Department
for Environment
Food & Rural Affairs

The Microchipping of Dogs (England) Regulations 2015

Post-Implementation Review

December 2021

The Department for Environment, Food and Rural Affairs is responsible for improving and protecting the environment, growing the green economy, sustaining thriving rural communities and supporting our world-class food, farming and fishing industries. This includes being responsible for policies relating to animal welfare, such as the microchipping of dogs.

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Introduction

1. Under the Microchipping of Dogs (England) Regulations 2015[1] ("the 2015 Regulations"), it is compulsory for all dogs over the age of eight weeks in England to be implanted with microchips unless they are certified as exempt. This came into effect in April 2016. Regulation 18 sets out a requirement to review the legislation, and to publish an initial report within a five-year period. In accordance with this, Defra has carried out this review of the 2015 Regulations.
2. The review assesses the effectiveness of the current legislation, considers its impact and suggests refinements. The report concludes with a recommendation to improve a number of the requirements which are set out in the 2015 Regulations and also to incorporate new requirements for the compulsory microchipping of cats following a recent public consultation[2]. This consultation showed that there is overwhelming public support for the introduction of compulsory cat microchipping, a government manifesto commitment which is also part of the Government's Action Plan for Animal Welfare[3].The intention is to introduce this policy in 2022.

Objectives of the policy

3. As explained in the Impact Assessment[4] accompanying the 2015 Regulations, the policy objectives were to improve animal welfare by increasing the traceability of dogs through microchipping and by encouraging responsible dog ownership.
4. The main intended effect of the 2015 Regulations was that more stray dogs would be re-united with their owners more quickly, to the benefit of owners and dogs, and also saving local authorities and charities considerable kennelling costs.
5. Other intended effects included making it easier to tackle dog abuse; improving dog health and welfare by making it easier to trace breeders and keepers; and supporting public safety.

Review scope and approach

6. This post-implementation review assesses the effectiveness of the 2015 Regulations and the extent to which these policy objectives have been achieved. Using evidence from a variety of sources, the review addresses:
    - The extent to which the 2015 Regulations have achieved their objectives, as set out in the Impact Assessment;

[1] The Microchipping of Dogs (England) Regulations 2015
[2] Cat and dog microchipping and scanning in England: Summary of responses and government response
[3] Our Action Plan for Animal Welfare
[4] Impact Assessment No Defra 1372: Compulsory Microchipping of Dogs in England

- Whether the objectives are still appropriate and/or if they could be achieved in a less burdensome way;
- Whether the types, and scale, of costs and benefits associated with the 2015 Regulations were largely as expected and, if not, how they diverged from the estimates in the original Impact Assessment;
- Any significant unexpected consequences, positive or negative;
- Refinements and improvements that could be made to enhance the benefits of microchipping for animal welfare, increase positive societal impacts, reduce burdens on business, reduce other costs, and improve compliance.

7. The level of evidence gathering and analysis undertaken for a post-implementation review should be proportionate to the impact of the regulations. According to the original Impact Assessment, the Annual Net Direct Cost to Business of these reforms was relatively low (£0.4 million) which would usually indicate that a lighter-touch approach to data collection and stakeholder engagement would be appropriate. However, the 2015 Regulations attracted a high level of stakeholder and public interest. Additionally, non-business impacts were estimated as medium/high. Based on these factors, we have undertaken a more in-depth review and have sought the views of key stakeholders.
8. Any recommended regulatory changes arising from this review will be subject to further consultation.

Sources of evidence

9. This review draws on several sources of evidence. The two main sources are (i) commissioned, external research to assess the effectiveness of the 2015 Regulations undertaken by a team at the University of Nottingham ("the Nottingham research report"), and; (ii) a targeted consultation with key stakeholders. Publicly available data have also been used, notably Battersea Dogs and Cats Home 2021 Microchipping report[5] and the PDSA's (People's Dispensary for Sick Animals) PAW (PDSA Animal Wellbeing) 2021 report[6] .
10. The Nottingham research report[7] reviews the effectiveness of the 2015 Regulations, provides evidence on whether the expected costs and benefits have been realised (monetary and non-monetary) and considers any refinements that could enhance the benefits and improve compliance. The research also looked at the prevalence of cat microchipping and public opinion towards the compulsory microchipping of cats. As part of this research, several surveys were undertaken including surveys disseminated to dog and cat owners, local authorities, veterinary professionals, and microchip implanters.
11. Most of the publications used included information from Wales and Scotland in the sample. The PDSA PAW report, as well as the Battersea and Dogs Trust reports relating to stray dogs also include data from Northern Ireland. Whilst the 2015 Regulations (and

[5] Battersea (2021): Compulsory dog microchipping. Five years on.
[6] PDSA Animal Wellbeing Report 2021
[7] A review of the effectiveness of the dog microchipping legislation

therefore this report) apply to England only, similar legislation came into force in Wales and Scotland at the same time as in England. Therefore, where data from Wales and Scotland had been included in the methodology, we have accepted the conclusions based on combined data. This also applied to reports which included Northern Ireland data, as Northern Ireland already had dog microchipping requirements in place before 2016.

12. Our approach to stakeholder engagement involved ongoing dialogue with key stakeholders throughout the review process, including database operators, veterinary organisations, animal welfare organisations, police representatives and local authorities. In addition to this, key stakeholders were also invited to submit comments in writing. Defra's letter of 6th May 2021, which is included in Annex B, requested comments (with evidence, if relevant) on the extent to which the 2015 Regulations have achieved their objectives.
13. We received written responses from 19 organisations. A list of these organisations is included in Annex C.

Have the 2015 Regulations met their objectives?

14. This section assesses the extent to which the 2015 Regulations have met the objectives outlined in the original Impact Assessment.

Increasing reunification rates

15. One of the key objectives of the 2015 Regulations was to increase the reunification rate of lost dogs with their owners through an increase in the number of dogs microchipped. This objective appears to have been met.
16. The evidence indicates that the increase in the number of dogs that are microchipped can be associated with the introduction of the 2015 Regulations. According to the latest PDSA PAW report (2021)[8], there are currently around 9.6 million dogs in the UK. According to the PDSA, the proportion of microchipped dogs increased from 83% to 92% between 2015 and 2016[9] (Figure 1). A plausible explanation is that the 2015 Regulations made a positive contribution to the number of dogs microchipped. PDSA's 2021 report explained that the latest figure was 89%, down from 91% in 2020. One possible explanation may be the temporary reduction in microchipping services which occurred as a result of COVID-19 restrictions. According to the dog and cat owner survey in the Nottingham research report, 95% of dog owners indicated that their dog was now microchipped[10]. In summary, despite minor discrepancies between different sources,

[8] PDSA Animal Wellbeing Report 2021
[9] PDSA works with market research company YouGov to annually survey representative samples of pet dog and cat owners in the UK.
[10] From 3020 dog and cat owners in England, Scotland and Wales, sampled by YouGov using the same methodology as used for the PDSA Paw report.

there is strong evidence that the number of dogs microchipped has increased since the 2015 Regulations were introduced.

