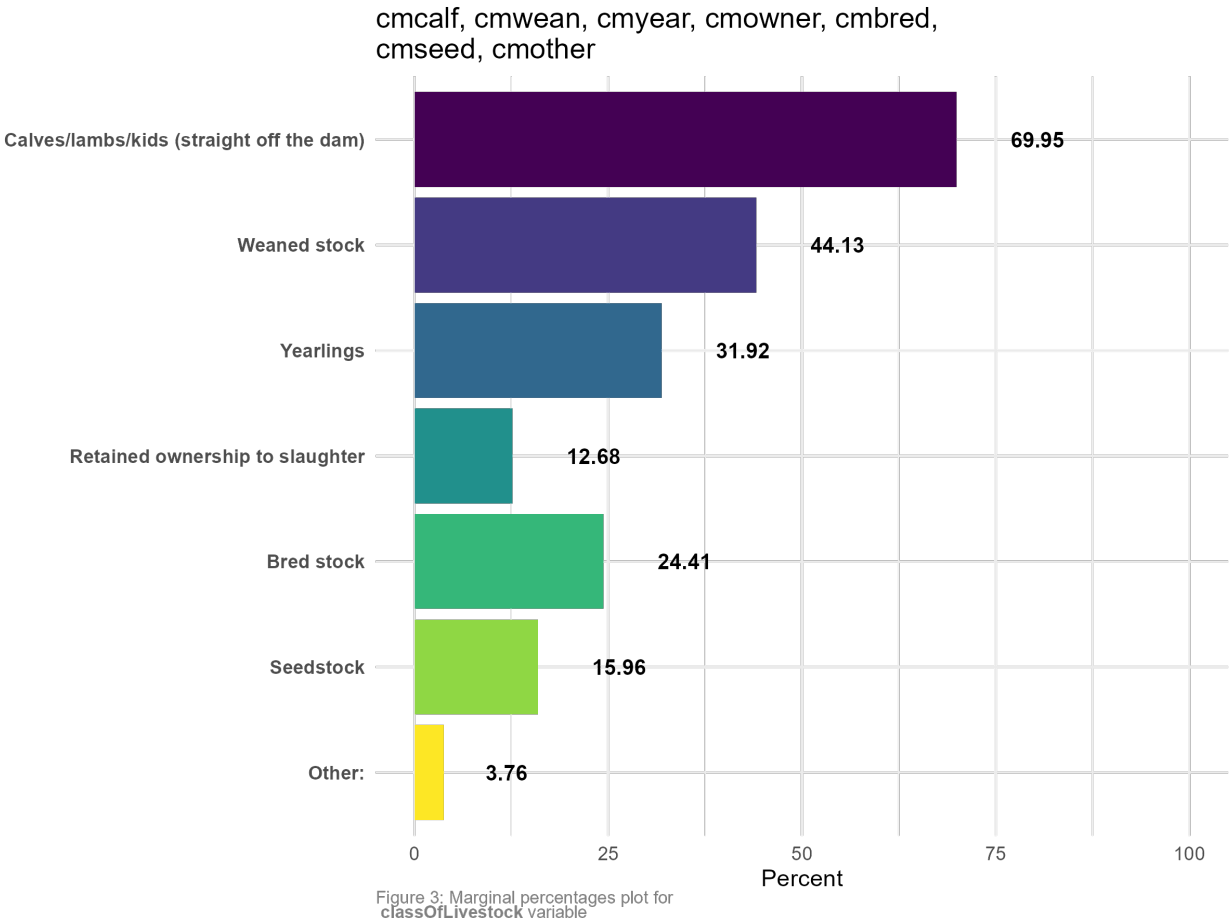

Figure 3: Marginal percentages plot for **classOfLivestock** variable

Variable Name: cmothtxt

Question Text: Which classes of livestock do you market? (Select all that apply.) - Other:
Responses:

*Table 4: Responses for **cmothtxt** variable*

RESPONSES
Dairy products
Retain market calves for slaughter and beef sales
Culls
Horses
My family also raise and feed some of our steer calves to show and then sell at the Central Montana Fair.
2 year old Hereford Bulls
Recip type cattle, cull cattle

Variable Name: allnat

Question Text: Do you market “all natural” livestock?
Frequencies and Marginal Percentages:

*Table 5: Frequencies and marginal percentages table for **allnat** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
No	137	66.83%
Yes	68	33.17%
TOTAL	205	

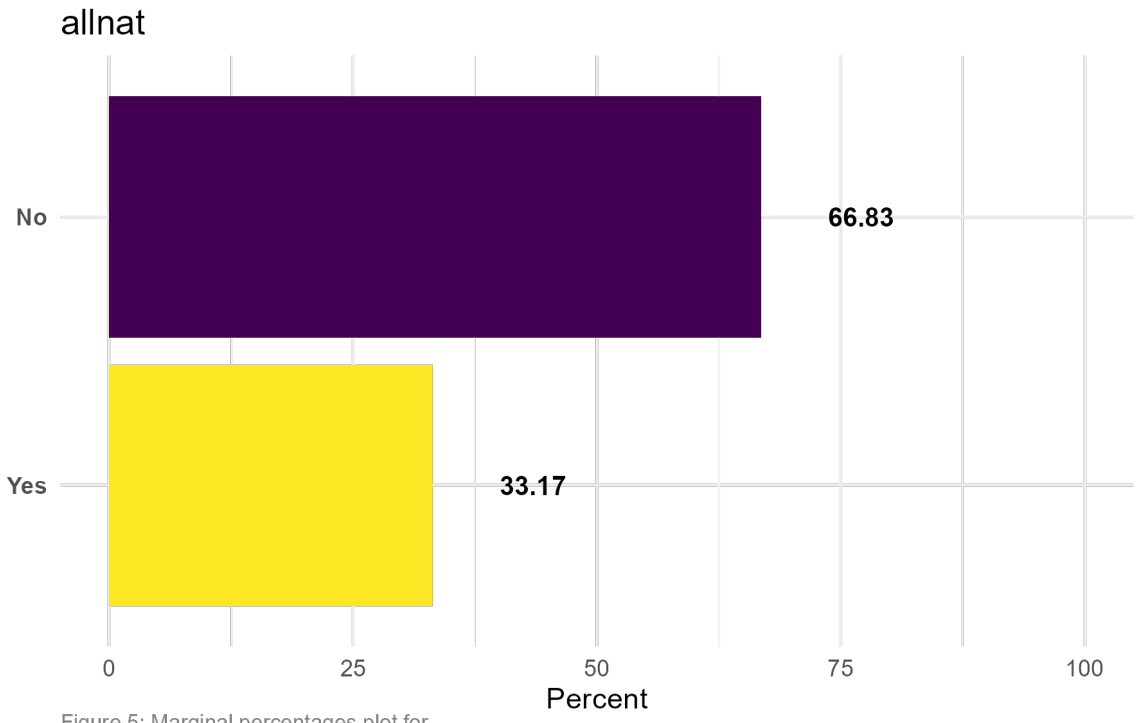

Figure 5: Marginal percentages plot for **allnat** variable

Variable Name: month

Question Text: Which month does the majority of your calving/lambing/foaling/kidding start?
Frequencies and Marginal Percentages:

*Table 6: Frequencies and marginal percentages table for **month** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
January	8	4.26%
February	26	13.83%
March	71	37.77%
April	56	29.79%
May	17	9.04%
June	3	1.60%
July	2	1.06%
August	1	0.53%
September	1	0.53%
October	0	0.00%
November	0	0.00%
December	0	0.00%
N/A	3	1.60%
TOTAL	188	

