

Montana Veterinarian 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 41 responses.

Summary of Variables

Variable Name: pbovine

Question Text: Please indicate what percentage of your practice falls into each of the following categories. (The total should add up to 100%.) - Bovine

Summary Statistics:

Table 1: Summary statistics for *pbovine* variable

STATISTIC	VALUE
Min	0.00
Max	100.00
Median	30.00
Mean	38.27
Total	1569.00
Missing	0.00
Count	41.00

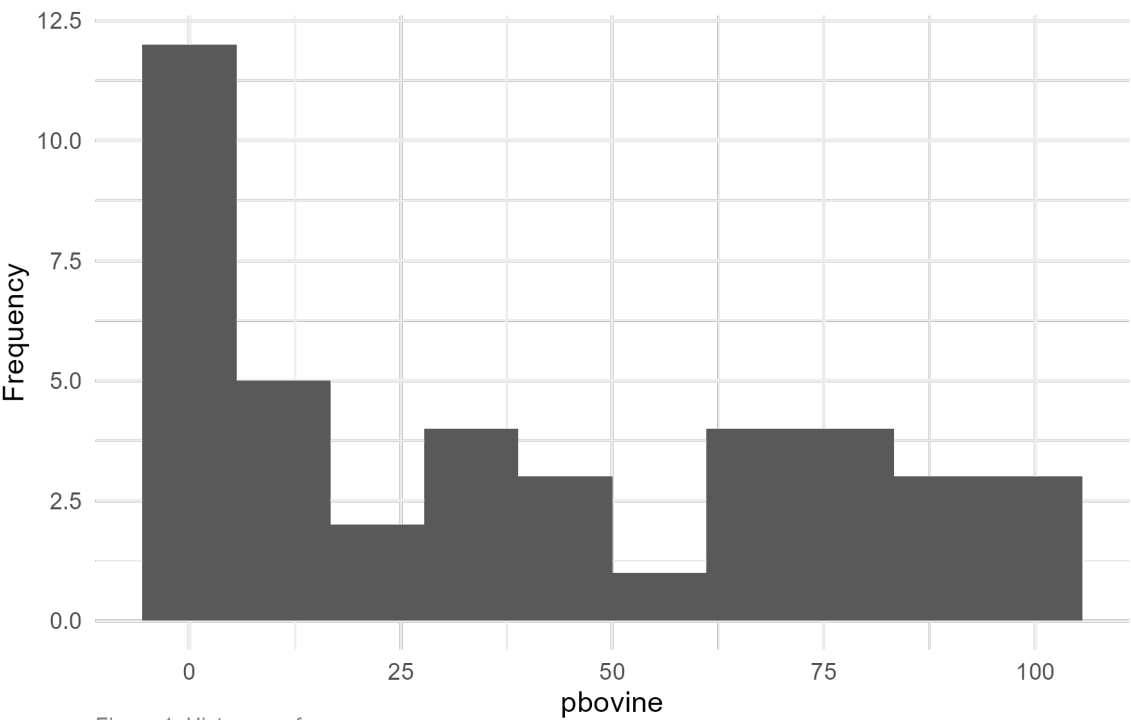


Figure 1: Histogram for *pbovine* variable

Variable Name: pequine

Question Text: Please indicate what percentage of your practice falls into each of the following categories. (The total should add up to 100%) - Equine

Summary Statistics:

Table 2: Summary statistics for *pequine* variable

STATISTIC	VALUE
Min	0.00
Max	100.00
Median	15.00
Mean	25.37
Total	1040.00
Missing	0.00
Count	41.00

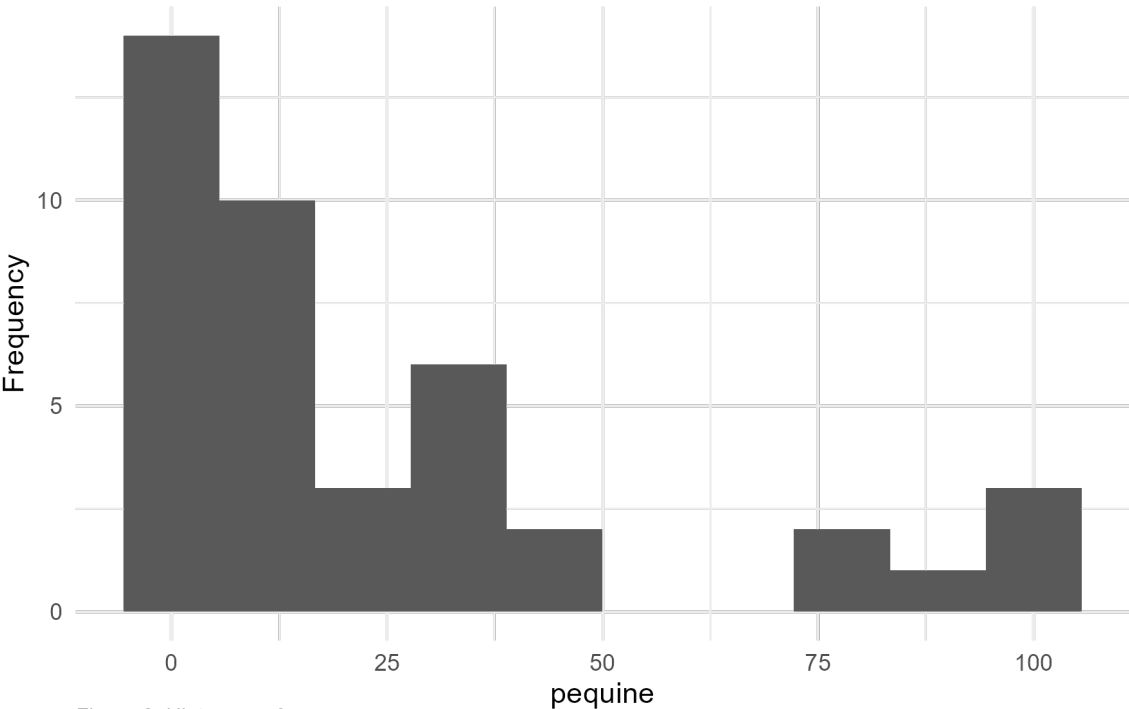


Figure 2: Histogram for *pequine* variable

Variable Name: **psmani**

Question Text: Please indicate what percentage of your practice falls into each of the following categories. (The total should add up to 100%) - Small animal

Summary Statistics:

Table 3: Summary statistics for *psmani* variable

STATISTIC	VALUE
Min	0.00
Max	100.00
Median	18.00
Mean	32.68
Total	1340.00
Missing	0.00
Count	41.00

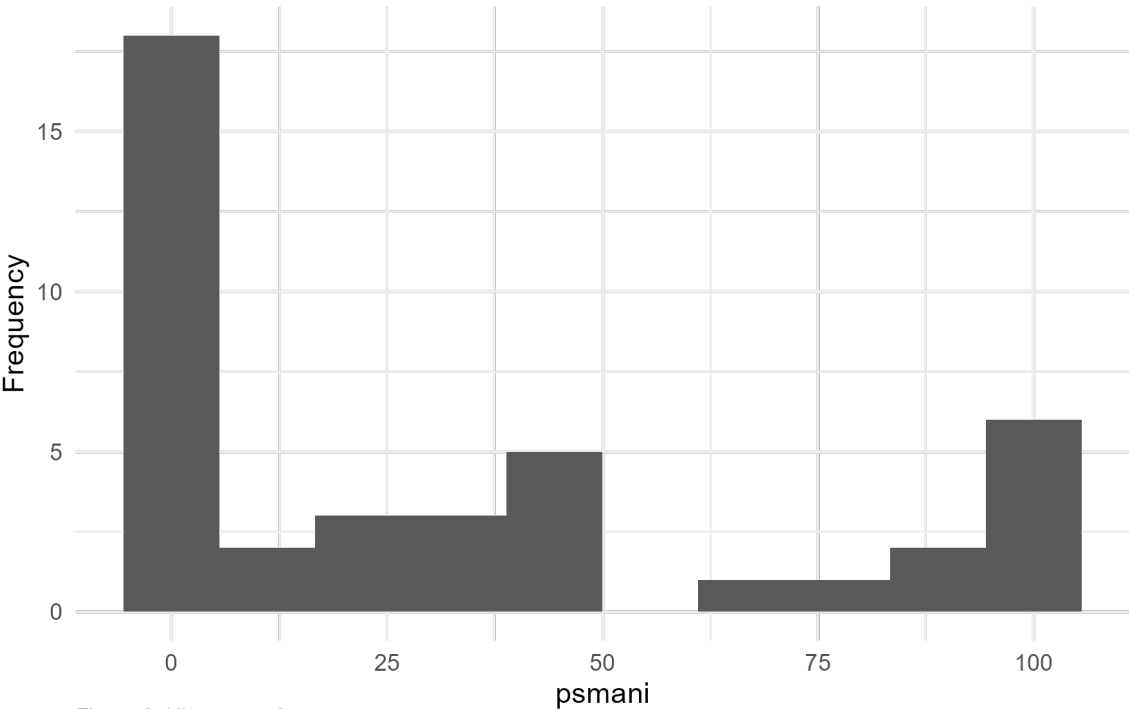


Figure 3: Histogram for *psmani* variable

Variable Name: **psmrum**

Question Text: Please indicate what percentage of your practice falls into each of the following categories. (The total should add up to 100%) - Small ruminant

