

QUESTIONNAIRE for veterinary surgeons
'Recognition and amelioration of pain in pet rabbits'
University of Bristol

Part 1: The respondent

(If you work in multiple places, please answer for the clinic where you spend most of your working time)

1. In which year did you graduate from Veterinary school? _____
2. Please indicate which veterinary school you graduated from _____
3. Do you have a recognised specialist qualification in any discipline? (e.g. RCVS, European, American, other)? YES NO
4. If yes, please specify your discipline _____
5. Do you have a certificate in any discipline? (RCVS, BSAVA, others)? YES NO
6. If yes, please specify the discipline _____

7. Please list any Rabbit CPD that you have completed in the last 12 months.

Subject	Approximate number of Hours
e.g. Anaesthesia	1

8. How would you describe your knowledge or experience in treating rabbits?
 - Excellent
 - Good
 - Adequate
 - Fair
 - Poor
9. From which sources did you learn about treating rabbits (Please tick all that apply)?
 - Veterinary school
 - Webinars
 - Day CPD meetings
 - Evening CPD meetings
 - Congresses/Conferences
 - Text books
 - Articles in non-peer reviewed journals (e.g Veterinary Times, etc)
 - Articles in peer-reviewed journals (e.g. In Practice, Veterinary Record, JAVMA, etc)
 - Online forums (e.g VIN, etc)
 - Other, please specify _____

10. In your opinion, which ones are the most useful sources of information to learn about treating rabbits? Please tick up to three
- Veterinary school
 - Webinars
 - Day CPD meetings
 - Evening CPD meetings
 - Congresses/Conferences
 - Text books
 - Articles in non-peer reviewed journals (e.g Veterinary Times, etc)
 - Articles in peer-reviewed journals (e.g. In Practice, Veterinary Record, JAVMA, etc)
 - Online forums (e.g VIN, etc)
 - Other, please specify _____
11. Please indicate whether your veterinary clinic is:
- Rabbit and Exotic animals only
 - Small and exotic animals
 - Small animals only
 - Mixed farm and small animals
 - Other, please specify _____
12. Please indicate whether your veterinary clinic is:
- First opinion
 - Referral
 - Charity
 - Other, please specify _____
13. Is your veterinary clinic listed in the RWAFF Rabbit Friendly Veterinary list?
- YES
 - NO
 - I do not know
14. If yes, which standard?
- Gold
 - Silver
 - I am not sure
 - NA it is not on the RWAFF list
15. On average, approximately how many rabbits are seen in your veterinary clinic in a month?
- 0
 - 1-10
 - 11-20
 - 21-30
 - 31-40
 - 41-50
 - 51-60
 - More than 60

16. On average, how many rabbit cases do YOU personally see in a month?
- 0
 - 1-5
 - 6-10
 - 11-20
 - 21-30
 - 31-40
 - 41-50
 - 51-60
 - More than 60
17. On average, how many rabbit ovariohysterectomies do you personally perform in a month?

18. On average, how many rabbit castrations do you personally perform in a month?

19. In your opinion, would you say that your veterinary clinic has adequate facilities for treating rabbits?
- Yes
 - No
 - Maybe
20. If No or Maybe, what changes would you like to see made in your veterinary clinic in order to help you treat rabbits more effectively? Please list up to 3
- _____
 - _____
 - _____
21. In which country is your veterinary clinic located?
- England
 - North Ireland
 - Scotland
 - Wales
 - Other (e.g. Spain, Germany, etc), please specify _____
22. Please, write the first part of the post code if located in UK (e.g. BS23) _____
23. Please, select your gender
- Male,
 - Female
 - Other, please specify
 - I prefer not to say

24. Please, select your age bracket

- 21-29
- 30-39
- 40-49
- 50-59
- Over 60

Part 2: Pain

(If you work in multiple places, please answer for the clinic where you spend most of your working time)

25. In your opinion, what are the most common conditions (Medical and/or surgical) causing pain in rabbits? Please list up to 3 conditions in order of severity

1	
2	
3	

26. Which of the following surgical procedures have been performed on rabbits at your veterinary clinic in the last 6 months (Please tick all that apply)?