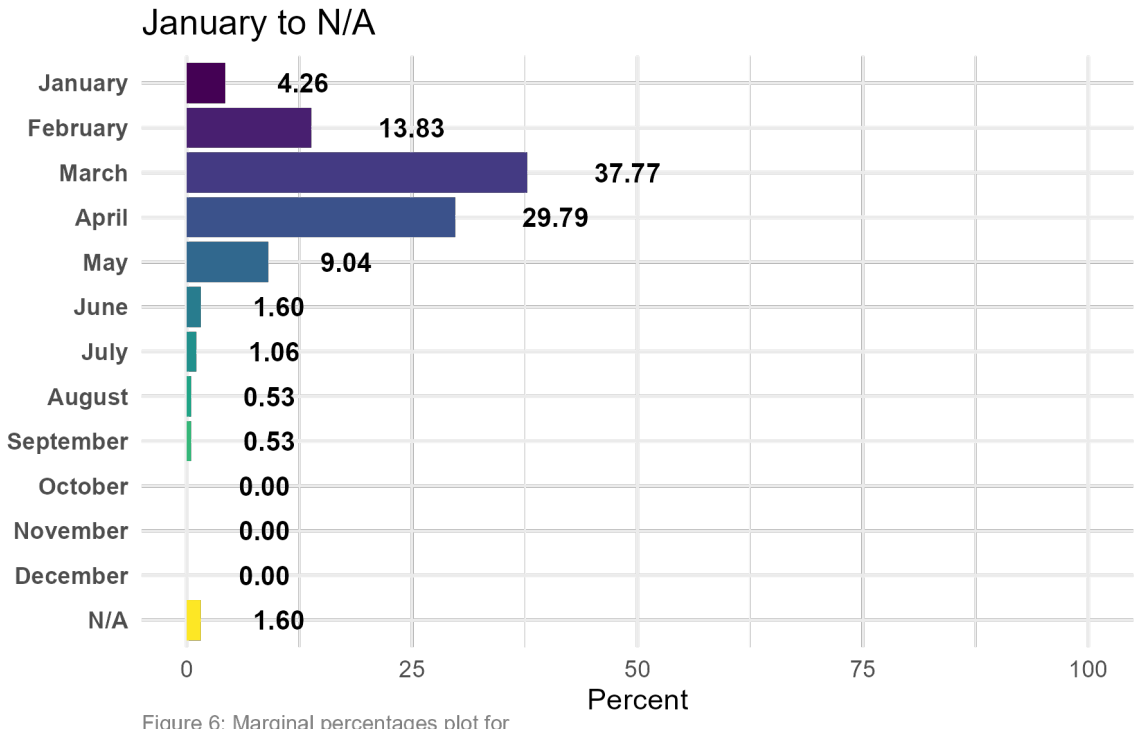

Figure 6: Marginal percentages plot for **month** variable

Variable Name: record

Question Text: What is your primary record keeping method for tracking treatment administration dates?

Frequencies and Marginal Percentages:

*Table 7: Frequencies and marginal percentages table for **record** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
None	2	1.00%
Calendar	16	8.00%
In my head	13	6.50%
Notebook (for example, IRM Red Book)	95	47.50%
Phone	22	11.00%
Spreadsheet	24	12.00%
White board or chalkboard	1	0.50%
Other:	27	13.50%
TOTAL	200	

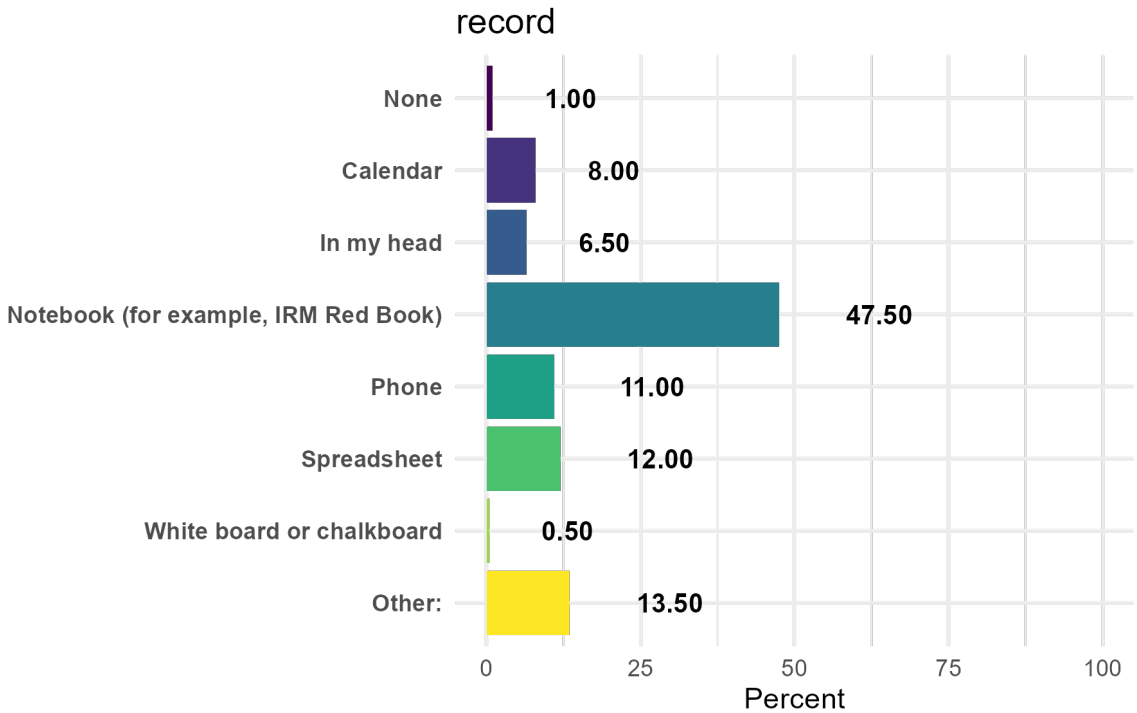

Figure 7: Marginal percentages plot for **record** variable

Variable Name: recordtx

Question Text: What is your primary record keeping method for tracking treatment administration dates? - Other:
Responses:

*Table 8: Responses for **recordtx** variable*

RESPONSES
CattleMax
Cattlemax program
CattleMax and special ear tag to ID treated animals
Cattlemax software
Cattlemax
Cattle Max (cloud based software)
CattleMax Software
Calendar; Spreadsheet; 701x New Awesome
Calendar; Notebook; Spreadsheet
In my head; Notebook
In my head; Notebook
My vet tells me
calendar; notebook; phone
Notebook; phone
calendar; notebook
Calendar; Notebook; Spreadsheet
In my head; Notebook
Calendar; Notebook; Spreadsheet
Paper tablet
Cellphone notes
Notebook and Spreadsheet
In my head and Notebook
Performance Beef Application
Book in calving shed
Phone calendar
Ranch Manager

Variable Name: treat

Question Text: Do you ever treat livestock with antibiotics?
Frequencies and Marginal Percentages:

*Table 9: Frequencies and marginal percentages table for **treat** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
No	5	2.36%
Yes	207	97.64%
TOTAL	212	