Summary Statistics:

Table 4: Summary statistics for *psmrum* variable

STATISTIC	VALUE
Min	0.00
Max	30.00
Median	1.00
Mean	3.24
Total	133.00
Missing	0.00
Count	41.00

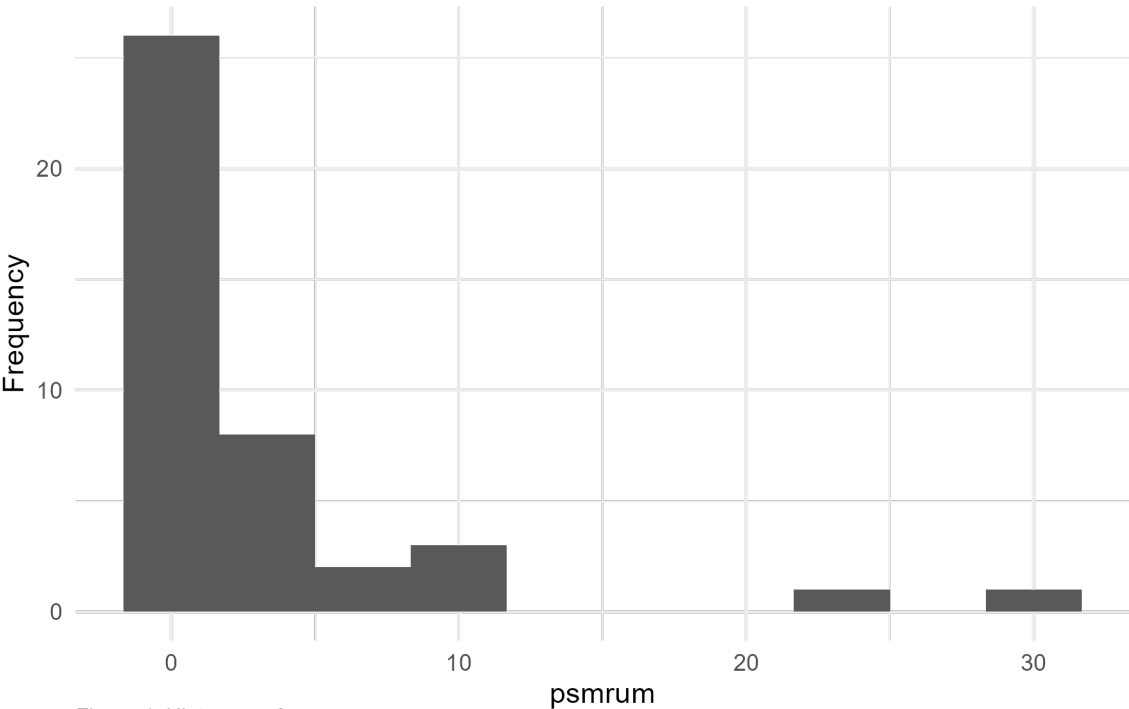


Figure 4: Histogram for *psmrum* variable

Variable Name: **pother**

Question Text: Please indicate what percentage of your practice falls into each of the following categories. (The total should add up to 100%) - Other:

Summary Statistics:

Table 5: Summary statistics for **pother** variable

STATISTIC	VALUE
Min	0.00
Max	15.00
Median	0.00
Mean	0.44
Total	18.00
Missing	0.00
Count	41.00

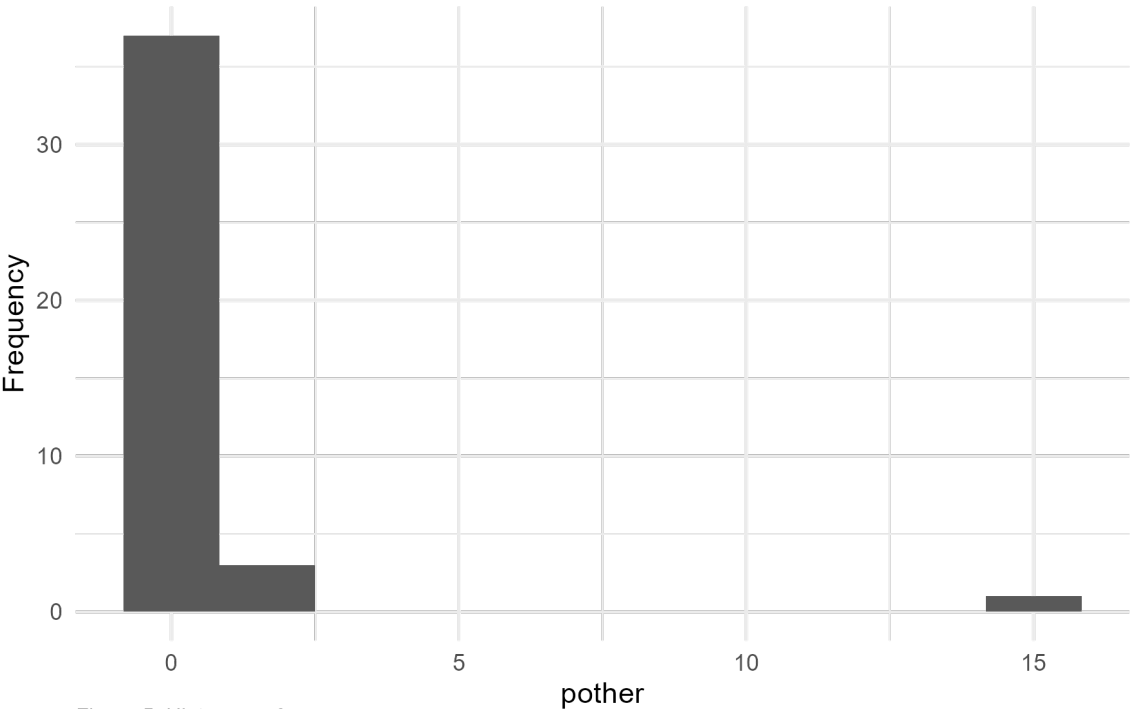


Figure 5: Histogram for **pother** variable

Variable Name: **pothtxt**

Question Text: Please indicate what percentage of your practice falls into each of the following categories. (The total should add up to 100%.) - Other:

Responses:

Table 6: Responses for *pothtxt* variable

RESPONSES
Pigs/Camelids

Variable Names: **havail,..., hother**

Question Text: How do you choose which antibiotics to recommend to livestock producers? (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 41 respondents.