Castration	Dental treatment (Coronal reduction of cheek teeth)	Incisor removal	
Ovariohysterectomy	Lumpectomy	Surgical removal of abscess (e.g. entire capsule or marsupialisation)	
Cystotomy	Exploratory laparotomy	Orthopaedic surgery	

27. Which of the following surgical procedures have YOU personally performed on rabbits in the last 6 months (Please tick all that apply)?

Castration	Dental treatment (Coronal reduction of cheek teeth)	Incisor removal	
Ovariohysterectomy	Lumpectomy	Surgical removal of abscess (e.g. entire capsule or marsupialisation)	
Cystotomy	Exploratory laparotomy	Orthopaedic surgery	

28. Please indicate how painful you think the following procedures are by selecting the appropriate pain score where (1) is not painful and (10) is very painful

	Not painful									Very painful
Castration	1	2	3	4	5	6	7	8	9	10
Ovariohysterectomy	1	2	3	4	5	6	7	8	9	10
Dental treatment (Coronal reduction of cheek teeth)	1	2	3	4	5	6	7	8	9	10
Incisor removal	1	2	3	4	5	6	7	8	9	10
Lumpectomy	1	2	3	4	5	6	7	8	9	10
Surgical removal of abscess ((e.g. entire capsule or marsupialisation)	1	2	3	4	5	6	7	8	9	10
Cystotomy	1	2	3	4	5	6	7	8	9	10
Exploratory laparotomy	1	2	3	4	5	6	7	8	9	10
Orthopaedic surgery	1	2	3	4	5	6	7	8	9	10

29. Which of the following signs do you consider to be an indicator(s) of pain in rabbits (Please tick all that apply)?

Increased heart rate	Drinking more often	Hiding behaviour	
Increased respiratory rate	Grinding teeth	Aggression towards a handler	
Increased body temperature	Holding the ears flat against the head	Running away when approached	
Loss of body weight	Closed or semi-closed eyes	Increased grooming	
Increased blood pressure	Abnormal posturing	Thumping the hind feet	
Decreased food intake	Hunched back	Other, please specify ____	
Decreased faecal output	Reluctance to move		

30. Which of the above indicators would you consider to be the most reliable indicators of pain in rabbits? Please, list up to 3 indicators

- _____
- _____
- _____

31. How confident do you feel in your ability to recognise signs of pain in rabbits?

- Very confident
- Fairly confident
- Not very confident
- Not confident at all
- I am not sure

32. In your opinion, what is the biggest limitation in reliably assessing pain in rabbits? Please choose only one answer.
- Rabbits are prey species
 - There is little available information on how to assess pain in this species
 - I have little or no experience of treating this species
 - There a lack of validated rabbit pain scale to quantify pain in rabbits
 - Other, please specify _____
33. What would help you to better assess pain in rabbits in your care? Please, list up to 3 answers
- _____
 - _____
 - _____
34. Is pain assessed in rabbits in your veterinary clinic post-operatively?
- Yes
 - No
 - Sometimes
35. If yes or sometimes, who is mainly responsible for assessing pain in rabbits post-operatively?
- Vets
 - Nurses
 - Vets and nurses
 - Kennel assistant
 - Other, please specify _____
36. Is a pain scale routinely uses to assess post-operative pain in rabbits?
- YES
 - NO
 - Sometimes
37. If yes or sometimes, which one do you most commonly use?
- The Rabbit Grimace scale
 - The Glasgow composite pain scale for cats or dogs
 - A Numerical rating scale
 - A Simple descriptive scale
 - I do not use a scale but I use physiological and behavioural indicators
 - Other, please specify _____
38. On average, for how long would a rabbit be assessed for pain post-neutering?
- Never
 - 10 minutes
 - 30 minutes
 - 2 hours
 - Until the rabbit is able to ambulate

- Until the rabbit is eating
- Until the rabbit has passed faeces
- Until the rabbit is discharged from the clinic
- Other, please specify _____

39. How frequently would a rabbit be assessed for pain in the first 30 minutes post-neutering?

- Never
- Once
- Every 10 minutes
- Every 15 minutes
- Other, please specify _____

40. After you have operated on a rabbit, at discharge, do you advise the owner on how to assess pain in their rabbit?

- Always
- Sometimes
- Never
- If the owner asks
- If the rabbit shows signs of discomfort at discharge
- Other, please specify _____