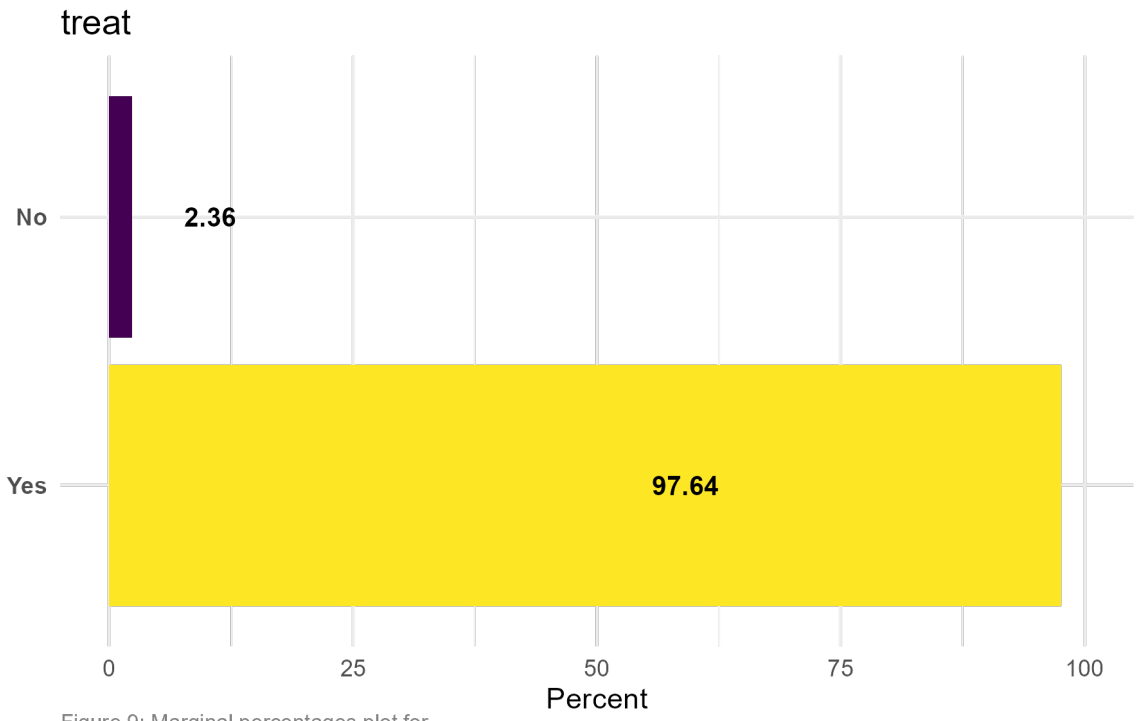

Figure 9: Marginal percentages plot for **treat** variable

Variable Names: ctnewb, ctnurse, ctwean, ctyear, ctadult, ctother

Question Text: What class of livestock do you treat with antibiotics? (Select all that apply.)
Note: Frequencies do not total to 100% as respondents could select multiple options. Some respondents did not select any of the options. The percentage represents the percent of respondents who chose the option out of 213 respondents.
Frequencies and Marginal Percentages:

Table 10: Frequencies and marginal percentages table for ***ctnewb, ctnurse, ctwean, ctyear, ctadult, ctother*** *variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Newborn	99	46.48%
Nursing calf, lamb, or kid	168	78.87%
Weaned calf, lamb, or kid	161	75.59%
Yearling	146	68.54%
Adult	167	78.40%
Other:	15	7.04%

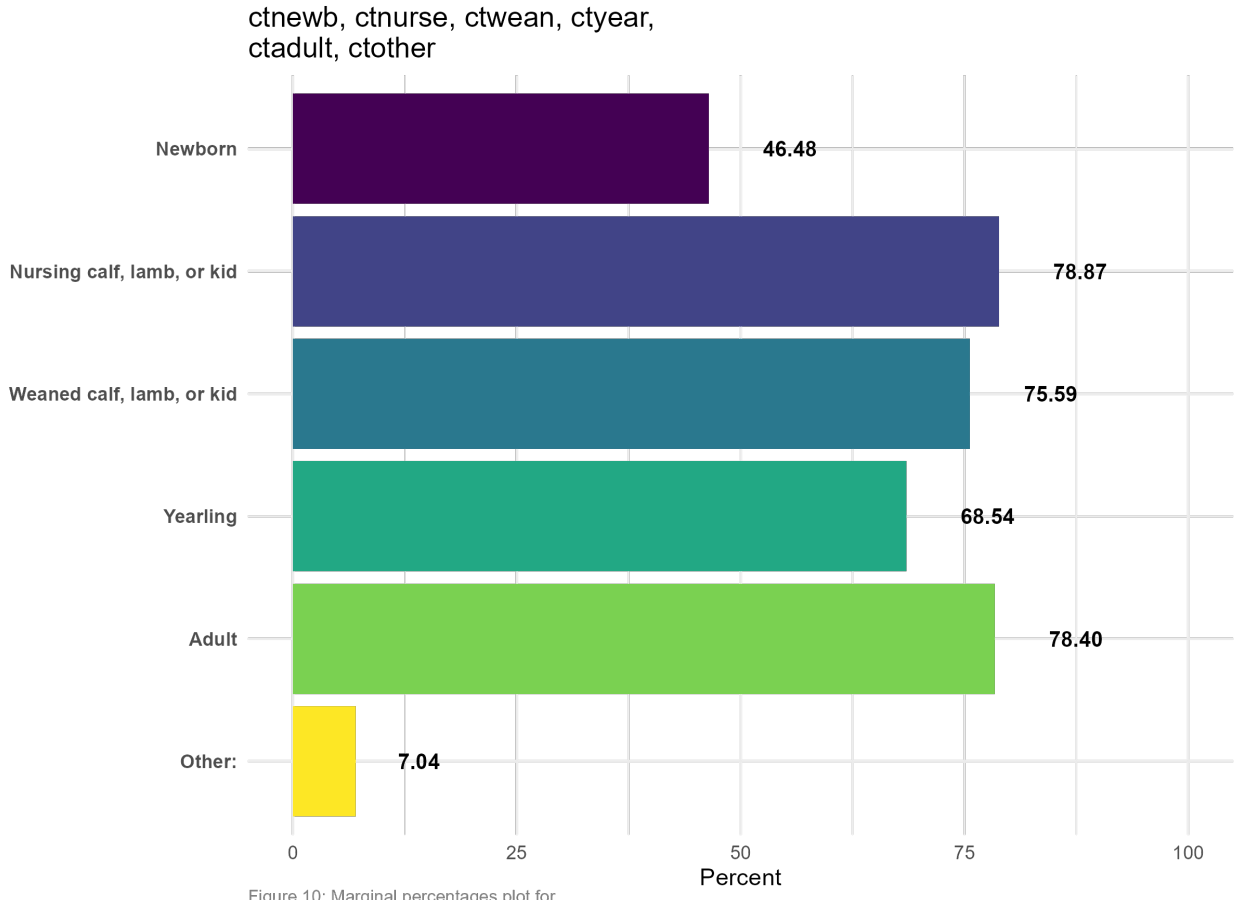

Figure 10: Marginal percentages plot for **treatedWithAnitbiotics** variable

Variable Name: ctothtxt

Question Text: What class of livestock do you treat with antibiotics? (Select all that apply.) - Other:
Responses:

*Table 11: Responses for **ctothtxt** variable*

RESPONSES
any age if sick or injured
Only sick ones
We treat them when necessary then take them out of our Natural program.
Any age if needed but only if needed
Only sick animals, as needed
Case by case basis
Only as needed
Whatever gets sick
Any that I see need it
any age that presents sickness
Any in need.
Only if they are sick and need it.
Only livestock that are sick not depending on age
only as needed. all ages

Variable Names: pfeed, pwater, pinject, pnouse, pother

Question Text: How do you use antibiotics for prevention? (Select all that apply.)
Note: Frequencies do not total to 100% as respondents could select multiple options. Some respondents did not select any of the options. The percentage represents the percent of respondents who chose the option out of 213 respondents.
Frequencies and Marginal Percentages:

Table 12: Frequencies and marginal percentages table for ***pfeed, pwater, pinject, pnouse, pother*** *variables*

SELECTED CHOICE	FREQUENCY	PERCENT
In the feed	39	18.31%
In the water	10	4.69%
Injectable	72	33.80%
Don't use antibiotics for prevention	109	51.17%
Other:	9	4.23%