Frequencies and Marginal Percentages:

Table 7: Frequencies and marginal percentages table for *havail,..., hother* variables

SELECTED CHOICE	FREQUENCY	PERCENT
Availability	28	68.29%
Client requests	19	46.34%
Convenience	24	58.54%
Cost	31	75.61%
Based on culture results	20	48.78%
Whether it can be used in a dart gun	16	39.02%
Evidence-based medicine (i.e. scientific journal articles or other veterinary publications)	27	65.85%
What we have always used	8	19.51%
Withdrawal times	25	60.98%
Other:	6	14.63%

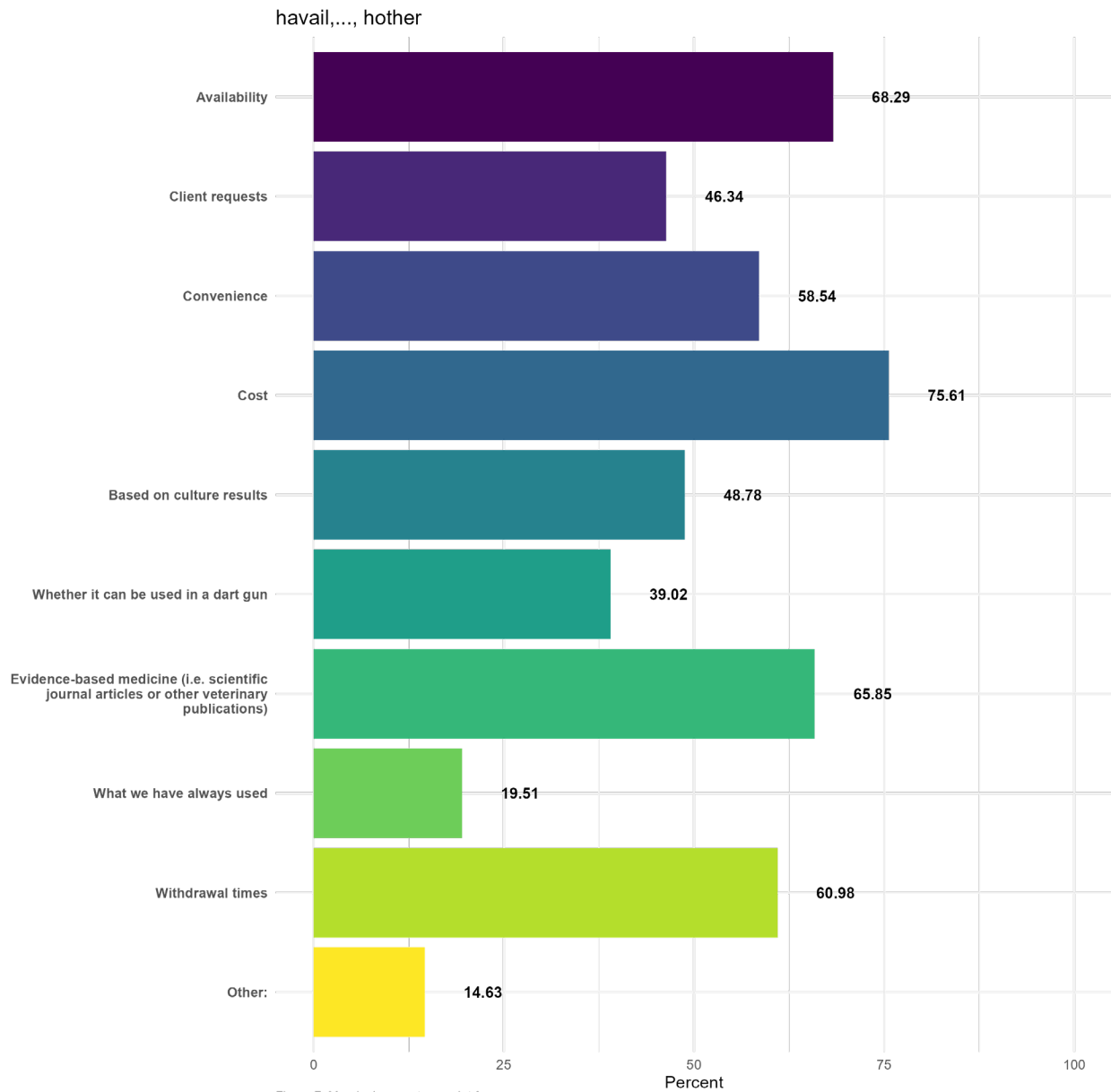


Figure 7: Marginal percentages plot for howToChoose variable

Variable Name: **hothtxt**

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

Responses:

Table 8: Responses for *hothtxt* variable

RESPONSES
I would rely heavily on vin for recommendations and rarely would Rx anything. Occasionally for a friend or backyard poultry
N/A
I don't do Rx's for livestock
I did feed yard medicine in Texas before most ???
Safety
Consultation with a livestock veterinarian

Variable Name: **howpres**

Question Text: Which of the following do you primarily do?

Frequencies and Marginal Percentages:

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

RESPONSE OPTION	FREQUENCY	PERCENT
Write prescriptions for antibiotics	5	13.89%
Sell antibiotics directly to producers from my practice’s inventory	31	86.11%
TOTAL	36	