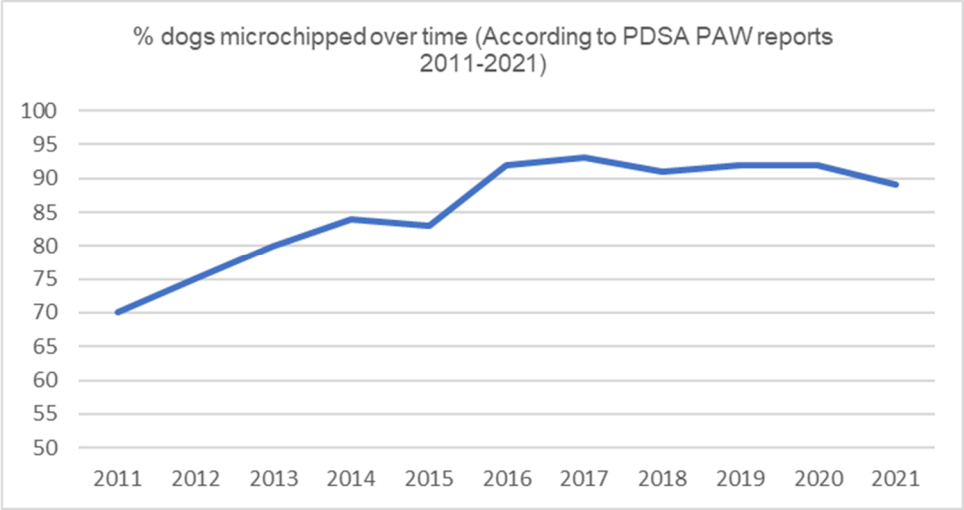


Figure 1. Percentage of dogs microchipped (based on PDSA data)

17. The Nottingham research report also showed, however, that whilst the proportion of microchipped dogs in the general dog population is high (95%), the proportion of microchipped stray dogs is lower. A total of 31% of stray dogs did not have a microchip implanted. The Battersea Dogs and Cats Home 2021 report[11] put the figure of stray dogs without a microchip at 23%[12].
18. The increase in microchipped dogs appears to have led to an increase in reunification rates. According to the Nottingham research report, microchipping has had a positive effect on reunification rates and was identified as a leading means of reunification. The Battersea Dogs and Cats Home 2021 report found that dogs that are microchipped and have up-to-date microchip records are more than twice as likely to be reunited with their keeper than dogs without an accurate microchip record.
19. Despite evidence that the objective to increase reunification rates largely seems to have been met, several factors have emerged as potential barriers to reunification. Firstly, the information relating to a microchipped dog must be registered on a database that meets the 2015 Regulations (a 'compliant database'). Where a dog is microchipped but registered on a non-compliant database, it will not show in a search for that microchip number and the keeper may not be found. The survey of veterinary professionals in the Nottingham research report[13] found that 45% of veterinary professionals indicated that they 'sometimes' encountered a dog that was microchipped but not registered on a database. This indicates that some dog keepers may not register the microchip on a compliant database, which could make reunification challenging if the dog becomes lost.
20. Secondly, the 2015 Regulations require that information relating to a microchipped dog is kept up to date (for instance, the keeper's address). A key issue raised by veterinary and

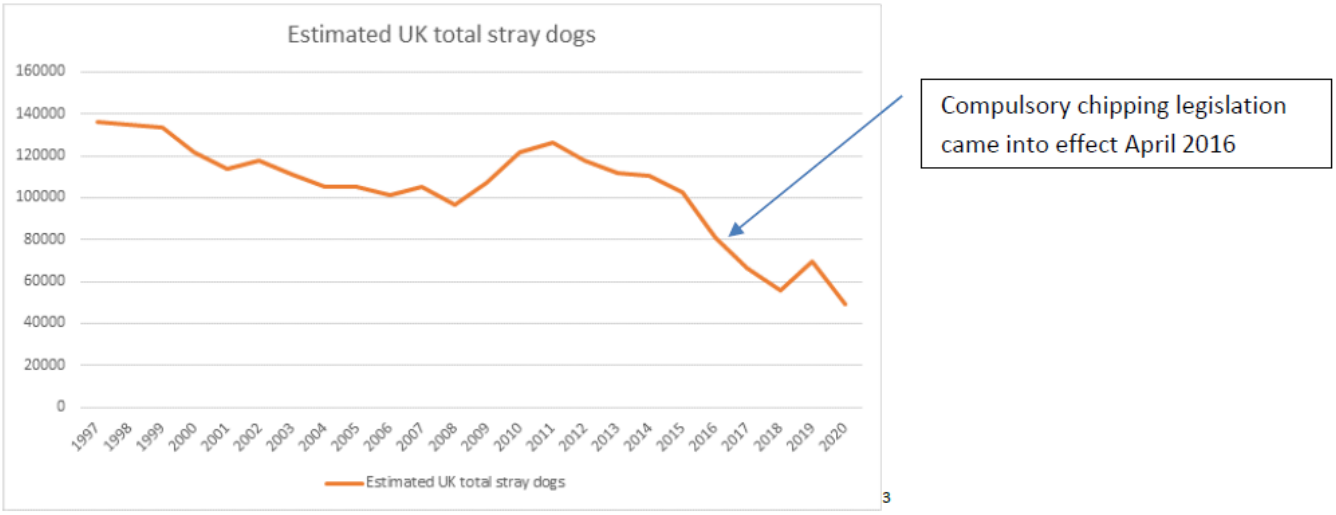
[11] Battersea (2021): Compulsory dog microchipping. Five years on.
[12] From 407 stray dogs who were collected during May 2021 from 53 local authorities.
[13] From 100 useable responses: 90% from veterinary surgeons and 10% from veterinary nurses.

animal welfare sector organisations is that in practice many dog owners do not do this. According to Battersea Dogs and Dogs Home (2021), 63% of microchipped stray dogs collected by local authorities had an inaccurate database record. Only 26% of strays collected by local authorities had a microchip implanted with the keeper's up to date details held on a compliant database. 96% of stray dogs which were microchipped and had up to date details on a compliant database were reunited with their keepers, compared to 77% of microchipped dogs whose keepers' details were inaccurate, and just 40% of dogs without a microchip. Although compliance with the 2015 Regulations is higher amongst dogs that are not stray, the pet owner survey in the Nottingham research report found that 12% of dog owners indicated that they had not updated the details on their dog's microchip. Although only 1% dog owners indicated that they had not registered the microchip on a compliant database, 10% said they 'did not know' if they were registered.

21. The survey of veterinary professionals in the Nottingham research report highlighted that the leading factors hindering the reunification of dogs with their owners were; details being out of date (65% of veterinary respondents), dogs not being microchipped (47%), or dogs appearing as unregistered (44%). This evidence indicates that reunification rates for stray dogs were significantly improved if the details were registered on a compliant database and were kept up to date.
22. Finally, the majority of the organisations we consulted considered that the current database system could helpfully be improved. In particular, the increasing number of compliant databases in operation (currently 16) has made the process of checking the keeper's details on a database more complex than when there were fewer compliant databases in operation.

Reducing costs to local authorities, animal charities and kennels

23. A second key objective of the 2015 Regulations was to reduce costs to local authorities, animal charities and kennels. The assumption was that increased reunification rates for lost dogs would result in a reduction in the number of dogs taken in by animal shelters or occupying kennels under the care of local authorities. The evidence indicates that this objective appears to have been met.
24. Estimates from the Dogs Trust show that the total number of stray dogs in the UK has followed an overall downward trend from around 2011, with the policy announced in 2012 and the regulations coming into effect in April 2016. Whilst this graph combines the UK as a whole, similar policies came into effect in Scotland and Wales at the same time. Northern Ireland already had compulsory microchipping in place.
25. This chart and the earlier chart both indicate that recent trends in microchipping rates and in stray dog numbers seemed to start around the time that the proposals were first publicised in 2012, following which there was a public consultation prior to the regulations being made in 2015. It is possible that some behavioural changes took place in anticipation of microchipping becoming mandatory and in advance of the regulations coming into effect.