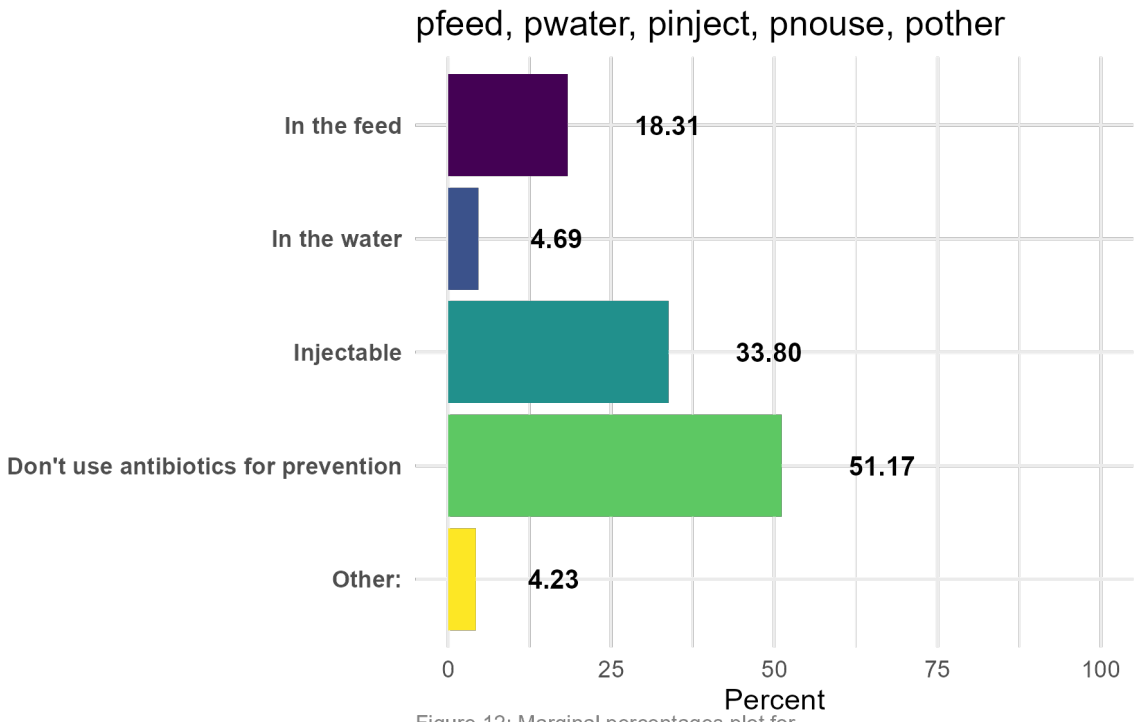

Figure 12: Marginal percentages plot for **antibioticPreventionUse** variable

Variable Name: pothtxt

Question Text: How do you use antibiotics for prevention? (Select all that apply.) - Other:
Responses:

*Table 13: Responses for **pothtxt** variable*

RESPONSES
We dont typically use as preventative but will feed through occasionally.
I've thought about ctc in mineral
Bolus
Haven't used feed thru antibiotics for prevention since needing a prescription, now wait and treat individual and hope dont have to treat the whole lot
I use vitamins/minerals in feed to boost overall immune function.
Very rare but in feed
dry treat
oral
salt-aureomycin

Variable Names: atcocci,…, atother

Question Text: What conditions do you regularly use antibiotics to treat? (Select all that apply.)
Note: Frequencies do not total to 100% as respondents could select multiple options. Some respondents did not select any of the options. The percentage represents the percent of respondents who chose the option out of 213 respondents.
Frequencies and Marginal Percentages:

Table 14: Frequencies and marginal percentages table for ***atcocci,…, atother*** *variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Coccidiosis	77	36.15%
Diphtheria	44	20.66%
Footrot	157	73.71%
Hardware	14	6.57%
Joint ill	30	14.08%
Mastitis	58	27.23%
Navel ill	65	30.52%
Overeating	68	31.92%
Pinkeye	99	46.48%
Pneumonia	175	82.16%
Scours	128	60.09%
Uterine infection	46	21.60%
Other:	8	3.76%

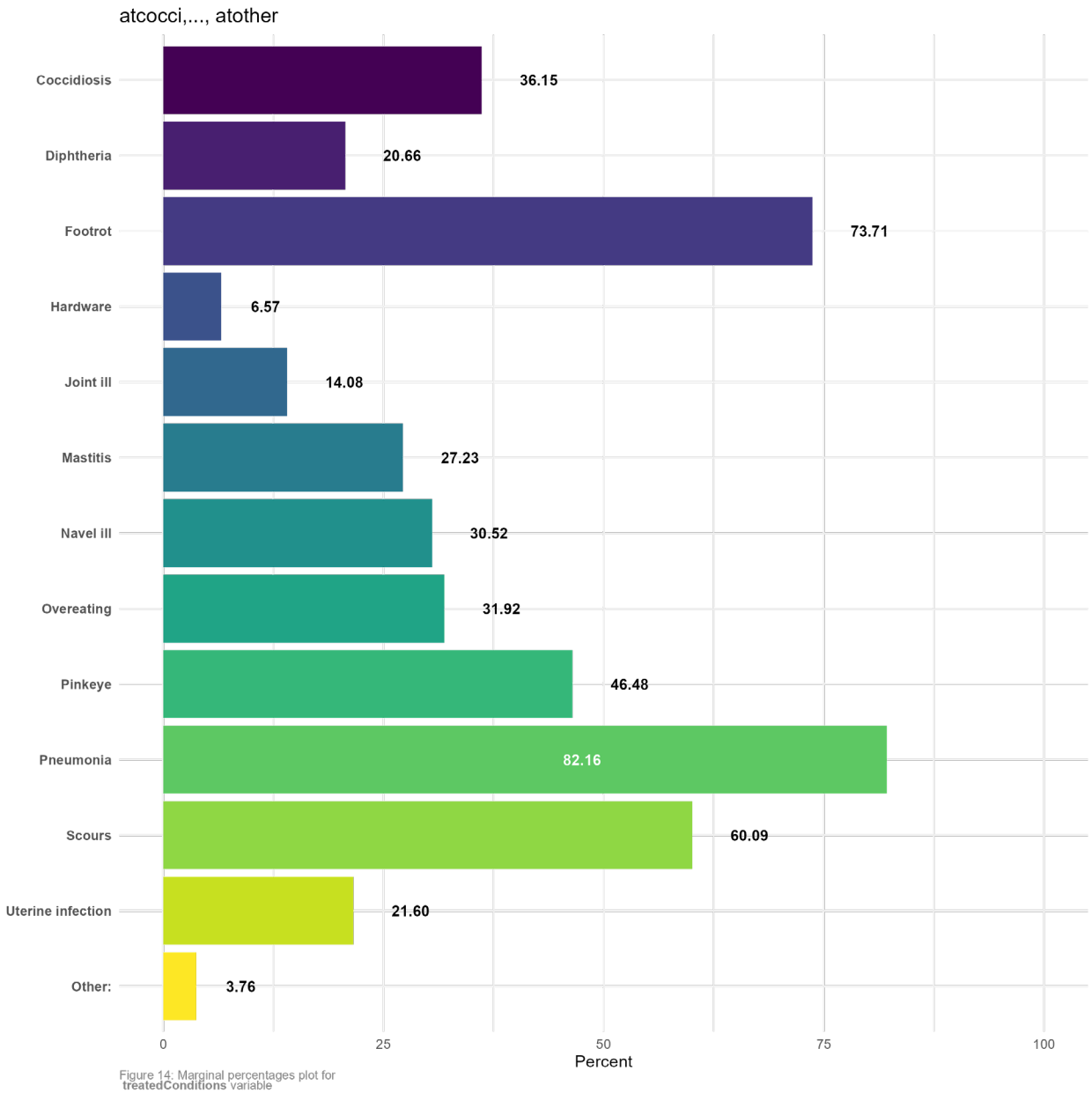

Figure 14: Marginal percentages plot for **treatedConditions** variable

Variable Name: atothtxt

Question Text: What conditions do you regularly use antibiotics to treat? (Select all that apply.) - Other:
Responses:

*Table 15: Responses for **atothtxt** variable*

RESPONSES
Foul foot (infection)
none
General infections
mycoplasma; polio; haemophilus
No regularity
Wounds
Wound infection, sole access, tooth infection

Variable Names: auampi,…, auother

Question Text: Antibiotics used: (Select all that apply.)
Note: Frequencies do not total to 100% as respondents could select multiple options. Some respondents did not select any of the options. The percentage represents the percent of respondents who chose the option out of 213 respondents.
Frequencies and Marginal Percentages:

*Table 16: Frequencies and marginal percentages table for **auampi,…, auother** variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Polyflex (ampicillin)	3	1.41%
Excede, Excenel, Naxcel (ceftiofur)	87	40.85%
Baytril, EnroMed, Quellaxcin, Tenotryl (enrofloxacin)	19	8.92%
Nuflor, Norfenicol, Loncor, Resflor (florfenicol)	140	65.73%
Neomycin	12	5.63%
LA 200, LA 300, Biomycin (oxytetracycline)	183	85.92%
Penicillin	120	56.34%
Sustain III boluses, Trimethoprim sulfa tablets, Dimethox or SulfaMed injection (sulfonamides)	102	47.89%
Zuprevo (tildipriosin)	28	13.15%
Micotil (tilmicosin)	7	3.29%
Draxxin, Increxxa, Arovyn, Macrosyn (tulithromycin)	159	74.65%
Other:	3	1.41%