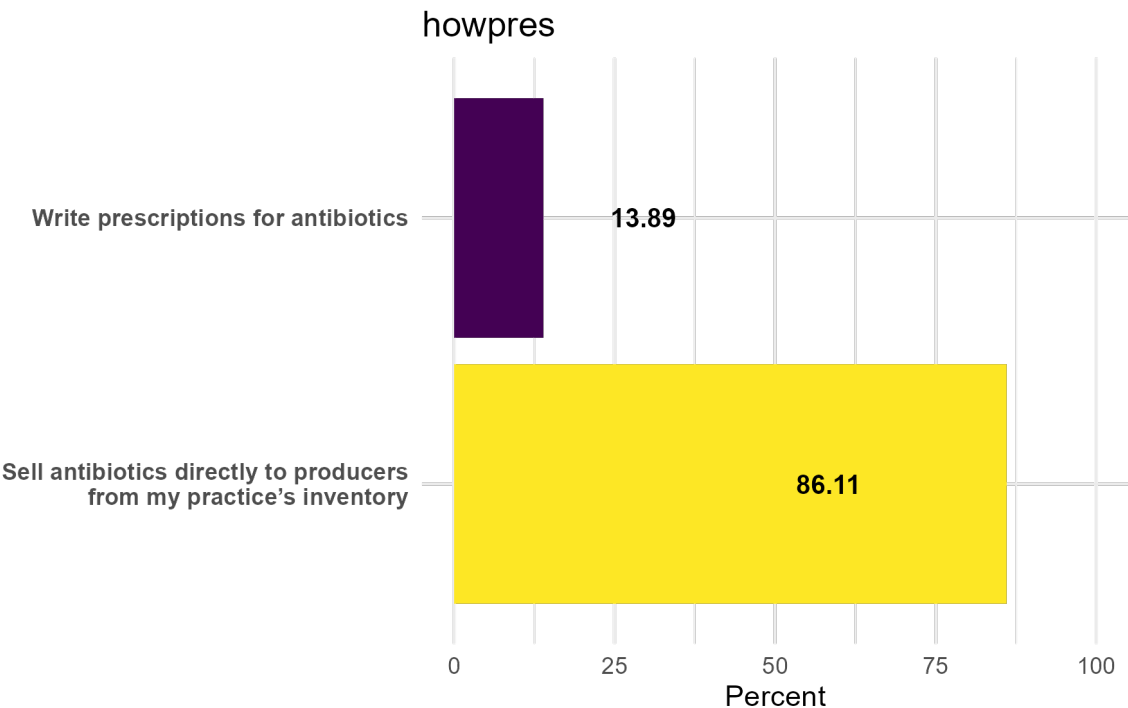


Figure 9: Marginal percentages plot for **howpres** variable

Variable Name: stockres

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

Table 10: Frequencies and marginal percentages table for *stockres* variable

RESPONSE OPTION	FREQUENCY	PERCENT
No	1	2.78%
Yes	35	97.22%
TOTAL	36	

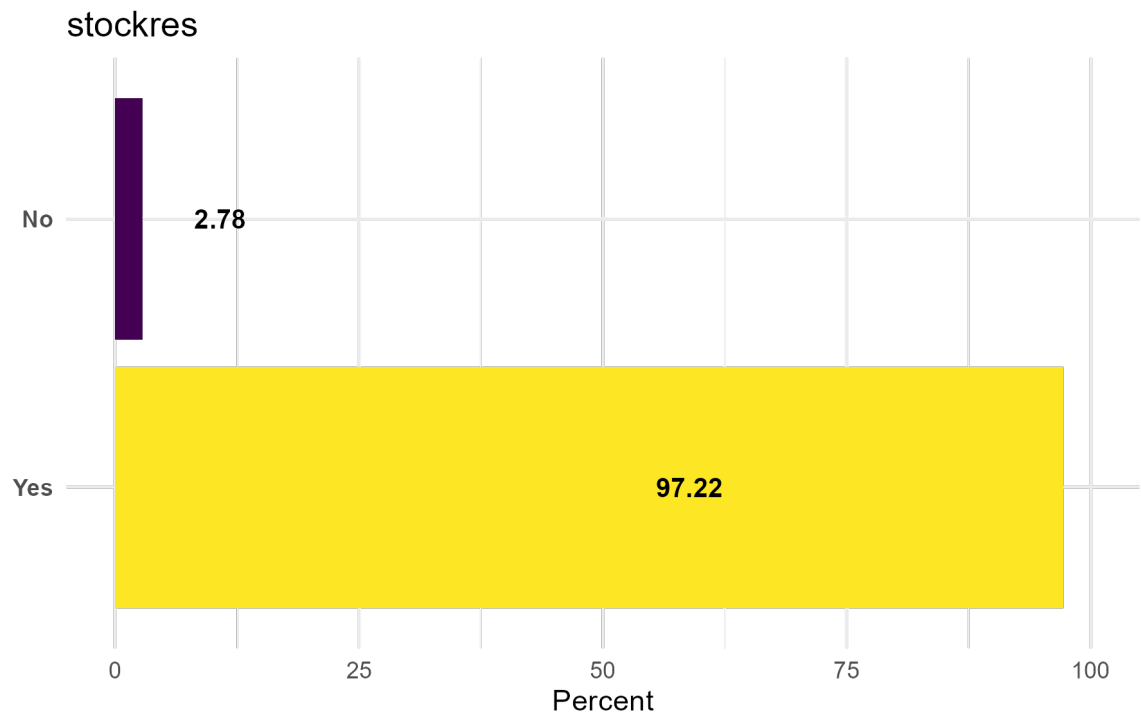


Figure 10: Marginal percentages plot for *stockres* variable

Variable Names: *asampi,..., asother*

Question Text: Based on sales, what are the top 5 antibiotics that you sell? (Select up to five.)

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 41 respondents.

Frequencies and Marginal Percentages:

*Table 11: Frequencies and marginal percentages table for **asampi,..., asother** variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Polyflex (ampicillin)	1	2.44%
Excede, Excenel, Naxcel (ceftiofur)	27	65.85%
Baytril, EnroMed, Quellaxcin, Tenotryl (enrofloxacin)	11	26.83%
Nuflor, Norfenicol, Loncor, Resflor (florfenicol)	27	65.85%
Neomycin	0	0.00%
LA 200, LA 300, Biomycin (oxytetracycline)	27	65.85%
Penicillin	17	41.46%
Sustain III boluses, Trimethoprim sulfa tablets, Dimethox or SulfaMed injection (sulfonamides)	17	41.46%
Zuprevo (tildipirosin)	6	14.63%
Micotil (tilmicosin)	2	4.88%
Draxxin, Increxxa, Arovyn, Macrosyn (tulithromycin)	25	60.98%
Other:	6	14.63%

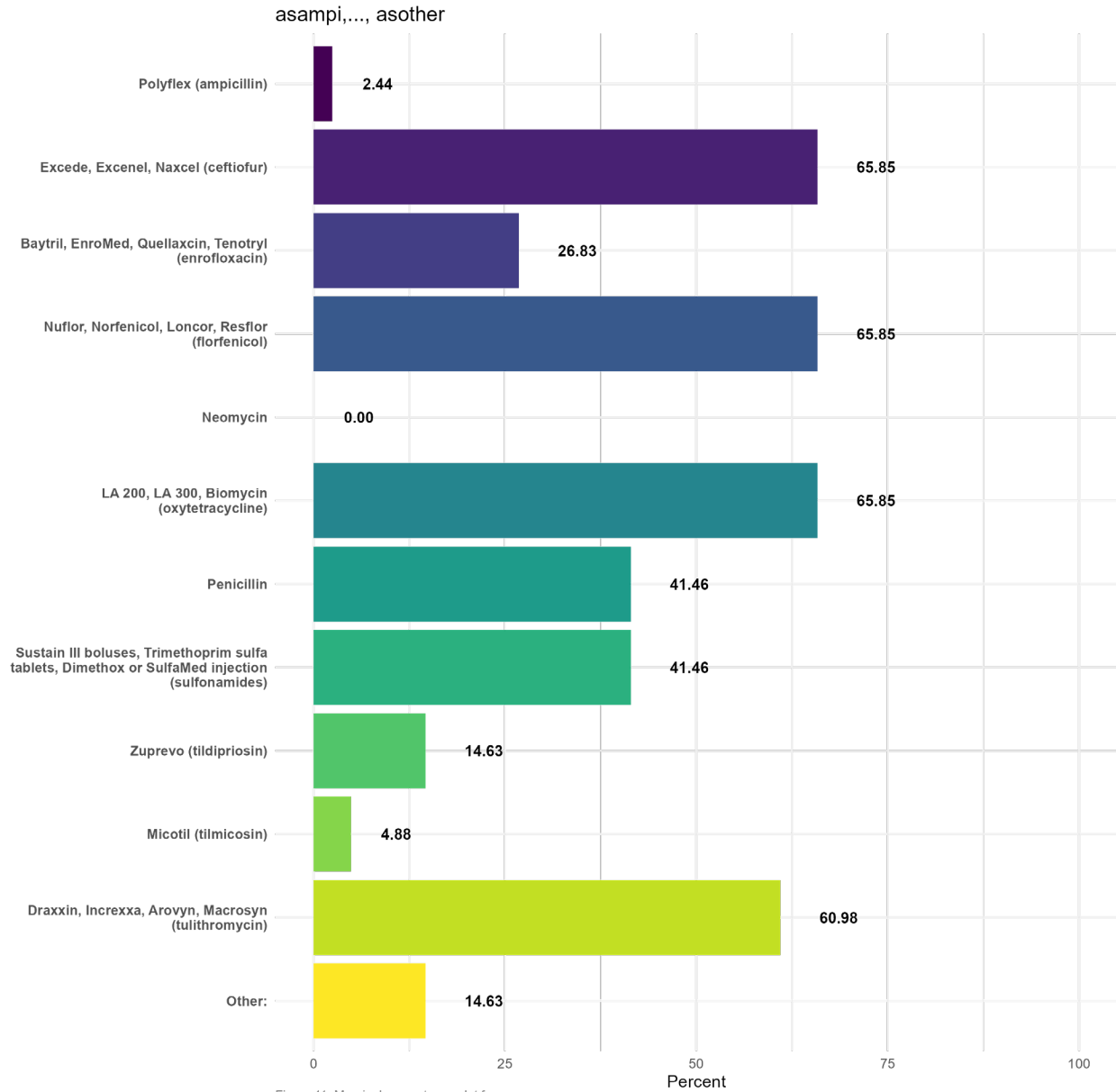


Figure 11: Marginal percentages plot for top5antibioticsSold variable

Variable Name: asothtxt

Question Text: Based on sales, what are the top 5 antibiotics that you sell? (Select up to five.) - Other:
Responses:

*Table 12: Responses for **asothtxt** variable*

RESPONSES
None
Gentocin/amkacin
gent
Gentamicin
Clindamycin, Cephalexin, Clavalley
Amoxicillin, Metromidazole, Clindamycin, Cefovecin

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

Question Text: What ancillary treatments do you recommend? (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 41 respondents.
Frequencies and Marginal Percentages:

*Table 13: Frequencies and marginal percentages table for **naampro, nadexa, nafluni, namelox, naoxyto, naprobio, naprosta, navita, naother** variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Corid (amprolium)	24	58.54%
Dexamethasone	27	65.85%
Banamine, Prevail, Vetameg (flunixin meglumine)	32	78.05%
Meloxicam	15	36.59%
Oxytocin	24	58.54%
Probiotics	26	63.41%
Lutalyse, Estrumate, EstroPlan (prostaglandins)	27	65.85%
Vitamins/minerals	29	70.73%
Other:	6	14.63%