26. The results from a local authority questionnaire in the Nottingham research report[14] showed that the introduction of compulsory dog microchipping was associated with a statistically significant reduction in the number of stray dogs, which is likely to result in reduced costs. According to the Battersea Dogs and Cats Home 2021 report[15], there was a 66% reduction in the number of stray dogs handled by local authorities in 2021 compared to 2016. According to the Dogs Trust[16], the number of stray dogs handled by the local authorities they surveyed decreased from 81,050 in 2015-2016 to 69,621 in 2018-2019. This trend continued in 2020[17]. The Battersea Dogs and Cats Home 2021 report states that this reduction "does seem, at least in part, to be due to compulsory microchipping", as organisations with scanners such as veterinary practices and animal charities were able to reunite more lost dogs directly with their owners, without contacting local authorities.
27. While no data was provided by rescue centres on the cost savings associated with changes in the handling of stray dogs, the overall reduction in the number of strays and their reduced length of stay indicates that costs should have fallen. We have tried to obtain information from animal welfare charities, but it was challenging to quantify reduction in costs. One key charity said that "it is clear that is has had an impact to the extent that it has allowed us to undertake new initiatives to care for more dogs". Given that rescue centres often take in dogs that local authorities themselves have been unable to reunite with their keepers, the overall cost savings to rescue centres are likely to be lower than those of the local authorities.
28. Evidence was obtained which indicates that local authorities have incurred reduced costs from handling stray dogs. Local authorities and other organisations considered that there is scope to reduce costs further in the future. In particular the lack of accurate keeper

[14] Based on data from 58 Local Authorities.
[15] Battersea (2021): Compulsory dog microchipping. Five years on
[16] Dogs Trust Stray Dogs Survey Report 2018-19
[17] Dogs Trust Stray Dog Survey report 2019-20

details on the databases was raised as a barrier to reunification by many key organisations. Some local authorities highlighted that the difficulties in reuniting dogs with inaccurate details significantly increased the workloads of their staff. The time taken to navigate the microchipping database system and contact individual database companies was also highlighted as a resource burden. Addressing these issues could speed up reunification and could further reduce costs incurred by local authorities and by rescue centres.

Improving dog health and welfare by improving traceability of breeders and tackling abuses of dog welfare

29. It was anticipated that the 2015 Regulations would deliver animal health and welfare benefits by improving the traceability of breeders. The rationale was that increased traceability of breeders could lead to longer-term positive outcomes for dog health and welfare as there would be a decrease in poor breeding conditions. No clear evidence has been provided or obtained to substantiate this impact.
30. The 2015 Regulations require a breeder's licence number and details of the local authority that issued it to be recorded against the microchip number, if the breeder is the owner of the puppy's dam. However, the 2015 Regulations do not require the breeder's details to remain recorded on the microchip database after they have transferred keepership.
31. Breeders must not sell puppies until they are at least eight weeks old, and the dog must be microchipped before sale. The pet owner survey in the Nottingham research report indicated considerable non-compliance amongst breeders in microchipping and/or registering their puppies on a database. Responses to the survey revealed that 30% of dogs purchased from a licenced breeder after the 2015 Regulations came into force were not microchipped. This percentage is specifically for 'licenced' breeders, and local authority licensing does not apply to the very large number of small-scale breeders. It is, therefore, possible that the overall percentage is higher (55% of pet owners said they bought their dog from a UK based breeder or seller and 35% indicated that they purchased from a licenced breeder).
32. Several key sector organisations commented that the 2015 Regulations have not led to improved traceability of breeders. Concerns were raised around compliance with and enforcement of the 2015 Regulations in relation to breeders. Although illegal breeding and poor breeding conditions are complex issues that cannot be addressed solely through microchipping regulations, some sector organisations have suggested changes to the microchipping requirements might contribute to meeting this objective – for example, through increased enforcement to ensure compliance and making it compulsory for the breeder's details to remain on the database when the dog changes keeper.
33. Another intended impact of the 2015 Regulations was to make it easier for those tackling abuses of dog welfare to bring keepers to account and protect public safety. According to the RSPCA, the proportion of microchipped dogs entering its care increased from 32% in April 2015 to 51% in April in 2021. As they care for dogs which are victims of cruelty, abuse or abandonment, these numbers are not representative of the overall dog population. However, these figures provide some evidence that microchipping rates have increased, even amongst dogs who are victims of abuse or abandonment. Although

microchipping has the potential to increase traceability of keepers so might make it easier to identify neglectful owners and/or abusers, this review has not identified evidence to confirm that compulsory microchipping has made it easier to tackle dog abuse or has reduced the number of dog attacks.

Are the measures set out in the 2015 Regulations fit for purpose?

34. This section reviews the provisions in the legislation. Throughout the review process stakeholders also made suggestions for improvements. These suggestions are summarised in the 'stakeholder suggestions' section of this report.

Obligation to microchip (Regulation 3)

35. Regulation 3 of the 2015 Regulations states that a dog must be microchipped by eight weeks old, unless the keeper has a certificate from a vet outlining valid reasons for exemption. This regulation involves ensuring that the dog is implanted with a microchip which is compliant with the 2015 Regulations and which is registered with a compliant database. An imported dog must be microchipped in accordance with the 2015 Regulations within 30 days of entering the country, unless exempt. Overall, we consider that this regulation is fit for purpose.
36. There is no evidence to suggest the widespread use of exemption certificates since the 2015 Regulations came into force. Although there is no central recording of these data, veterinary stakeholders who engaged in the review suggested that exemptions were rare and, where issued, tended to be justified and time-limited (for example, to allow a skin condition to heal before implantation).
37. The eight-week age limit aligns with the minimum age that licensed breeders can sell puppies. This means it is the responsibility of breeders to ensure that the dog is microchipped before sale, and to record their details on the database. We have not been presented with evidence from stakeholders to suggest this age limit might be inappropriate. However, there is evidence that many dogs are not being microchipped by the breeder before the eight-week age limit. We also have anecdotal evidence that dogs may be microchipped before eight weeks of age by breeders who leave the buyer to register the microchip, contrary to the intention of the 2015 Regulations.
38. The 30-day timeframe for ensuring that imported dogs are microchipped in accordance with the 2015 Regulations gives keepers time to ensure their dogs' microchips are registered on a compliant database. Most of the stakeholders we consulted did not highlight any concerns with this timeframe. However, the Nottingham research report recommended that registering a microchip on a compliant database could be part of the customs clearance process for imported dogs, because identifying the correct keeper when a foreign microchip is not registered on a UK database can be onerous. Battersea Dogs and Cats Home also suggested that an animal's chip details could be recorded on a database at the point of entry to the UK. They suggested that this could reduce the time and resources taken to quarantine and blood test a stray dog, a precautionary measure that is undertaken for disease management purposes when the keeper cannot

be identified, or when the microchip originates from a country where rabies is endemic. If the microchip was registered on a UK database upon entry, the date of entry into the country would then be known and quarantine might not be required.

39. The survey of pet owners in the Nottingham research report found that 83% of dog owners were aware that the law requires all dogs to be microchipped and requires database details to be kept up to date. However, this also indicates that 17% of dog owners surveyed were unaware of these requirements.

Form of microchip (Regulation 4)

40. Regulation 4 of the 2015 Regulations states that any microchip must have a unique number, including the manufacturer's code, and must be compliant with standards set by the International Standards Organisation (ISO). Overall, we consider that this regulation is fit for purpose.
41. The veterinary survey in the Nottingham research report indicated that veterinary professionals do not always use ISO chips (82% of veterinary professionals surveyed indicated that they 'always' used an ISO standard microchip for implantation, while 11% indicated that they 'often' used such a chip). However, it is not clear whether this is because the respondents were uncertain whether the chips were indeed of ISO standard, whether they used other chips for species other than dogs or whether they used different types of microchips for other reasons.
42. According to the Nottingham research report, use of non-ISO standard microchips is one of the leading causes of microchip unresponsiveness, alongside poor scanning techniques and the use of low-quality scanners or microchips.
43. Microchip unresponsiveness is not a common event. 36% of veterinary professionals reported that they 'never' encountered a functional failure with a dog's microchip and 59% reported that this had 'rarely' happened.