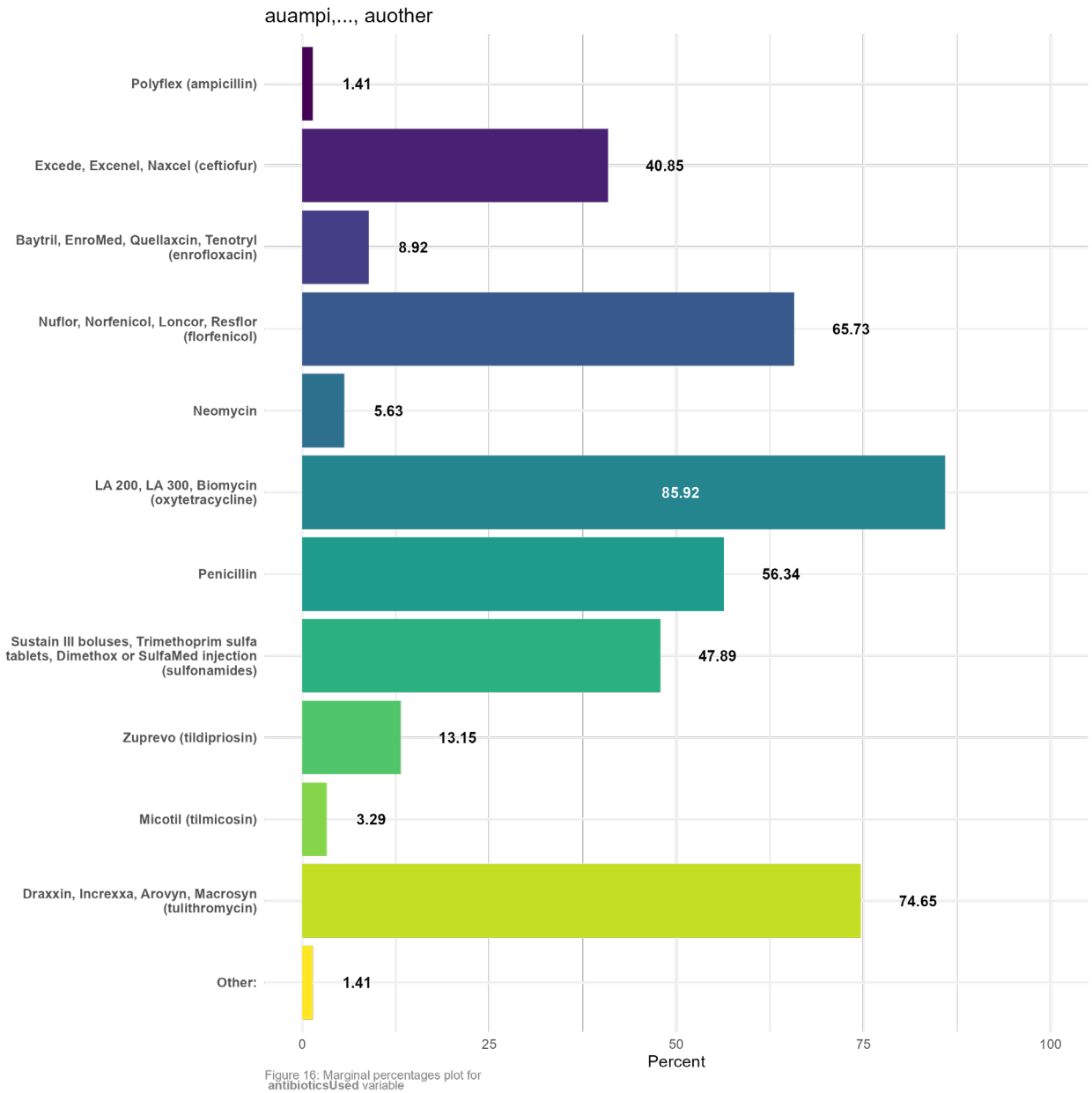

Figure 16: Marginal percentages plot for **antibioticsUsed** variable

Variable Name: auothtxt

Question Text: Antibiotics used: (Select all that apply.) - Other:
Responses:

*Table 17: Responses for **auothtxt** variable*

RESPONSES
Zactran
ToDay brand mastitis treatment

Variable Names: naampro, nadexa, nafluni, namelox, naoxyto, naprobio, naprosta, navita, naother

Question Text: What non-antibiotic treatments do you use? (Select all that apply.)
Note: Frequencies do not total to 100% as respondents could select multiple options. Some respondents did not select any of the options. The percentage represents the percent of respondents who chose the option out of 213 respondents.
Frequencies and Marginal Percentages:

Table 18: Frequencies and marginal percentages table for ***naampro, nadexa, nafluni, namelox, naoxyto, naprobio, naprosta, navita, naother*** *variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Corid (amprolium)	82	38.50%
Dexamethasone	116	54.46%
Banamine, Prevail, Vetameg (flunixin meglumine)	146	68.54%
Meloxicam	20	9.39%
Oxytocin	92	43.19%
Probiotics	103	48.36%
Lutalyse, Estrumate, EstroPlan (prostaglandins)	103	48.36%
Vitamins/minerals	151	70.89%
Other:	10	4.69%

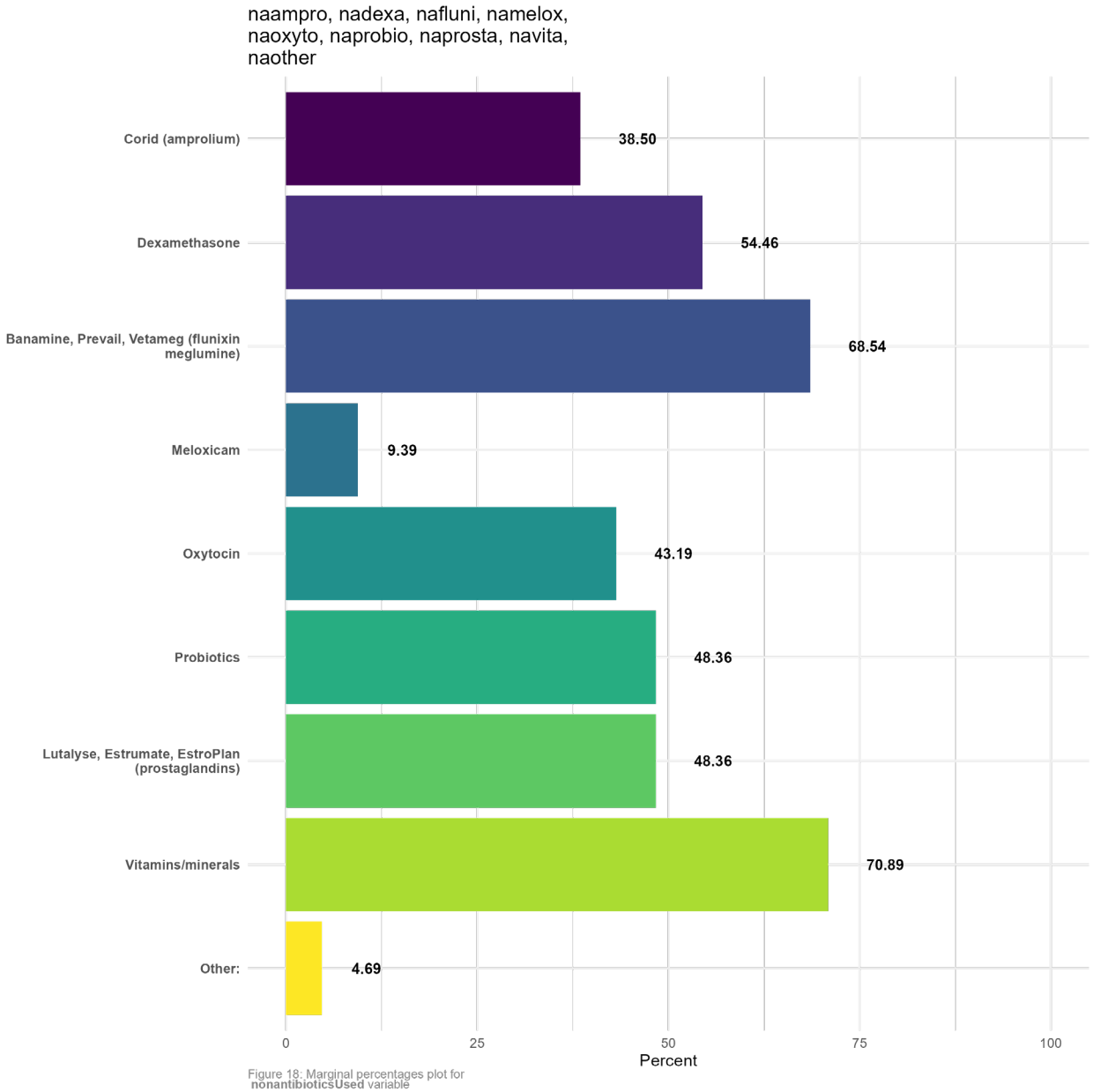

Figure 18: Marginal percentages plot for **nonantibioticsUsed** variable

Variable Name: naothtxt

Question Text: What non-antibiotic treatments do you use? (Select all that apply.) - Other:
Responses:

*Table 19: Responses for **naothtxt** variable*

RESPONSES
Mineral oil; vinegar
Mineral Salt
Vitamin B is the one I use the most!
MB-1

Variable Names: havail, hconv, hcost, hculture, hdart, hvetrec, halways, hwithdr, hother

Question Text: How do you choose which antibiotics to use? (Select all that apply.)
Note: Frequencies do not total to 100% as respondents could select multiple options. Some respondents did not select any of the options. The percentage represents the percent of respondents who chose the option out of 213 respondents.
Frequencies and Marginal Percentages:

Table 20: Frequencies and marginal percentages table for ***havail, hconv, hcost, hculture, hdart, hvetrec, halways, hwithdr, hother*** *variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Availability	85	39.91%
Convenience	67	31.46%
Cost	60	28.17%
Based on culture results	31	14.55%
If it can be used in a dart gun	70	32.86%
Veterinarian recommendations	161	75.59%
What we have always used	32	15.02%
Withdrawal times	28	13.15%
Other:	15	7.04%

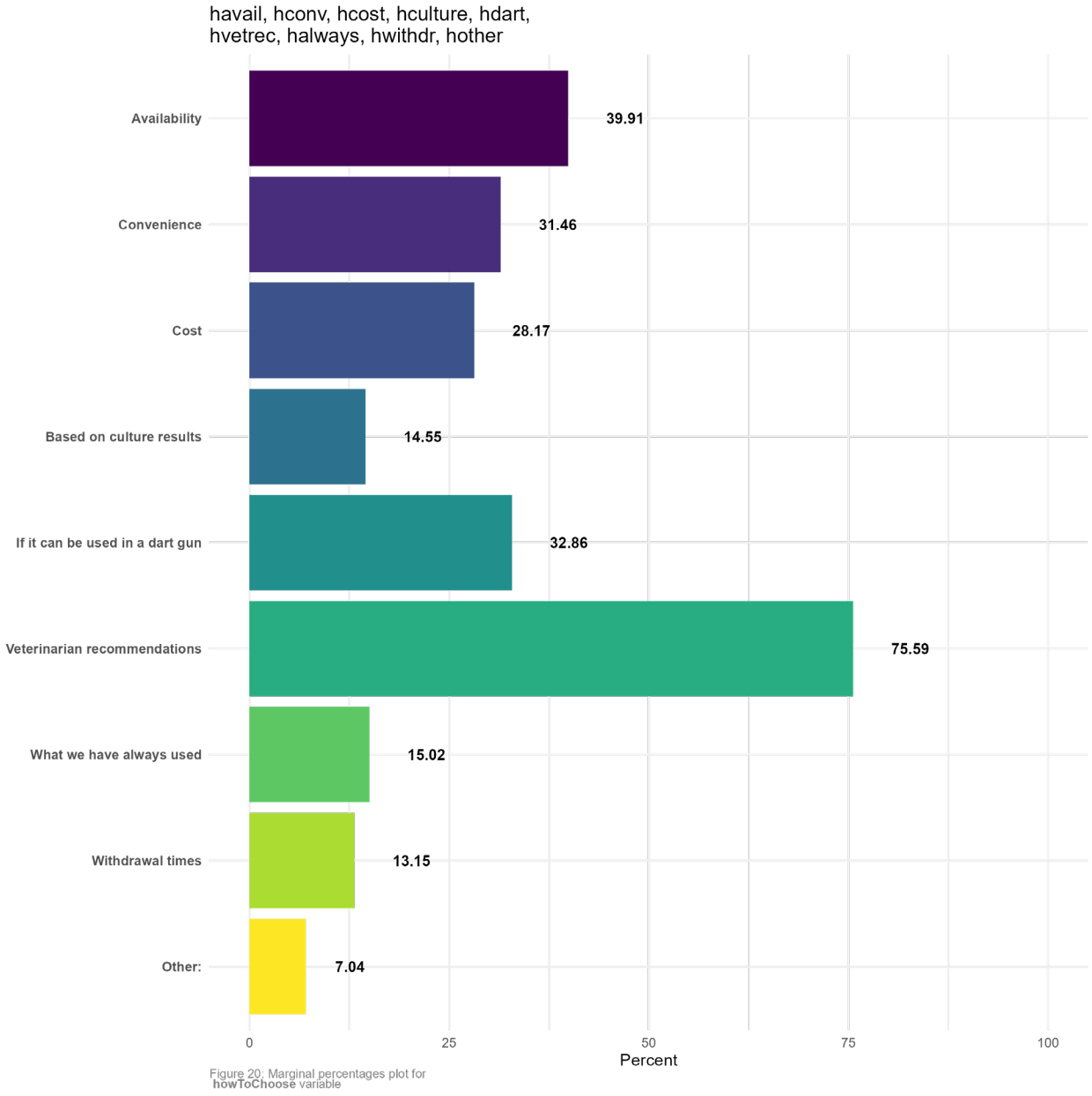

Figure 20: Marginal percentages plot for **howToChoose** variable

Variable Name: hothtext

Question Text: How do you choose which antibiotics to use? (Select all that apply.) - Other:
Responses:

*Table 21: Responses for **hothtext** variable*

RESPONSES
Success rate
Symptoms
Disease
The antibiotic I feel best fits the illness the animal has
It works
Which has the best results. Draxxin has been working well
Symptoms
The most effective with least harmful effects to overall health of animal and prevention of drug resistance. Also depends on what disease treating.
What symptoms are to match effectiveness
Animal Health Protocols based on how high risk the cattle are on arrival
Efficacy
approved [illegible]
weather - some are too thick for cold
Advice from friends or sales people

Variable Name: switch

Question Text: Have you switched antibiotics because you have noticed resistance (not working as well)?

Frequencies and Marginal Percentages:

*Table 22: Frequencies and marginal percentages table for **switch** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
No	150	74.26%
Yes	52	25.74%
TOTAL	202	