41. Which analgesic drugs do you routinely keep at your veterinary clinic? Please tick all that apply.

Opioids		NSAIDs		Local anaesthetics		Other analgesic drugs	
Buprenorphine		Carprofen		EMLA® cream		Gabapentin	
Butorphanol		Meloxicam		Bupivacaine		Ketamine	
Fentanyl		Ketoprofen		Lidocaine		Tramadol	
Morphine		Flunixin meglumine		Other, please specify _____		Medetomidine	
Methadone		Robenacoxib				Amantadine	
Other, please specify _____		Other, please specify _____				Other, please specify _____	

42. How often do you personally administer these drugs to rabbits?

Drug/s	Very often (>75% of rabbits seen)	Often (>50%)	Rarely (<50%)	Never
Buprenorphine				
Butorphanol				
Fentanyl				
Morphine				
Methadone				
Carprofen				
Meloxicam				
Ketoprofen				
Flunixin meoglumine				
Emla [®] cream				
Lidocaine				
Bupivacaine				
Ketamine				
Tramadol				
Gabapentin				
Medetomidine				
Amantadine				
Other, please specify				
Other, please specify				
Other, please specify				
Other, please specify				

43. How often do you use these local anaesthetic drugs during these specific procedures?

Drug/surgery	Very often (>75% of rabbits undergoing the procedure)	Often (> 50%)	Occasionally (< 50 %)	Never
Emla [®] cream to place an IV catheter				
Emla [®] cream to take blood sample				
Lidocaine during castration				
Lidocaine AND/OR bupivacaine for dental nerve block				
Lidocaine AND/OR bupivacaine for abdominal skin incision				
Other, please specify _____				

44. Do you routinely administer NSAIDs to rabbits undergoing routine surgical procedures (surgical treatment of abscesses, lumpectomy, castration, and ovariohysterectomy)?

- Every rabbit
- Most rabbits (>50%)
- Some rabbits (<50%)
- Never
- I am not sure

45. If you do use NSAIDs in rabbits undergoing routine surgical procedures, when do you administer them?

- At premedication
- At induction of anaesthesia
- During surgery
- During recovery from anaesthesia
- Other, please specify _____

46. If you use parenteral meloxicam in rabbits undergoing routine surgical procedures (surgical treatment of abscesses, lumpectomy, castration, and ovariohysterectomy), what dosage do you routinely administer? Please choose one.

- 0.2 mg/kg
- 0.3 mg/kg
- 0.6 mg/kg
- 1 mg/kg
- Other, please specify _____

47. Do you routinely administer opioids to rabbits undergoing routine surgical procedures (surgical treatment of abscesses, lumpectomy, castration, and ovariohysterectomy)?
- Every rabbit
 - Most rabbits (>50%)
 - Some rabbits (<50%)
 - Never
 - I am not sure
48. If you do use opioids in rabbits undergoing routine surgical procedures, when do you administer them?
- At premedication
 - At induction of anaesthesia
 - During surgery
 - During recovery from anaesthesia
 - Other, please specify _____
49. Do you routinely use a combination of NSAIDs and opioids undergoing routine surgical procedures (surgical treatment of abscesses, lumpectomy, castration, and ovariohysterectomy)?
- Every rabbit
 - Most rabbits (> 50%)
 - Some rabbits (<50%)
 - Never
 - I am not sure
50. What anaesthesia protocol do you most commonly use for rabbit ovariohysterectomy? Please choose one protocol.
- Ketamine, medetomidine and buprenorphine + isoflurane/sevoflurane
 - Ketamine, medetomidine and buprenorphine only
 - Ketamine, medetomidine and butorphanol + isoflurane/sevoflurane
 - Ketamine, medetomidine and butorphanol only
 - Ketamine and medetomidine only
 - Midazolam and buprenorphine + isoflurane/sevoflurane
 - Midazolam, buprenorphine and alfaxalone + isoflurane/sevoflurane
 - Hypnorm and midazolam + isoflurane/sevoflurane
 - Hypnorm and alfaxalone + isoflurane/sevoflurane
 - Alfaxalone, ketamine, midazolam+ isoflurane/sevoflurane
 - Isoflurane/sevoflurane only
 - Other, please specify _____

51. At what time do you usually discharge rabbits after routine surgery (surgical treatment of abscesses, lumpectomy, castration, and ovariohysterectomy)?