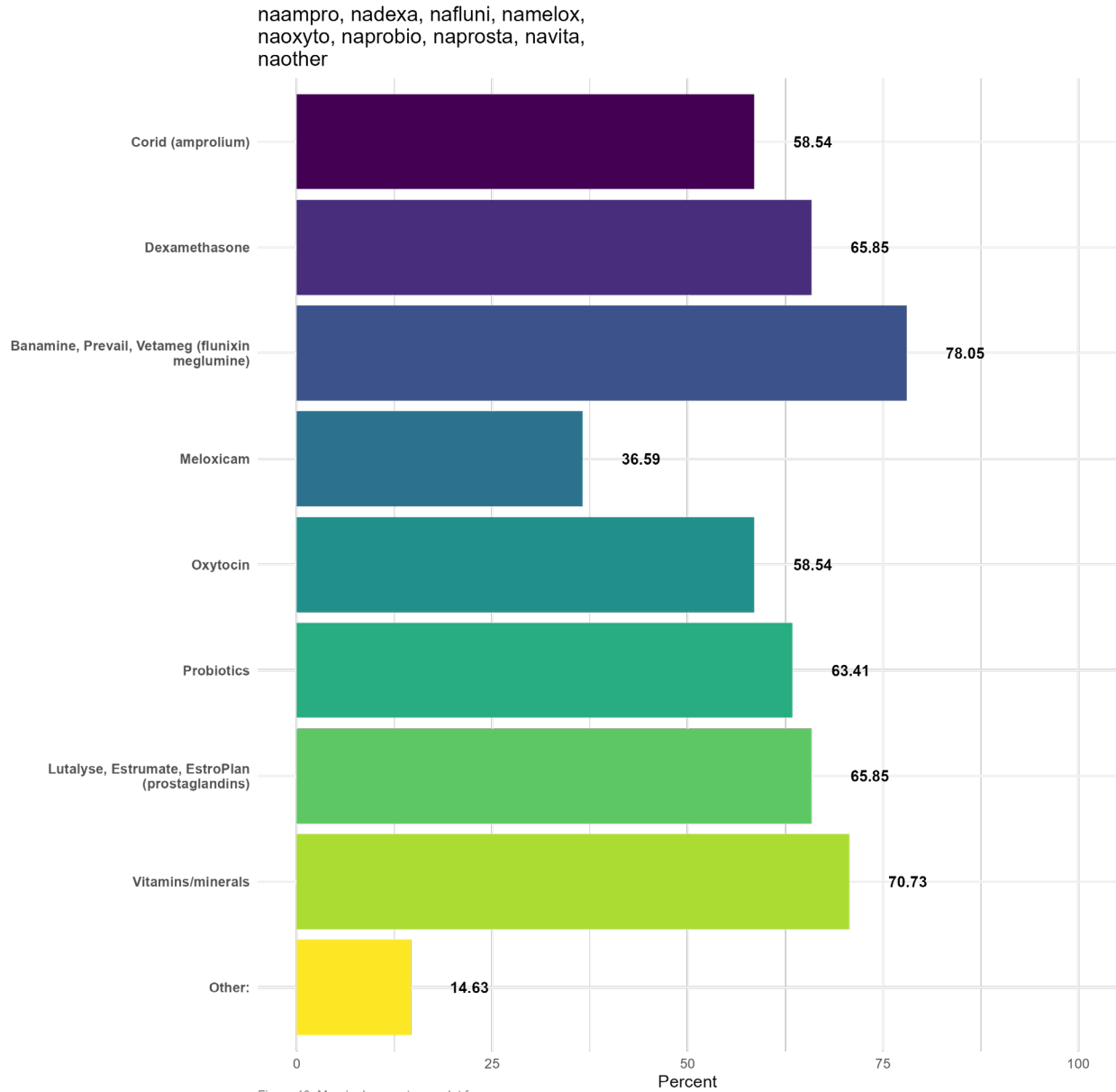


Figure 13: Marginal percentages plot for ancillaryTreatments variable

Variable Name: naothtxt

Question Text: What ancillary treatments do you recommend? (Select all that apply.) - Other:

Responses:

*Table 14: Responses for **naothtxt** variable*

RESPONSES
Carprofen, Apoquel, heart meds
Diet change, Prednisone
Vaccination for prevention
Supplements
electrolytes, feraplease

Variable Name: feeddir

Question Text: How many Veterinary Feed Directives do you write per year?

Frequencies and Marginal Percentages:

*Table 15: Frequencies and marginal percentages table for **feeddir** variable*

RESPONSE OPTION	FREQUENCY	PERCENT
0	13	37.14%
1 - 10	19	54.29%
11 - 50	2	5.71%
51 or more	1	2.86%
TOTAL	35	

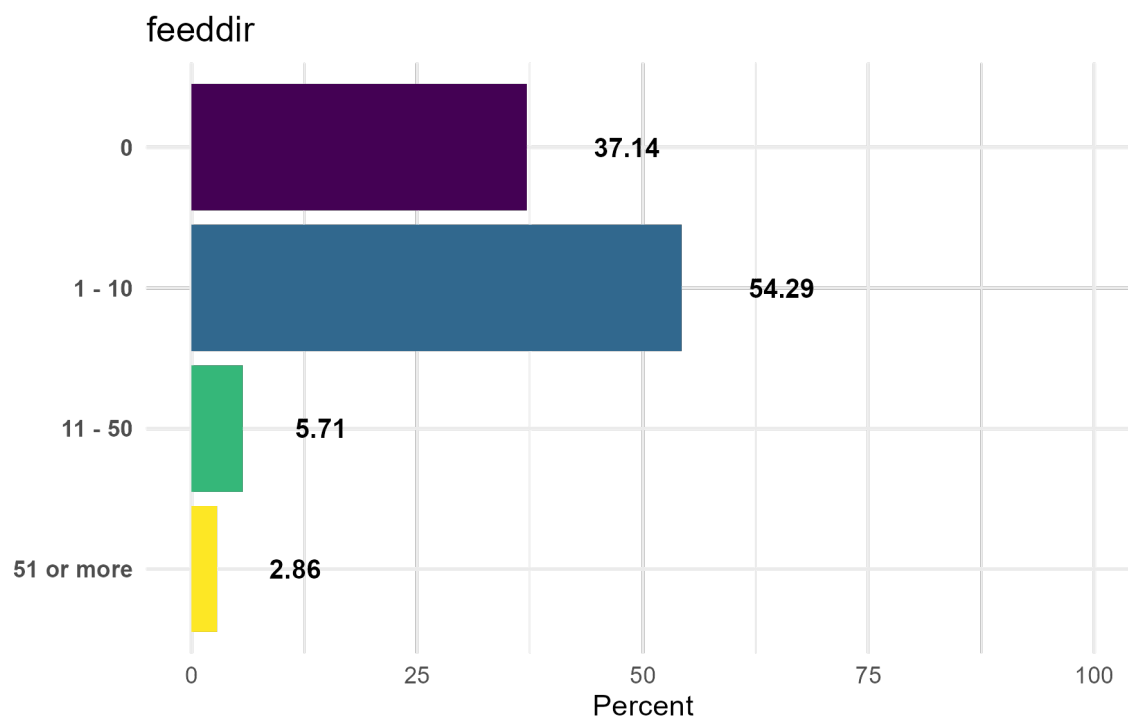


Figure 15: Marginal percentages plot for **feeddir** variable

Variable Name: tissue

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

Frequencies and Marginal Percentages:

Table 16: Frequencies and marginal percentages table for *tissue* variable

RESPONSE OPTION	FREQUENCY	PERCENT
No	6	16.67%
Yes	30	83.33%
TOTAL	36	

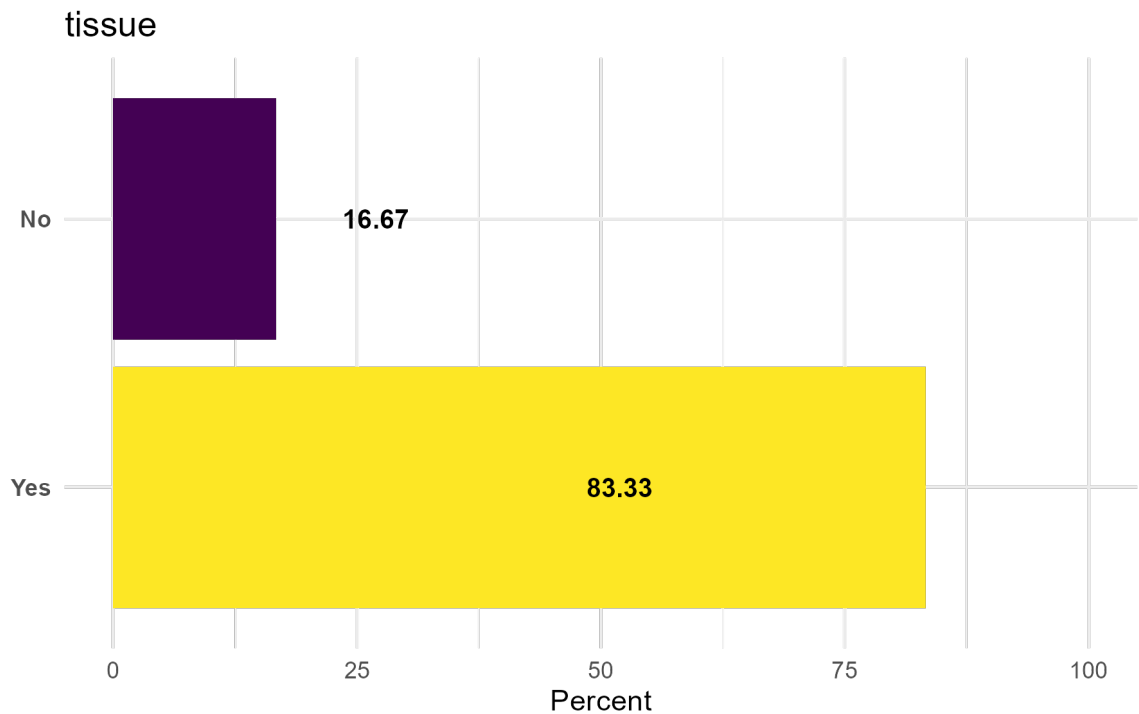


Figure 16: Marginal percentages plot for *tissue* variable

Variable Name: humanres

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

Table 17: Frequencies and marginal percentages table for *humanres* variable

RESPONSE OPTION	FREQUENCY	PERCENT
No	5	14.29%
Yes	30	85.71%
TOTAL	35	

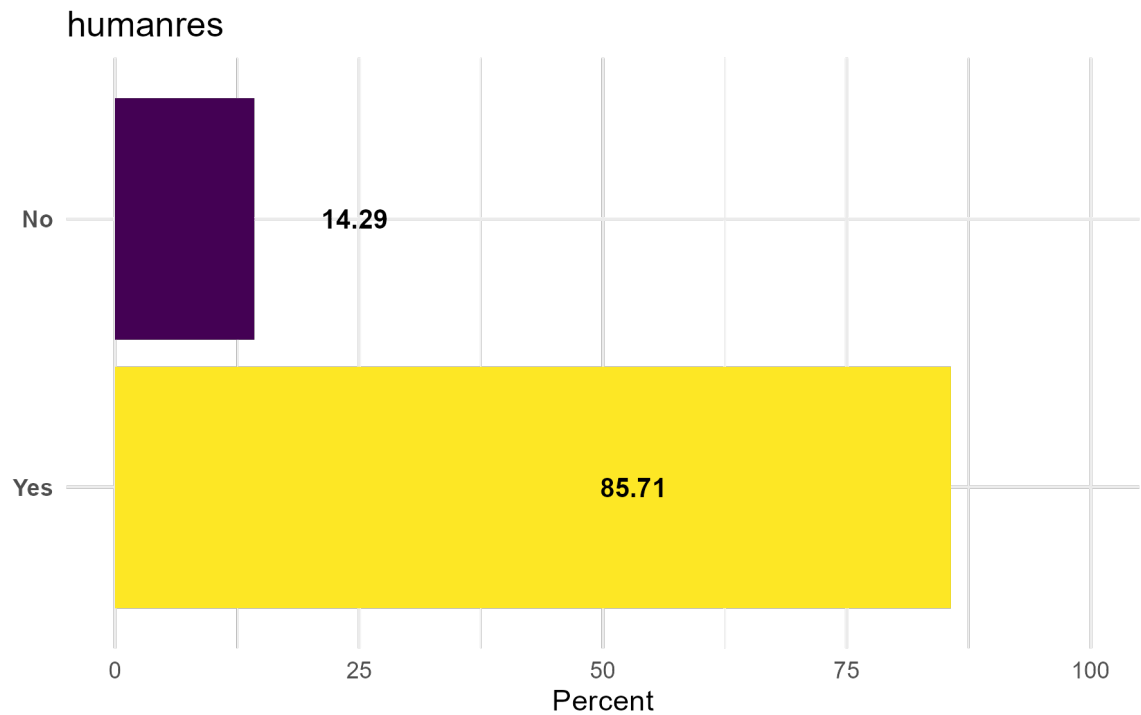


Figure 17: Marginal percentages plot for *humanres* variable

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 18: Frequencies and marginal percentages table for **prescrip** variable

RESPONSE OPTION	FREQUENCY	PERCENT
No	2	5.56%
Yes	34	94.44%
TOTAL	36	

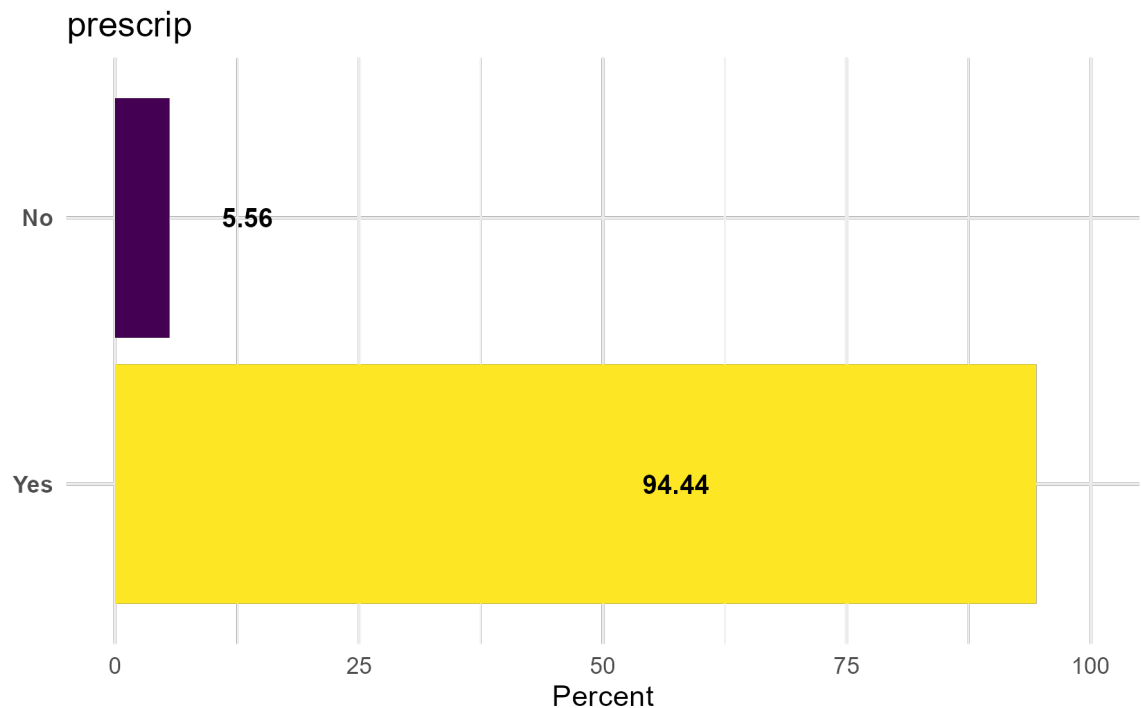


Figure 18: Marginal percentages plot for **prescrip** variable

Variable Names: *atcocci*,..., *atother*

Question Text: What are the top 5 most common conditions your clients treat with antibiotics? (Select up to five.)

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 41 respondents.