Details to be recorded on a database (Regulation 5) and Database conditions (Regulation 6)

44. All keepers must ensure that their dog is microchipped and that their details are kept up to date on a compliant database. Microchip databases are commercially operated businesses that operate independently of government. In April 2016, there were four compliant databases. Since 2016, the number of database operators in the UK has grown and as of September 2021, 16 microchip databases are considered to be compliant with the 2015 Regulations.
45. Regulation 5 of the 2015 Regulations sets out the details that need to be recorded on a compliant database, including information to identify the dog (breed, sex, age), the microchip number and details of the keeper (name, address and phone number). If the keeper is also the breeder and is licensed under the Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations 2018, the breeder's licence number and the local authority that issued the licence must also be included.
46. Regulation 6 of the 2015 Regulations sets out the conditions that database operators must comply with. This includes having adequate database capacity, backing up data securely and having a system for responding to requests at all times. They must also have a system for identifying people authorised for the purposes of the 2015 Regulations, such as local authorities, as well as a system for identifying the keeper.

They must provide any information requested by the keeper (in relation to their dog) or by an authorised person.

47. The Nottingham research report and the stakeholder consultation exercise raised several concerns over the operation of these databases. In the Nottingham research report, both veterinary professionals and local authorities highlighted issues with the current system. 34% of local authority respondents commented that the system is easy to use but time consuming due to many dogs being believed to be registered on more than one database (the Battersea Dogs and Cats Home 2021 report[18] suggested duplicate registrations in the stray dog population are less than 2%, but there is no data on the number of duplicate registrations in the general dog population). 23% responded that the systems were not easy to use, and that it was time consuming to contact database companies. Most veterinary respondents (81%) reported that the current microchip database system was an inefficient use of veterinary practice resources, because multiple databases must be checked to find the keeper of a lost dog. Many sector organisations commented that the database system overall was overly complex and time consuming to navigate due to the existence of multiple databases and the lack of a central database or single point of entry.
48. In the Nottingham research report, the pet owners' survey highlighted issues that could be hindering dog owners' compliance with the law. 59% of respondents were not aware that microchipping databases were different to the veterinary practice's own record systems. 60% did not know which database company their pet's record was registered with, and 92% of those did not know how to find out. These figures are echoed in a survey carried out by the Pet Panel[19] , which found that 35% of pet owners surveyed did not know which database held their records.
49. Many key stakeholders, including many of the compliant database companies, considered that there were differences in how database companies interpreted some of the conditions. For example, despite the 2015 Regulations outlining that database operating companies need to be available for requests at all times, there were concerns that this was being applied differently by different database operators.
50. Many stakeholders raised concerns about the increasing number of databases exacerbating existing difficulties experienced by those attempting to navigate them. Whilst the current "check-a-chip" system identifies which database a microchip is registered on, each database operates an individual log-in process to retrieve the full record of a dog, meaning an authorised person such as a local authority must be able to negotiate multiple different login processes. Feedback about the perception of many users needing to search multiple databases in the first place also implies that the "check-a-chip" could be put to better effect.

[18] Battersea (2021): Compulsory dog microchipping. Five years on.

[19] The Tailster Pet Panel Pet Microchipping - Survey Results

Powers of the Secretary of State (Regulation 7)

51. Under Regulation 7, database companies must provide the Secretary of State with information held on their databases upon request and meet requests for information that demonstrates their compliance with the conditions. The Secretary of State can also serve a notice on a database operator holding itself out as complying with the conditions in the 2015 Regulations that fails to comply with those conditions. This notice requires the operator to cease presenting itself as being compliant. The database operator must also provide the Secretary of State or another database with a copy of the data that they hold under the 2015 Regulations.
52. Some stakeholders have suggested that more should be done to address non-compliant databases and that the Secretary of State should exercise powers under Regulation 7 more often. It has also been highlighted that a clear process is needed to enable data to be transferred to an alternative database in the event that a database company goes out of business (although no such event has happened since the 2015 Regulations came into force).

Change of keeper (Regulation 8)

53. Under Regulation 8 of the 2015 Regulations, in the case of transfer of keepership, it is the responsibility of the new keeper to update contact details recorded on the database if the previous keeper has not already done so.
54. Many sector organisations commented that these provisions are fit for purpose. However, many key stakeholders called for a consistent process around transfer of keepership that database companies must adhere to.
55. Concerns were raised that dogs can be registered on more than one database simultaneously. There was a widely held assumption that some companies have policies in place to ensure that duplicate registrations are not accepted. However, at present, database companies vary in their processes and some are content to accept duplicate registrations. It was highlighted that a consistent and effective process for transferring keepership and addressing duplicate registrations could also be an important measure for countering pet theft, as it could safeguard against unwarranted changes of keepership.

Implanting of microchips (Regulation 9)

56. Regulation 9 of the 2015 Regulations states that the implanting of microchips must only be carried out by a veterinary surgeon, veterinary nurses under guidance of a veterinary surgeon, student veterinary surgeons or nurses under guidance of a veterinary surgeon, an implanter who has been satisfactorily assessed on completion of a government-approved training course, or a person who received training on implantation before 6th April 2016. Training courses must provide practical experience of implanting microchips.
57. According to the Nottingham research report, 95% of pet owners surveyed said that their dog was microchipped, but only 23% of owners said their dog was microchipped when they bought them. 72% indicated that their dog was microchipped by a veterinarian and 3% indicated that the procedure was performed by another qualified implanter.

58. There are currently 13 approved implanter training courses. To be able to offer an approved training course, providers must apply for approval to the Animal and Plant Health Agency (APHA) and supply evidence of their training materials, assessment materials, the qualifications of assessors and the programme they deliver to trainees[20]. This is then reviewed, and a training provider will receive a letter of approval from APHA if they meet the required standards. Implanter training courses are not monitored or routinely audited.
59. Microchip implanters are not generally given a specific registration number and there is no register that covers all accredited implanters. 76% of veterinary survey respondents in the Nottingham research report agreed that all implanters should be allocated a unique ID number and 58% commented that implanters should be linked to the animals they implant through the microchip database record. Over 85% of non-veterinary implanters agreed with this.

Adverse reactions (Regulation 10)

60. Regulation 10 of the 2015 Regulations sets out that all adverse reactions to microchips and functional failures must be reported to the Secretary of State. This includes harm caused by microchip implanting, microchip migration, or failure of the microchip to transmit the number when scanned.
61. Defra receives reports of adverse reactions through its Veterinary Medicines Directorate, whether these reports are related to medical reactions, migration or loss of microchip or functional failure.
62. The Nottingham research report carried out a literature review on the prevalence of adverse reactions and analysed data provided by the Veterinary Medicines Directorate. The findings from both this analysis and the literature review demonstrated that adverse reactions are rare events, both for medical and non-medical adverse events. The Nottingham research report found that medical adverse reactions accounted for the minority of all reports submitted to the Veterinary Medicines Directorate. From a data sample including 3,463 reports between 2016-2019, only 3.5% were for medically adverse reactions. The remainder of the reported adverse reactions related to migration of the microchip or functional failure.
63. There was no evidence to indicate that a dog being microchipped under eight weeks increased the risk of a medically adverse reaction. However, the Nottingham research report highlighted that more data were needed to confirm this, given the uncertainty in the data.
64. According to results from the veterinary survey in the Nottingham research report, 81% of veterinary professionals said they ‘never’ experienced adverse reactions and 18% said they ‘rarely’ did. 79% of non-veterinary implanters reported that they ‘never’ encountered adverse reactions, while 20% reported that they had seen an adverse reaction. When asked if their dog experienced any adverse reactions due to the implantation of a microchip, 94% of pet owners stated that they had never experienced any issues and

[20] Guidance: Implantation of dog microchips. How to apply to run a microchip implantation course.

none of the respondents reported medical issues because of the procedure (reported issues were all due to microchip migration or an undetectable chip).