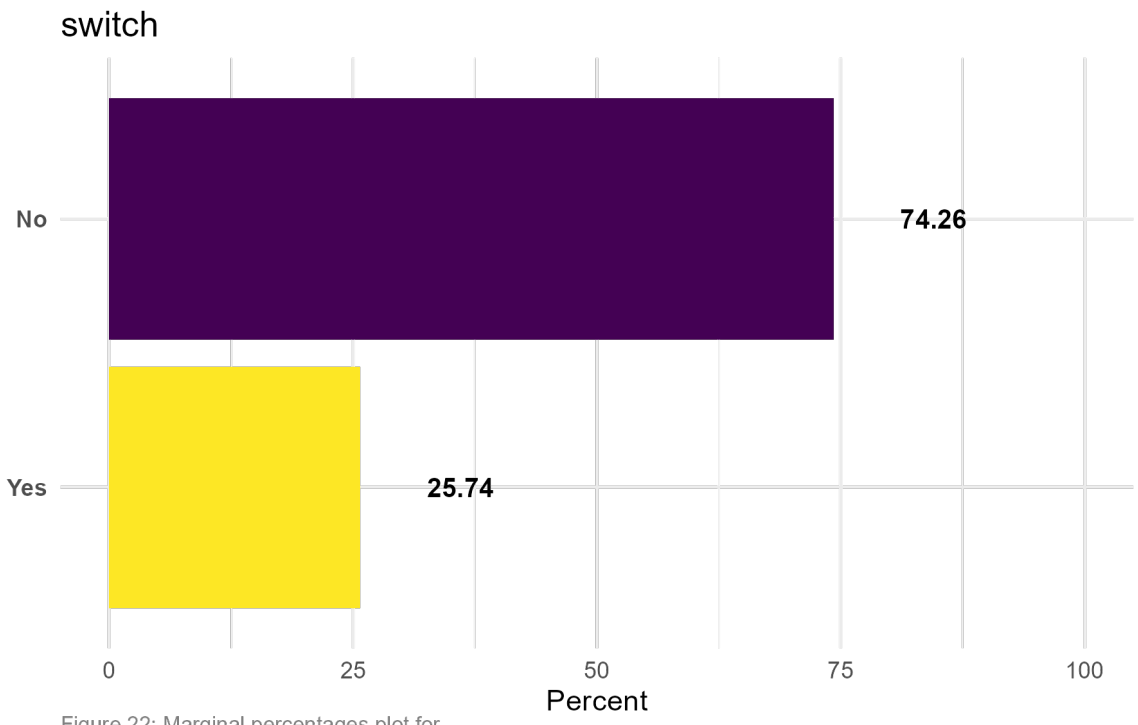

Figure 22: Marginal percentages plot for **switch** variable

Variable Name: retreat

Question Text: If an animal does not improve with antibiotic treatment, how long do you wait to re-treat?

Frequencies and Marginal Percentages:

*Table 23: Frequencies and marginal percentages table for **retreat** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
1 day	2	1.02%
2-5 days	128	64.97%
6 or more days	58	29.44%
I don't re-treat	9	4.57%
TOTAL	197	

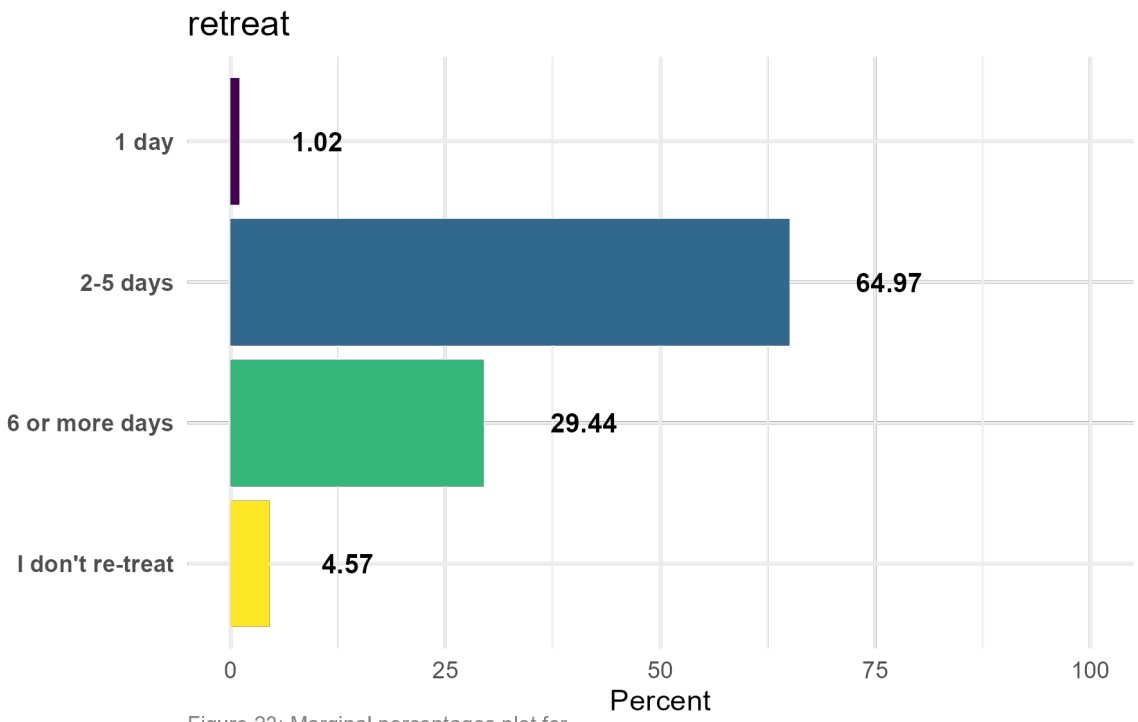

Figure 23: Marginal percentages plot for **retreat** variable

Variable Name: prescrip

Question Text: Do you know about the recent change in June 2023 that requires a veterinary prescription for all sales of medically important antibiotics?
Frequencies and Marginal Percentages:

*Table 24: Frequencies and marginal percentages table for **prescrip** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
No	12	5.77%
Yes	196	94.23%
TOTAL	208	

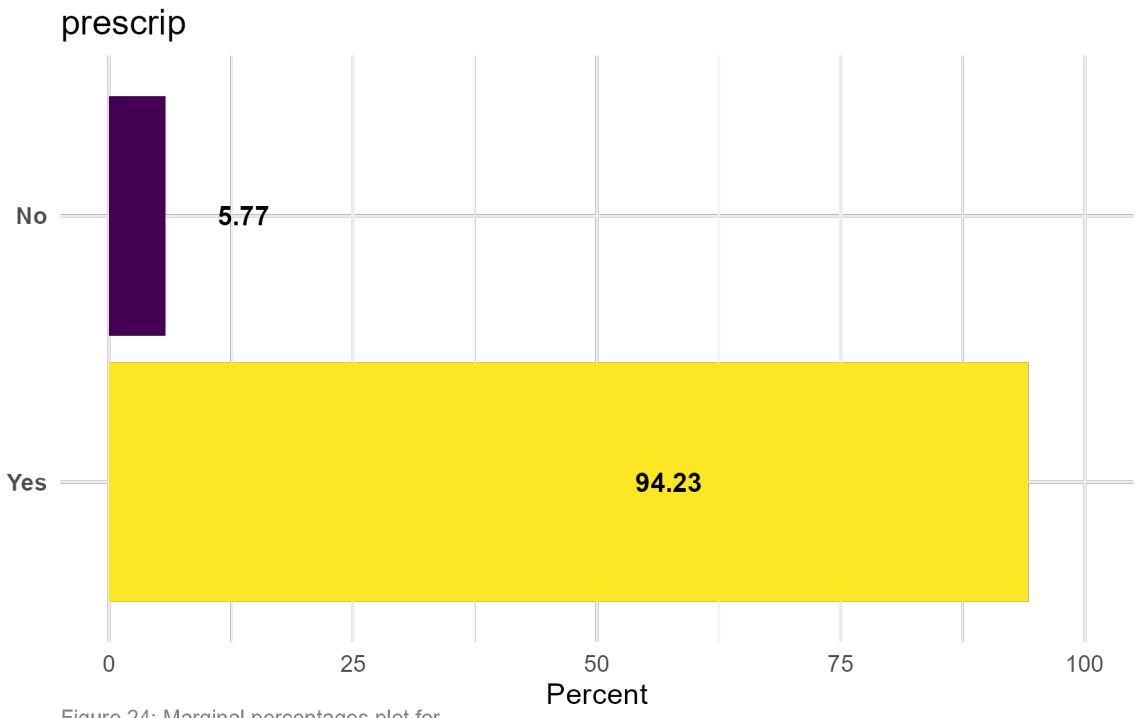

Figure 24: Marginal percentages plot for **prescrip** variable

Variable Name: herdres

Question Text: Are you concerned about antibiotic resistance in your herd?
Frequencies and Marginal Percentages:

*Table 25: Frequencies and marginal percentages table for **herdres** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
No	152	73.43%
Yes	55	26.57%
TOTAL	207	