Frequencies and Marginal Percentages:

*Table 19: Frequencies and marginal percentages table for **atcocci**,..., **atother** variables*

SELECTED CHOICE	FREQUENCY	PERCENT
Coccidiosis	9	21.95%
Diphtheria	3	7.32%
Footrot	25	60.98%
Hardware	0	0.00%
Joint ill	6	14.63%
Mastitis	6	14.63%
Navel ill	8	19.51%
Overeating	7	17.07%
Pinkeye	22	53.66%
Pneumonia	33	80.49%
Scours	21	51.22%
Uterine infection	10	24.39%
Other:	5	12.20%

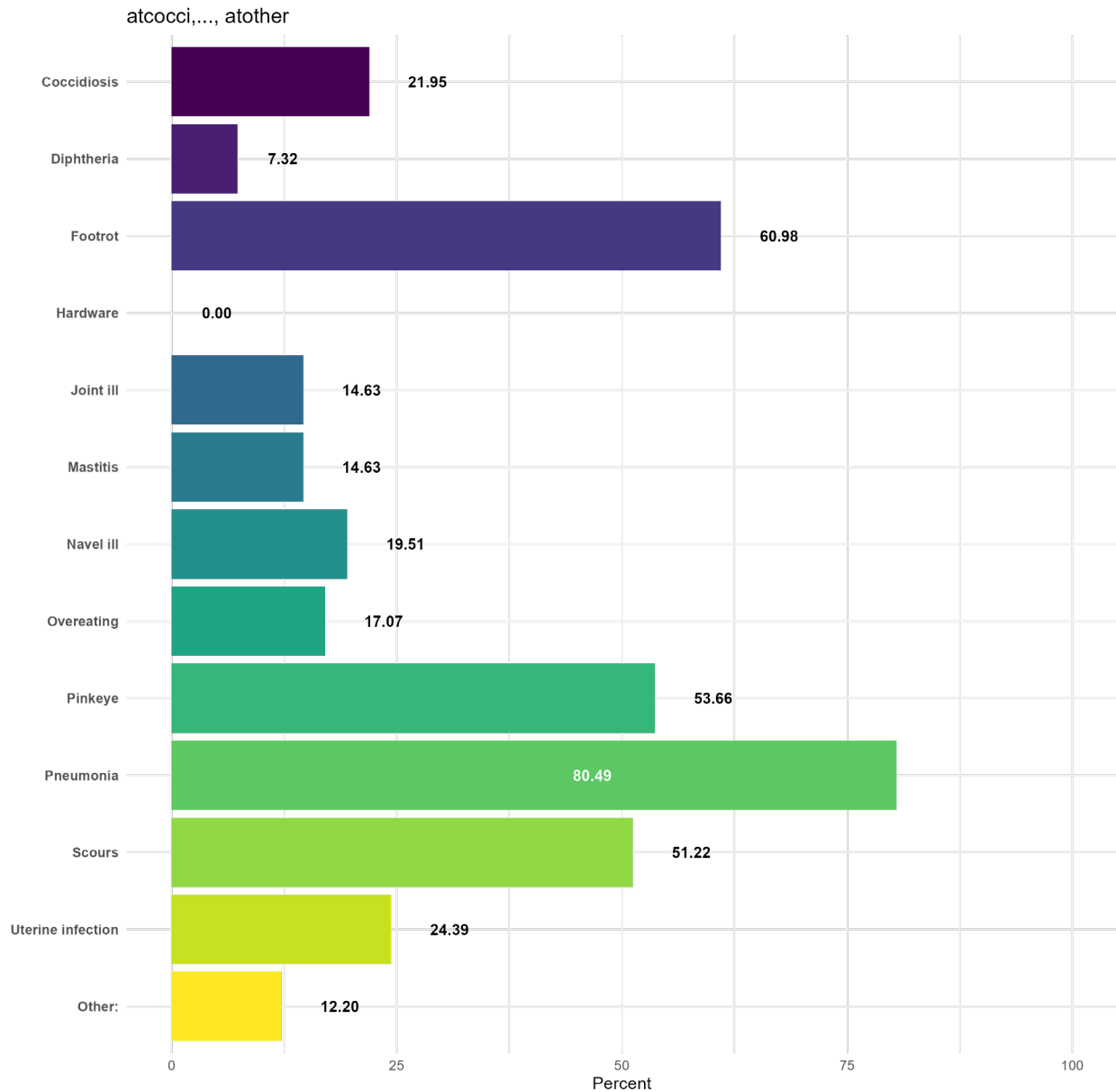


Figure 19: Marginal percentages plot for top5commonConditions variable

Variable Name: **atothtxt**

Question Text: What are the top 5 most common conditions your clients treat with antibiotics? (Select up to five.) - Other:

Responses:

Table 20: Responses for **atothtxt** variable

RESPONSES
Soft eggs, diarrhea
Post Colic sx, Cellulitis
Dermatitis, Septic arthritis, infected wounds
Wound infections, respiratory infections, UTI, Skin infections, GI infections
Pyoderma, Diarrhea, UTI, URI, Dental

Variable Name: switch

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

Frequencies and Marginal Percentages:

Table 21: Frequencies and marginal percentages table for **switch** variable

RESPONSE OPTION	FREQUENCY	PERCENT
No	18	50.00%
Yes	18	50.00%
TOTAL	36	

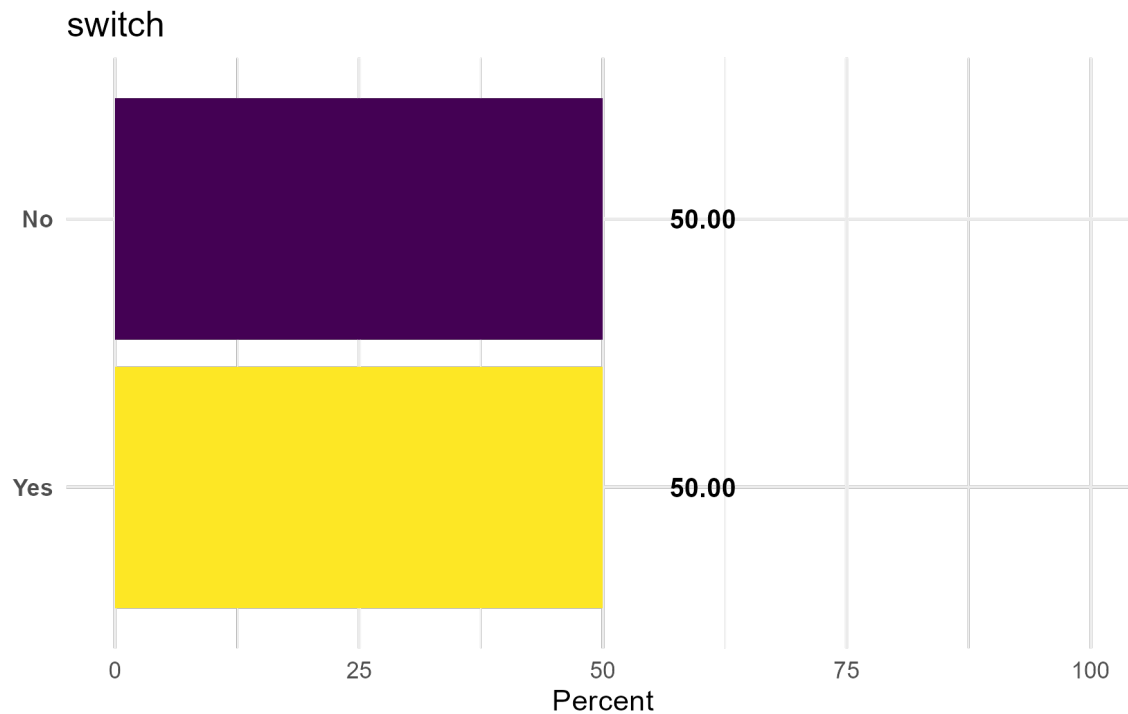


Figure 21: Marginal percentages plot for **switch** variable

Variable Name: extra

Question Text: Do you prescribe drugs in an extra-label manner (either for species or for dosage)?