65. The reporting of adverse effects must be done online via a dedicated webpage. The overall experience in using the adverse effect reporting system was good (75%). 64% of veterinary respondents said they did not make any reports. It is unclear whether this indicates that many veterinary professionals do not report adverse reactions or whether some respondents had not experienced any adverse reactions.
66. In the survey of non-veterinary implanters, only 42% of respondents were aware of the reporting scheme. This may imply that the number of adverse reactions may be underreported.

Powers of an Authorised Person (Regulation 12) and Offences (Regulation 13)

67. Regulation 11 states that the Secretary of State can give permission to any person to enforce the 2015 Regulations, local authorities can give permission to any person to enforce the 2015 Regulations in their area, and police constables and community support officers are automatically authorised persons under the 2015 Regulations. Regulation 12 outlines the powers of authorised persons to serve notices and to arrange for a dog to be microchipped (and to recover costs) in the case of non-compliance. Regulation 13 (''Offences'') outlines specific offences under the 2015 Regulations.
68. Under the 2015 Regulations, an authorised person may issue a notice to the keeper of a dog that is not microchipped, requiring the keeper to have the dog microchipped within 21 days. If the keeper does not comply within 21 days, the authorised person can arrange for the dog to be microchipped and recover the cost. It is an offence not to comply with a notice and a fine up to level 2 on the standard scale (currently £500) can be imposed on summary conviction. Fines can also be issued upon summary conviction to an implanter who is not appropriately accredited or if they fail to report adverse reactions, both of which are offences. It is also a specific offence if a database company fails to comply with the conditions set out in the 2015 Regulations, whilst holding itself out as being compliant.
69. Since 2008, when section 68 of the Clean Neighbourhoods and Environment Act 2005 came into force, local authorities have had the sole responsibility for discharging responsibilities for stray dogs and therefore, have a role in enforcing the 2015 Regulations.
70. According to the Nottingham research report, there are considerable discrepancies between local authorities in terms of levels of enforcement. Many local authorities commented on the administrative burden involved in issuing and following up on notices and 12 local authorities (16% of respondents) stated they did not follow up on non-compliances at all. Many agreed that the introduction of Fixed Penalty Notices, similar to those issued for littering offences, would be preferable as it would be simpler and less burdensome. Key organisations such as Battersea Dogs and Cats Home and the Dogs Trust also supported the introduction of Fixed Penalty Notices as an alternative mechanism to help local authorities enforce the 2015 Regulations.

Microchipping Regulations in other countries

71. International scientific research clearly demonstrates that microchipping increases the return rates of lost dogs. However, issues with inaccurate details on microchip databases is a common theme, hindering the full potential benefits of the policy being realised. In Australia, a study[21] found that email reminders for owners were an effective way to increase the number of database records which have accurate details of keepers. Public information campaigns were also a common way to address this issue. For example, in the USA, an annual 'check-a-chip-day' campaign encourages owners to update their details.

Costs and benefits

72. This section considers the actual costs and benefits of the 2015 Regulations and compares them with the estimates in the original Impact Assessment.
73. According to the models presented in the Nottingham report to assess the effectiveness of the 2015 Regulations, there is evidence that the expected benefits outlined in the original Impact Assessment have largely been met. Since the 2015 regulations were introduced the number of stray dogs dealt with by local authorities has reduced at a higher rate. This is likely to have been accompanied by a reduction in their costs. More dogs have been reunited with their owners quickly, with assumed benefits for animal welfare.
74. A full economic assessment of the actual costs and benefits of the 2015 Regulations is not in scope of the review. However, the costs and benefits outlined in the original Impact Assessment are presented below, with relevant evidence to support these estimates, where data were available. This is based on data from the Nottingham research report and evidence/data submitted by sector organisations.

Monetised costs and benefits.

75. The original Impact Assessment (IA) estimated the Net Present Value (NPV) of the policy over a 10-year period as £49.7m (Cost = £38.8m, Benefit= £88.5m), with a net cost to business per year of £0.4m. A breakdown of the monetary costs and benefits is outlined below**.**

Transitional Costs

[21] Goodwin, K., Rand, J., Morton, J., Uthappa, V. and Walduck, R., 2018. Email reminders increase the frequency that pet owners update their microchip information. *Animals*, *8*(2), p.20

76. Transitional costs are costs incurred at the start of the policy to meet the new requirements.

Dog keepers

77. The transitional costs to dog owners were estimated at £19.1m in the original IA. This included the cost of microchipping dogs (£10.90 each) not covered by free dog microchipping initiatives, as well as an estimated lifetime update service fee from the microchipping database of £16 for all dog owners.
78. PDSA reported an increase in the proportion of dogs microchipped from 83% in 2015[22] to 92% in 2016[23], where the population grew from 9.3m dogs owned to 9.4m. The difference in the number of microchipped dogs between 2015 and 2016 was therefore around 930,000. In 2015 and 2016, the free microchip initiative by Dogs Trust microchipped around 290,000 dogs[24], leaving 640,000 to be microchipped by dog keepers. We were unable to obtain figures from other microchipping initiatives. The Nottingham research report found a range in costs between £15-£17 for lifetime updates on microchipping databases, which is in line with the estimate in the original IA**.**
79. Based on this evidence, we estimate the transitional cost to dog keepers was around £21.9m on the assumption that dog keepers microchipped 640,000 dogs between 2015 and 2016 at a cost of £10.90, and all of the 930,000 dogs microchipped (by both dog keepers and free microchipping initiatives) incurred a cost of £16 each for lifetime updates on databases. Overall, the transitional cost impact has been £2.8m more than the £19.1m estimated in the original IA. A key assumption here is that all of the increase in microchipping was a direct impact of the 2015 Regulations rather than the reflection of a longer-term prior ongoing trend.

Government

80. The transitional cost to government includes the cost of publishing articles in appropriate publications, arranging for posters and leaflets to be available in veterinary surgeries, providing information to licensed breeders, and other steps to publicise the changes. This cost was estimated at £0.04m in the original IA.
81. We have not retrieved data on exact costs for this review so cannot determine whether the estimated costs were incurred but the evidence we have obtained suggests that the transitional costs incurred by government were broadly in line with the original IA.

Breeders

82. The transitional costs to breeders included the cost of obtaining microchip scanners and undertaking implantation training. These were estimated at £0.2m and £0.4m respectively in the original IA. 2,250 breeders were estimated to have needed

[22] PDSA Animal Wellbeing Report 2015
[23] PDSA Animal Wellbeing Report 2016
[24] Overall, Dogs Trust has microchipped over 1.1m dogs between 1999-2019

implantation training at a cost of £130 each for the training course. The time taken to undergo this training was monetised at a rate of £11 per hour for 4 hours.

83. In practice, there are currently 13 approved implanter training providers offering courses costing between £100-400. These vary in duration from a few hours to a whole day.
84. On the assumption that training courses cost £250 on average, and all other variables are constant (e.g. time cost and number of breeders), this gives an estimated total cost of implantation training of £0.7m. Overall this suggests that the transitional cost to breeders may be higher at £0.9m compared to the original estimate of £0.6m.