- The same day of the surgery
- The following day
- As soon as the rabbit is able to ambulate
- Once the rabbit has started eating and passing faeces
- Once the rabbit has been assessed for pain
- Other, please specify _____

52. After the following procedures, would you discharge rabbits with oral analgesia for the owner to give at home? Please complete the following table

Procedure	Always	Often (> 50% of the rabbits undergoing the procedure)	Occasionally (< 50 %)	Never
Ovariohysterectomy				
Castration				
Surgical removal of an abscess (e.g. entire capsule or marsupialisation)				
Dental treatment (e.g. coronal reduction of cheek teeth)				
Incisor removal				
Lumpectomy				
Cystotomy				
Exploratory laparotomy				
Orthopaedic surgery				

53. If you do prescribe analgesic medication at discharge, please provide the ORAL analgesic treatment course you would prescribe for the following surgical procedures (Please tick all that apply).

Procedure	Analgesic drugs				Treatment course (in days)				
	Metacam	Carprofen	Buprenorphine	Other, Please specify	1	3	5	7	Other, Please specify
Ovariohysterectomy									
Castration									
Surgical removal of an abscess (e.g. entire capsule or marsupialisation)									
Dental treatment (Coronal reduction of cheek teeth)									
Incisor removal									
Lumpectomy									
Cystotomy									
Exploratory laparotomy									
Orthopaedic surgery									

54. If you prescribe ORAL meloxicam, what dosage and frequency do you most frequently prescribe? Please choose one option

- 0.2 mg/kg SID
- 0.2 mg/kg BID
- 0.3 mg/kg SID
- 0.3 mg/kg BID
- 0.6 mg/kg SID
- 0.6 mg/kg BID
- 1 mg/kg SID
- 1 mg/kg BID

55. At discharge do you generally show the owner how to administer oral analgesic medication to their rabbit?

- Always
- Sometimes
- Never
- If the owner asks
- If the rabbit shows signs of discomfort at discharge
- Other, please specify _____

56. When considering which analgesic drug to use on rabbits, how important are the following factors?

Factors	Very important	Fairly important	Not so important	Not important at all	Unsure
Analgesic efficacy					
Availability of an injectable preparation					
Reported safety					
Available product information					
Whether the product is licensed for rabbits					
Continuation of medication after discharge					
The cost					
Veterinary clinic policy					
Other, please specify					

57. In your opinion, what makes it difficult to treat pain in rabbits? Please, indicate if you consider these factors challenging, where (1) is not challenging at all and (10) extremely challenging

	Not challenging									Extremely challenging
Rabbits tend to hide clinical signs of pain	1	2	3	4	5	6	7	8	9	10
No knowledge of the clinical signs of pain in rabbits	1	2	3	4	5	6	7	8	9	10
Little or no experience in treating this species	1	2	3	4	5	6	7	8	9	10
Lack of available information on the dosage of analgesic drugs	1	2	3	4	5	6	7	8	9	10
No available information on the beneficial effects of analgesic drugs	1	2	3	4	5	6	7	8	9	10

No available information on the side effects of analgesic drugs	1	2	3	4	5	6	7	8	9	10
No analgesic medications are licensed for rabbits	1	2	3	4	5	6	7	8	9	10
Other, please specify	1	2	3	4	5	6	7	8	9	10

58. How confident do you feel about your knowledge of rabbit analgesia?

- Very confident
- Fairly confident
- Not so confident
- Not at all confident
- I am not sure

59. Are you happy with the information available on rabbit analgesia?

- Very happy
- Fairly happy
- Not very happy
- Not at all
- I am not sure

60. What would you like to know about rabbit analgesia? Please, list up to 3

- _____
- _____
- _____

**Thank you so much for taking the time to participate in this survey]
Your help is greatly appreciated**

We would like to contact you for a second questionnaire on '**Recognition and amelioration of STRESS in pet rabbits**'. If interested in participating, please write your email address here. Both questionnaires will be anonymous.