Frequencies and Marginal Percentages:

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

RESPONSE OPTION	FREQUENCY	PERCENT
No	7	19.44%
Yes	29	80.56%
TOTAL	36	

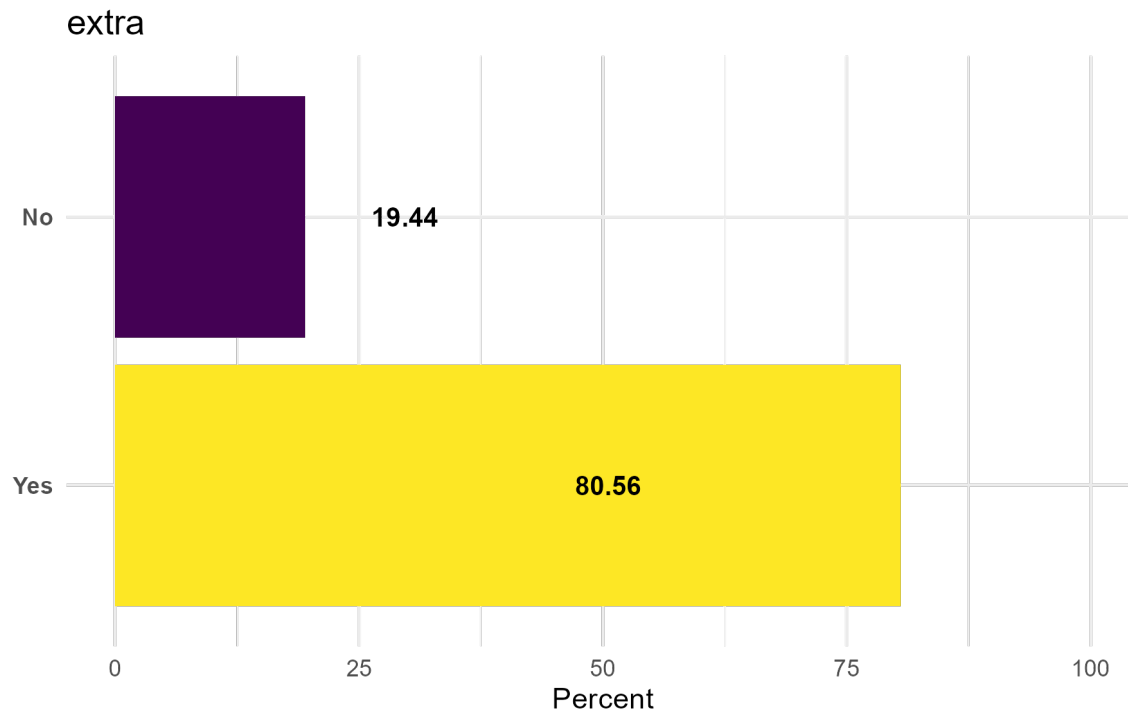


Figure 22: Marginal percentages plot for **extra** variable

Variable Name: **treatpro**

Question Text: How are treatment protocols handled in the clinic? (Select only one.)
Frequencies and Marginal Percentages:

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

RESPONSE OPTION	FREQUENCY	PERCENT
I am a solo practitioner and decide what treatments to recommend	20	55.56%
I am a practitioner in a practice with multiple veterinarians; each individual veterinarian decides what treatments to recommend	13	36.11%
I am a practitioner in a practice with multiple veterinarians; the group decides what treatments to recommend	3	8.33%
TOTAL	36	

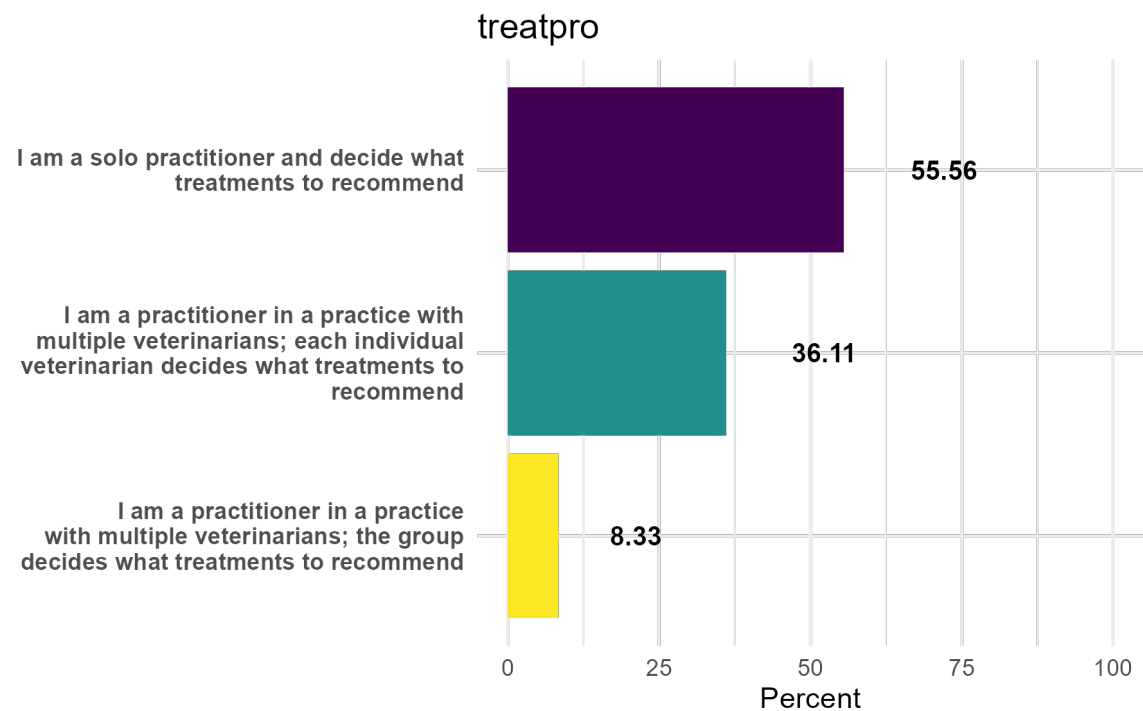


Figure 23: Marginal percentages plot for **treatpro** variable

Variable Name: years

Question Text: How many years have you practiced production animal medicine? (Select one.)

Frequencies and Marginal Percentages:

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

RESPONSE OPTION	FREQUENCY	PERCENT
Less than 1 year	0	0.00%
1-5 years	5	14.71%
6-10 years	7	20.59%
11 or more years	22	64.71%
TOTAL	34	

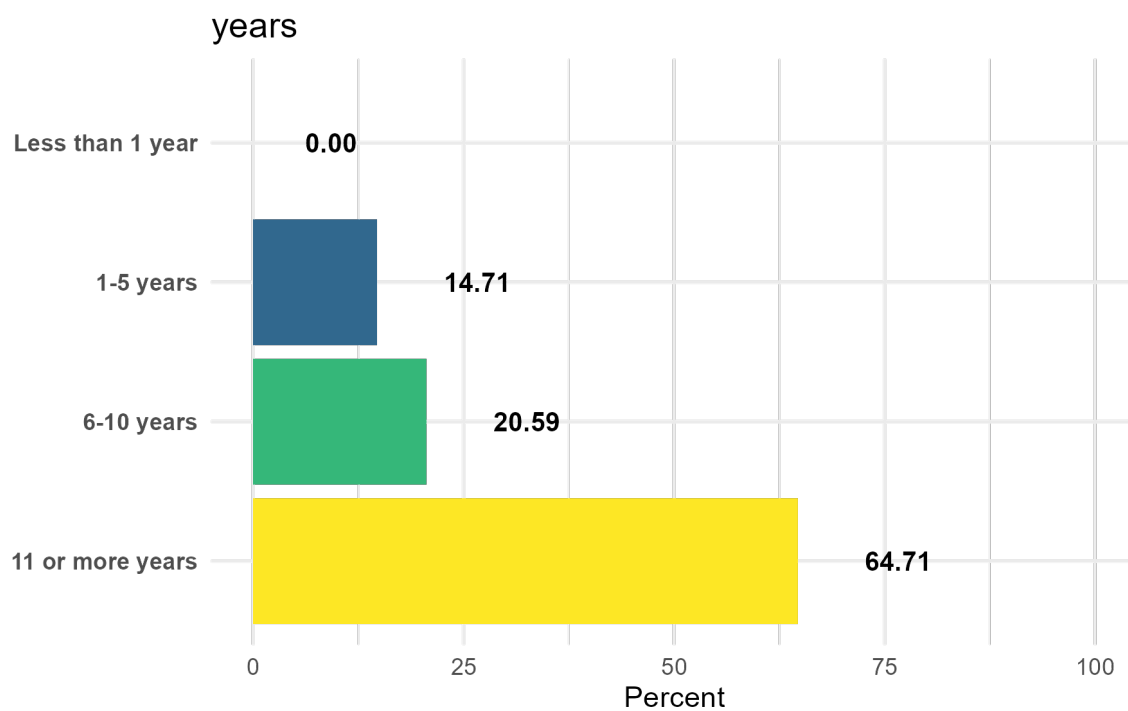


Figure 24: Marginal percentages plot for years variable