Other businesses including existing microchip databases

85. The original IA estimated that there would be a transitional cost to other businesses of £0.23m. This comprised the cost of veterinary practices updating their records management systems (£0.03m), and existing microchipping databases changing their databases (£0.2m) to include new requirements contained in the 2015 Regulations.
86. The 2015 Regulations did not introduce a licensing system for database operators, instead it set out the conditions applying to compliant databases and provided for their enforcement. These conditions were not considered in the original IA to apply significant additional market entry costs on database operators.
87. We do not have evidence on whether these costs were incurred.

Civil society organisations

88. The original IA estimates costs to civil society organisations of £9m. This is in relation to the cost of microchipping over 1.1m dogs.
89. The Dogs Trust has microchipped over 585,000m dogs[25], and PDSA has microchipped approximately 63,000 dogs[26] through its free microchipping initiatives. The Dogs Trust indicated that the cost of microchipping these dogs came to £3.4m. We do not have evidence of the cost to PDSA of microchipping 63,000 dogs. Other charities such as Battersea Dogs and Cats Home have also offered free microchipping for many years, but we have been unable to obtain figures and costs. However, Battersea Dogs and Cats Home did microchip 5,000 dogs for free as part of a community-based campaign leading up to the 2015 Regulations coming into force in 2016.
90. The data we have suggests that the cost to civil society organisations of their free microchipping initiatives could be significantly lower than the estimated £9m in the original IA, even if this is partly due to less dogs being microchipped.

Recurring Costs:

91. Recurring costs are those which we will continue to see each year as dogs continue to be purchased.

[25] Between 2014-2019
[26] Between 2016-2021

Costs of microchipping dogs

92. The total undiscounted cost of microchipping for dog keepers and breeders was estimated at £14m between 2016 and 2023 in the original IA, with the costs for each group being £9.7m and £4.2m respectively. For dog keepers, microchipping was estimated to cost £1.9m in 2016, reducing to £0.9m in 2023. For breeders, the cost of microchipping was estimated at £0.6m in 2016 gradually falling to £0.5m in 2023. Licensed breeders were estimated to be the source of 34% of all puppies bought.
93. Although both the dog population and the proportion of dogs microchipped have increased since the 2015 Regulations were put in place, we do not have sufficient data to estimate what the yearly cost of microchipping has been between 2016-2020. The pet owner survey in the Nottingham research report found that 30% of dogs purchased from a licensed breeder after 6 April 2016 were not microchipped prior to transfer to the new owner (which is not compliant with the 2015 Regulations). This might indicate that the recurring cost to breeders is slightly lower than originally estimated as breeders are not microchipping all dogs sold. However, it is important to note that that this potential reduced cost is due to a lack of compliance with the 2015 Regulations.
94. To the extent that breeders are not microchipping dogs prior to their transfer to a new keeper, these microchipping costs would instead be met by the new keeper.

Benefits

Local Authorities and civil society organisations

95. Compulsory microchipping was expected to lead to a reduction in the costs to local authorities of handling stray dogs. This was valued at an undiscounted total of £31m from 2016-2023. Over the three-year period surveyed in the original IA, an average of 102,000 strays per year were passed on to local authorities in England. Of these, 28% were passed on to civil society organisations for rehoming. The original IA estimated the number of stray dogs handled would be around 95,000 in 2016. Following the commencement of the 2015 Regulations, it estimated this figure would fall to 59,000 in 2021.
96. The Nottingham research report indicates that compulsory microchipping may have contributed to a reduction in stray dog handling by local authorities.
97. The Battersea Dogs and Cats Home 2021 survey[27] found a continued reduction in the number of stray dogs handled by local authorities. Of the local authorities that took part in this survey, a reduction of 66% was found between 2016-2021. A 66% reduction on the estimated 2016 figure of 95,000 stray dogs would result in a population of 32,300 in 2021. Based on this evidence, the population of stray dogs may have reduced by more than the original IA estimate. This implies that the benefits/savings to local authorities and civil society organisations may be greater than the original estimate. As previously

mentioned, we have not been able to gain data from rescue charities to establish whether the reductions in costs have matched the original estimates.

98. Although this information suggests that savings may be higher overall than estimated in the original IA, we have not been able to quantify what these might be.

The table below summarises the monetised costs and benefits discussed. As explained above, we have not been able to quantify all costs and benefits.

	Original IA (2015)	PIR (2021)	Difference
Transitional Cost			
Dog Keepers	£19.1m	£21.9m	(+) £2.8m
Government	£0.04m	-	-
Breeders	£0.6m	£0.9m	(+) £0.3m
Other businesses	£0.23m	-	
Civil society organisations	£9m	£3.4m	(-) £5.6m
			(-) £2.5m
Recurring Costs			
Dog Keepers	£9.7m	-	
Breeders	£4.2m	-	
Benefits			
Local Authorities			
Civil society organisations			

Non-Monetised Costs and benefits

99. Non-monetised costs identified in the IA included the time taken for the public to update details on databases, the costs for implantation training for implanters other than vets and breeders (e.g. dog groomers), and additional costs of enforcing the policy, incurred by the public sector. Although unquantified, evidence from the Nottingham research report and from our key stakeholders suggests that such costs have occurred as a result of the 2015 Regulations.

100. Other non-monetised costs that were not included in the original impact assessment include the ongoing costs to database operators from meeting the conditions in the 2015 Regulations and the costs to local authorities, vets and other organisations of using the database system. We have not obtained information to quantify these costs, but our assumption is that meeting the conditions set out in the 2015 Regulations will have incurred some ongoing costs to database operators, although we did not receive indication that significant costs incurred. Information from veterinary professionals, local authorities and charities has indicated that navigating the current database system can involve considerable time costs due to out of date details and challenges in navigating the database system, although they have not been quantified.

101. Non-monetised benefits identified in the original IA included the welfare benefits of increased reunification rates for lost dogs. Related to this would be benefits to dog keepers, as well as public safety benefits. As previously outlined, there is substantial evidence to demonstrate that the policy has achieved the welfare benefit of increased reunification rates, but we do not have evidence to support an improvement in public safety.

102. Other potential benefits highlighted in the IA included improving dog health due to better traceability and helping to address welfare issues. No clear evidence has been obtained to substantiate this impact.

Unintended consequences

103. As part of our targeted consultation with key stakeholders, we asked whether there had been any unexpected consequences, positive or negative, that their organisations had identified. 10 organisations responded to this question. Most of these responses referred to the increase in the number of database companies since the 2015 Regulations came into place. A few organisations suggested that this has made the system more complex and time consuming to access.

Impact on small and micro businesses

104. The original IA estimated that the direct cost to businesses (£0.4m) would fall entirely on microbusinesses as it was considered unlikely that commercial breeders/dog traders (who account for 95% of the net direct cost to business) would have more than 10 full time employees. This cost includes the cost to breeders of the requirement to microchip their puppies, undertake implanter training, and purchase a microchip scanner. The exact cost was expected to vary depending on whether a breeder paid for a vet to microchip their dogs or became a qualified implanter themselves (if they were not already qualified).

105. A full assessment of the actual costs to breeders has not been carried out so we do not have any evidence to indicate whether the actual costs have diverged significantly from the estimates. We have some evidence that the cost of implanter training courses

may be higher than estimated (see 'costs and benefits' section). However, it is not clear whether actual costs were higher overall due to lack of data on the proportion of breeders that have accessed implanter training since the 2015 Regulations were introduced.

106. The Nottingham research report and stakeholder responses did not identify any unexpected impacts on small and microbusinesses that were not reflected in the original IA.