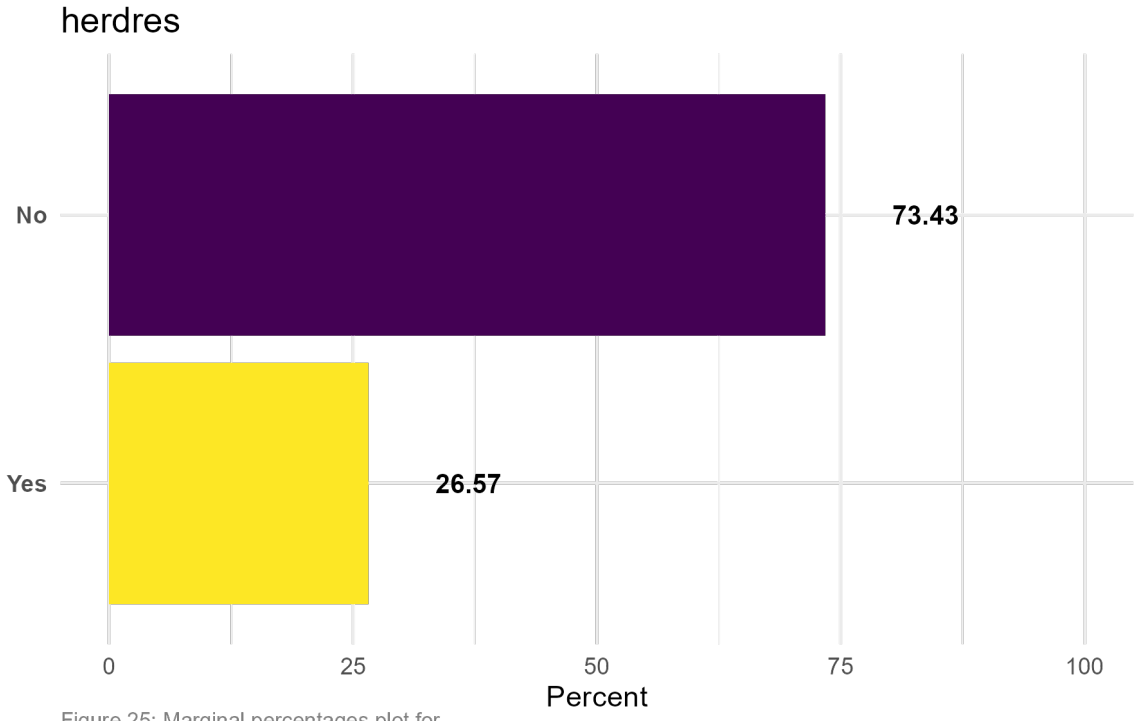

Figure 25: Marginal percentages plot for **herdres** variable

Variable Name: tissuep

Question Text: Are you concerned about the possibility of tissue damage when you administer antibiotics?

Frequencies and Marginal Percentages:

*Table 26: Frequencies and marginal percentages table for **tissuep** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
No	95	45.45%
Yes	114	54.55%
TOTAL	209	

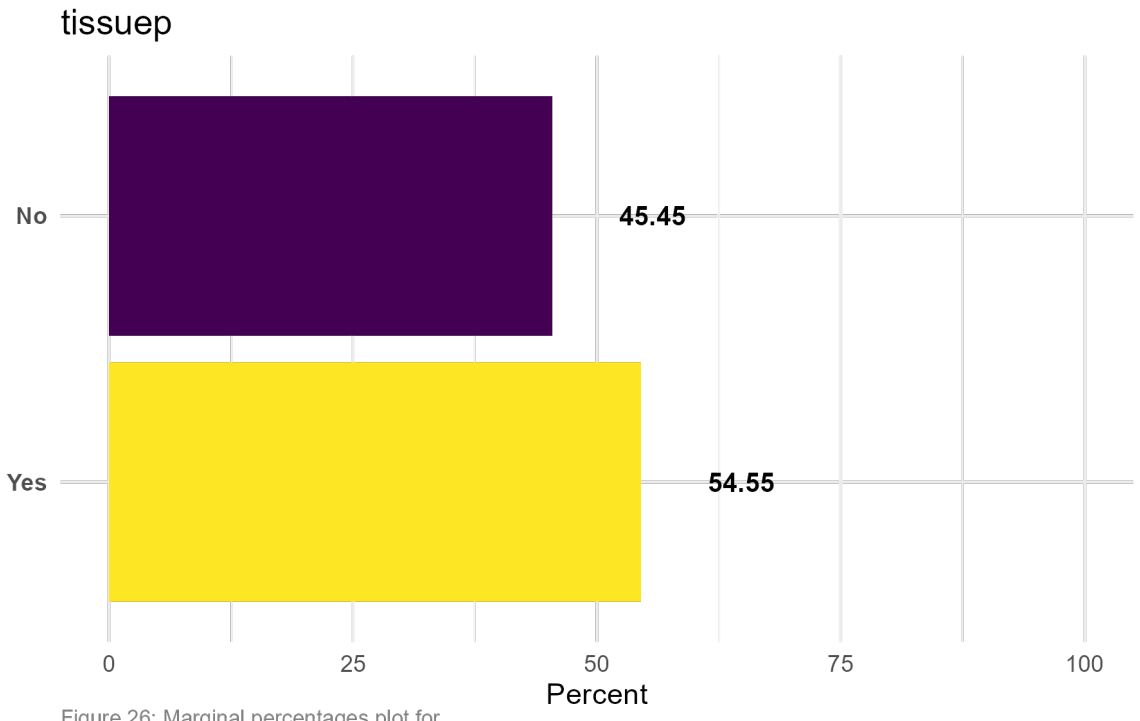

Figure 26: Marginal percentages plot for **tissuep** variable

Variable Name: humanres

Question Text: Are you concerned about antibiotic resistance in humans?
Frequencies and Marginal Percentages:

*Table 27: Frequencies and marginal percentages table for **humanres** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
No	118	57.56%
Yes	87	42.44%
TOTAL	205	

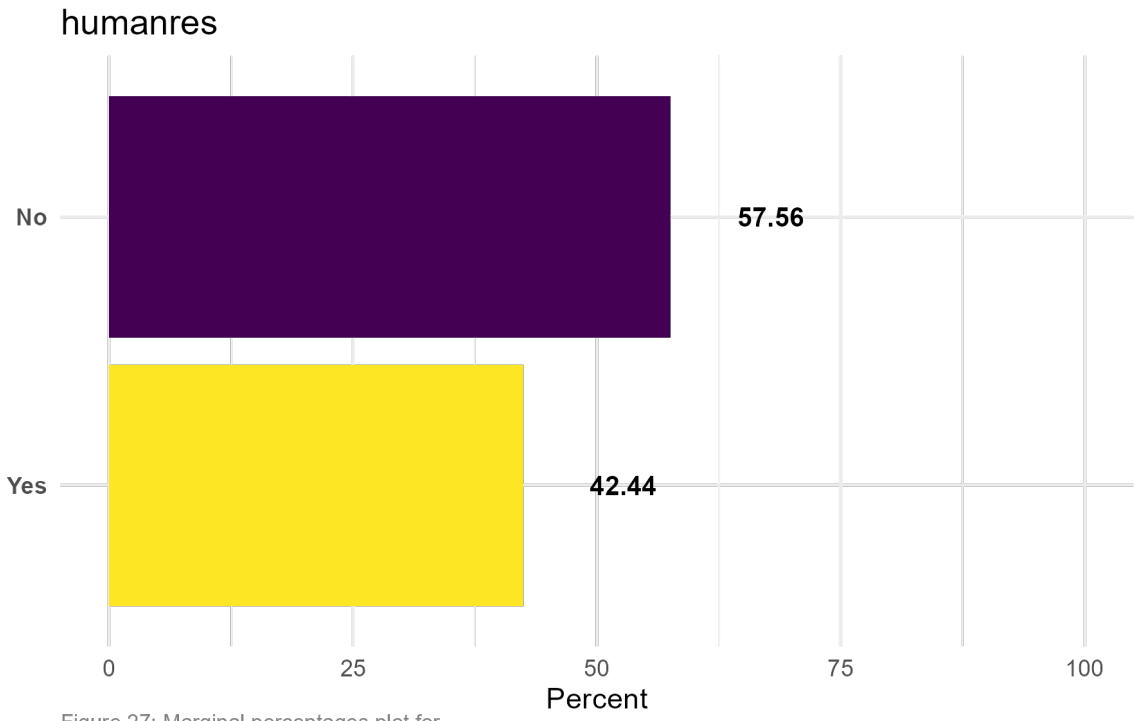

Figure 27: Marginal percentages plot for **humanres** variable