107. As the commercial breeder/dog trading sector consists almost entirely of small and microbusinesses, and as some key benefits of the reforms relate to the 2015 Regulations applying to breeders, there is little scope to exempt small and microbusinesses from the 2015 Regulations. The costs incurred by business from the 2015 Regulations in many cases would be transferred to the buyer of the puppy. This would apply to the costs to breeders as well as the costs to database operators. We do not have evidence to suggest that the net costs to small and microbusinesses are disproportionate.

Impact of COVID-19 on microchipping policy

108. Some key stakeholders raised concerns that COVID-19 had an impact on the implementation of microchipping policy, affecting the number of dogs microchipped. The Battersea Dogs and Cats Home 2021 report[28] highlighted that local authorities microchipped 77% fewer dogs between April and June 2020 compared with the same period in 2019. 61% fewer 21-day enforcement notices were issued by local authorities. According to the Battersea Dogs and Cats Home 2020 report on 'The impact of COVID-19 on Companion Animal Welfare'[29], Blue Cross reported that microchipping numbers were down by 73%. It was suggested that this was the result of rescue organisations having to reduce services and that many owners were concerned about taking their pets to a veterinary practice.

109. However, the Battersea Dogs and Cats Home 2021 report suggests that these effects were short-lived, and that the number of stray dogs dealt with by local authorities this year is similar to 2019, with the percentage microchipped being slightly higher.

Summary of proposals for improvement

110. Many sector organisations suggested refinements to improve the effectiveness of the 2015 Regulations, both regulatory and non-regulatory. The Nottingham research report also outlined a number of recommendations.

111. Below is a summary of the main suggestions put forward by stakeholders. These will be carefully considered going forward.

Public education:

[28] Battersea (2021): Compulsory dog microchipping. Five years on
[29] The Impact of COVID-19 on Companion Animal Welfare in the UK

- **A public information campaign** is needed, ensuring dog owners are aware of their legal responsibility to keep their contact information up to date. This should also inform dog owners that it is their legal responsibility to register on a compliant database.

The database system:

- **Additional details** that must be recorded on databases should be included in the 2015 Regulations, in order to maximise the potential benefits of compulsory dog microchipping. Compulsory details to be recorded could include:

    - Breeders' details to remain alongside the current keeper to improve traceability of breeders;
    - Implanter details, so that implanters can be identified in case of animal welfare impact;
    - Rescue back-up details, in case the dog is relinquished;
    - A statutory 'missing' and/or 'stolen' field.

- **A single national database** should be created, similar to the equine microchipping database system or a **single point of entry** with single log-on point and automatic routing of users to the specific database that holds the registration.
- **Improved functioning of the API** (Application Programming Interface) look-up tool would ensure effective communication and information exchange between databases and ensure that records are correctly identified to named databases.
- **A regular audit** should be undertaken by an independent body to ensure that database companies are meeting the conditions set out in the 2015 Regulations.
- **Regular reminders** should be issued by database companies to prompt keepers to update their details.
- **Duplicate registrations** should not be allowed, so companies should not accept registrations if a microchip is already registered elsewhere.

In addition to these suggestions put forward by stakeholders in the context of the targeted consultation carried out for this review, several recommendations were put forward by the **Pet Theft Taskforce Report**[30]. These included the following:

- Re-iteration of the **single point of access** to the database system.
- **Additional information to databases on litters** to improve traceability and assist local authorities to monitor how many litters one dog has had.
- **An effective and consistent transfer of keepership process**. It was suggested that a current keeper should always have to approve transfer of keepership or at least be alerted to the request.

[30] Pet Theft Taskforce Policy paper (2021)

Implanter training:

- **Implanter training courses should create a database** providing a unique registration ID to all trainees. This could be linked to individual microchips through the microchip database to improve implanter accountability. The Nottingham research report also proposed this. **The training requirements** for implanters should be strengthened.
- The Nottingham research report recommended that all training courses must **remind participants of the reporting requirements for adverse reactions**.

Enforcement of the Regulations:

- **A specific offence for breeders** who do not comply with the 2015 Regulations should be included to improve compliance and accountability.
- **Give powers to local authorities to issue Fixed Penalty Notices (FPNs)** to improve compliance and reduce administrative burden on local authorities. The Nottingham research report also recommended this.
- **Enforcement guidance for local authorities** should be produced to ensure the 2015 Regulations are effectively and consistently enforced and best practice is shared.

Costs and benefits going forward

Are the objectives and scope of the regulations still valid?

112. The review found that the original objectives of the 2015 Regulations continue to be relevant. Evidence outlined in this report has demonstrated that the 2015 Regulations largely appear to have met their objectives of improving animal welfare by increasing traceability of dogs, leading to a reduction in stray dogs and an increase in reunification rates.

113. The 2015 Regulations also intended to improve responsible ownership and reduce poor breeding conditions through enhanced traceability of owners and breeders. Despite limited evidence that the 2015 Regulations have met these longer-term objectives, they remain relevant. Many proposals have been put forward to enhance the 2015 Regulations, aimed at delivering broader benefits for animal welfare.

114. Defra will be considering refinements to the 2015 Regulations to enhance benefits and will be publicly consulting on any regulatory changes in the near future.

What are the likely costs and benefits going forward?

115. Evidence indicates that the legislation will continue to provide benefits going forward. These include increased traceability of dogs and therefore lower numbers of stray dogs than if there was no compulsory microchipping. This in turn should continue to impact positively on costs to local authorities of kennelling and handling stray dogs. Microchipping has the potential to allow breeders and keepers to be traced and therefore provides incentives to improve dog welfare. Although this review suggests that these benefits are not being fully achieved at present, improvements to the microchipping system to increase traceability of breeders and educate the public could have a positive impact.

116. In terms of costs, pet owners would incur additional costs from ongoing microchipping, database registration and updating contact details.

117. The costs of introducing improvements to the operation of the database system would initially be met by the database providers, although we would anticipate that these would be passed on to dog keepers via the fees they are charged by database operators. Equally we envisage that any increased costs incurred in the future by breeders would ultimately be passed to their customers.

How likely are unintended impacts in the future?

118. Many of our key stakeholders identified the proliferation of microchip database operators as an unintended impact of the 2015 Regulations. We are keen to improve the operation of the database network, to ensure efficiency and ease of access for authorised users.

Is regulation still the best option for achieving these objectives?

119. Evidence collated for this review has clearly demonstrated that microchipping legislation is still seen as an important and necessary means to achieve the desired policy objectives. There is a large body of evidence which suggests that the introduction of the 2015 Regulations has increased microchipping and reunification rates, leading to benefits for animal welfare and pet owners. However, it takes a whole system approach for the benefits to be fully realised: including, but not limited to, microchipping animals, effective and accessible database systems, and keepers ensuring their details are kept up to date. The Nottingham research report and key stakeholders have highlighted that a public information campaign, educating the public on their legal responsibilities including updating records and the benefits of microchipping, may drive up compliance and increase benefits further. Other regulatory changes, subject to consultation, may ensure that the provisions achieve their full benefits.

120. A key consideration is not so much whether regulation is needed or not, but whether the regulation in place has been pitched at the right level in terms of the obligations placed on dog keepers and on microchip implanters and database operators. A light touch regime was established in 2016. Future regulatory requirements should find the right balance between benefits and ensuring that the accompanying regulatory burdens are justified.

Next steps

121. The post-implementation review of the 2015 Regulations has highlighted several areas where improvements to its current operation could be made. These include:

Operation of the database system:

122. This review has identified issues with the current operation of the database system, including out of date records, challenges of accessing records, ineffective communications between different databases and inconsistent standards and processes adopted by database companies.

Enforcement:

123. The review has identified significant variation in the levels of enforcement between local authorities. Many local authorities and sector organisations have suggested that the introduction of Fixed Penalty Notices (FPNs) would support local authorities with enforcement by reducing the administrative burden. Powers are not currently available to introduce the ability to issue penalty notices through secondary legislation. However, Andrew Rosindell MP has introduced the Animals (Penalty Notices) Bill as a Private Member's Bill in the current Parliamentary session, which, if enacted, is likely to provide powers to enable penalty notices to be introduced through secondary legislation for this purpose.

Defra will be consulting shortly on potential reforms.

124. These may include the following themes:

- The auditing of database operators.
- Developing consistent standards and processes across all database operators.
- Making it easier for authorised persons to access database records.
- Additional details which could be recorded on databases.
- Transfer of keepership processes for databases.

125. A full assessment of monetary and non-monetary cost and benefits will also be carried out, including costs to small and microbusinesses, ahead of introducing any changes to the 2015 Regulations.

Replacing the 2015 Regulations with legislation encompassing dogs and cats

126. The Government has a manifesto commitment to introduce compulsory cat microchipping, and this has already been subject to consultation. The Government has decided to make cat microchipping mandatory, with a view to introducing this legislation in 2022. The Government's formal response to the consultation was published in December 2021[31].

127. The consultation considered the most appropriate legislative vehicle for implementing compulsory cat microchipping. Whilst we acknowledge that some of the requirements for cats may differ to those for dogs, both measures have similar objectives. We are, therefore, proposing to improve a number of the requirements set out in the 2015 Regulations and also introduce mandatory microchipping for cats. In terms of the legislation itself, this would involve revoking the 2015 Regulations and introducing new secondary legislation. The new regulations would retain the purpose of the 2015 Regulations but make them applicable to both dogs and cats.

[31] Cat and dog microchipping and scanning in England: Summary of responses and government response

Annex A: Template for Post-Implementation review

Title: Microchipping of Dogs (England) Regulations 2015	Post Implementation Review
PIR No:	**Date: 30/09/2021**
Original IA/RPC No: Defra 1372	**Type of regulation: Domestic**
Lead department or agency: Defra	**Type of review: Statutory**
Other departments or agencies: **N/A**	**Date measure came into force:** **06/04/2016**
Contact: caws.consultations@defra.gov.uk	**Recommendation: Replace**
	RPC Opinion: Green

1. What were the policy objectives of the measure? (Maximum 5 lines)

The policy objectives were to improve animal welfare by increasing traceability of dogs through microchipping. More lost dogs will therefore be re-united with their owners more quickly to the benefit of owners and dogs and saving local authorities and charities considerable kennelling costs. It will also be easier for those responsible for tackling abuses of dog welfare to bring owners to account and to protect public safety.

2. What evidence has informed the PIR? (Maximum 5 lines)

To inform this review, we commissioned the University of Nottingham to undertake research, reviewing the effectiveness of the 2015 Regulations. We also undertook targeted consultation with key organisations, to give them an opportunity to input evidence and/or comments in writing and we met with many of our key stakeholders to seek their views.

3. To what extent have the policy objectives been achieved? (Maximum 5 lines)

There is evidence that the 2015 Regulations have achieved the main objective of increased reunification rates for lost dogs. We have evidence that the regulations have reduced costs for local authorities. We do not have evidence that the objectives have reduced dog abuse, improved public safety or improved breeding conditions.

Sign-off for Post Implementation Review: Senior Analyst and Minister

1. I have read the PIR and I am satisfied that it represents a fair and proportionate assessment of the impact of the measure.

Signed: ***Priya Shah***

Signed: ***THE RT HON THE LORD GOLDSMITH OF RICHMOND PARK***

Date: *08/12/2021*

Further information sheet

Please provide additional evidence in subsequent sheets, as required.

4. What were the original assumptions? (Maximum 5 lines)

It was assumed in the original IA that enforcement would be limited to cases where keepers come to the attention of the authorities, so there would be risks with levels of compliance due to limited enforcement. Key assumptions and sensitivities in the original IA related to the baseline growth and uptake of microchipping and various costs such as costs of microchipping, updating details on databases and implanter training.

5. Were there any unintended consequences? (Maximum 5 lines)

The proliferation of new database companies since the 2015 Regulations were introduced has been the main unintended consequence identified by stakeholders. This has made the recording systems increasingly complex and time-consuming to access.

6. Has the evidence identified any opportunities for reducing the burden on business? (Maximum 5 lines)

The evidence suggests that improvements to the database system could reduce burden on local authorities, animal welfare charities and veterinary services. We intend to launch a consultation which will include seeking views on improvements to the database system

7. For EU measures, how does the UK's implementation compare with that in other EU member states in terms of costs to business? (Maximum 5 lines)

This is not an EU measure.

Click here to enter text.

Annex B: Letter sent to stakeholders

Department
for Environment
Food & Rural Affairs

Seacole Building
2 Marsham Street
London
SW1P 4DF
United Kingdom

T: 03459 335577
helpline@defra.gov.uk
www.gov.uk/defra

Date: 6th May 2021

Dear Sir/Madam,

We are currently undertaking a review of the Microchipping of Dogs (England) Regulations 2015 and we would like to ensure that the views of our key stakeholders are considered in this process. We are inviting your organisation to provide views on the implementation of the regulations.

Review Objectives

The Microchipping of Dogs (England) Regulations 2015 [1] came into force on 6th April 2016, making it compulsory for all dogs to be microchipped by the age of eight weeks. The policy aimed to improve animal welfare by increasing traceability of dogs through microchipping and to encourage responsible dog ownership.

We are currently undertaking a post-implementation review to assess the effectiveness of the regulations and the extent to which the policy objectives have been achieved. Utilising evidence from various sources and the views of stakeholders, we will assess whether the regulations have met their objectives, identify opportunities for reducing burden on business and propose refinements if required. We would welcome your comments on any aspect of the regulations including the current criteria regarding obligations to microchip, the enforcement approach, microchip implanting and the operation of databases.

How you can help

It would be particularly helpful to receive comments on the following:

-The extent to which the dog microchipping regulations have achieved their objectives, as set out in the original Impact Assessment[2]

-Whether costs and benefits associated with the regulations were as expected and if not, how much they diverged from the estimates in the original Impact Assessment

-Any unexpected consequences, positive or negative, that your organisation has perceived.

-Refinements that could be made to enhance benefits, reduce burden on business, reduce costs and/or improve compliance

We would like to invite you to input any comments, including any information or evidence if appropriate. Please send responses to caws.consultations@defra.gov.uk by 18th June 2021.

Yours sincerely,

Companion Animal Welfare Team
Department for Environment, Food and Rural Affairs

Annex C: Organisations that responded in writing to the letter

Organisation name	Organisation type
Animal Tracker	Database Company
Battersea Dogs and Cats Home	Animal Welfare Charity
Blue Cross	Animal Welfare Charity
British Small Animal Veterinary Association (BSAVA)	Veterinary Organisation
British Veterinary Association (BVA)	Veterinary Organisation
Cats Protection	Animal Welfare Charity
Canine and Feline Sector Group (CFSG)	Animal Welfare Sector Group
Cheshire East Council	Local Authority
Dogs Trust	Animal Welfare Charity
Essex Animal Welfare Forum	Animal Welfare Forum
Gloucestershire County Council	Local Authority
Identibase	Database Company
Microchip Trade Association	Trade Association
People's Dispensary for Sick Animals (PDSA)	Veterinary Charity

Royal College of Veterinary Surgeons (RCVS)	Veterinary Organisation
Royal Society for the Prevention of Cruelty to Animals (RSPCA)	Animal Welfare Charity
The Kennel Club	Dog Organisation
The Society for Practising Veterinary Surgeons (SPVS)	Veterinary Organisation
Wood Green	Animal Welfare Charity