

This is a De Minimis Assessment. Therefore, it has not been reviewed by the Regulatory policy committee (RPC).

Final Stage Impact Assessment

Title: Lamb Castration and Tail Docking Reform

Type of Measure: Secondary Legislation

Department or agency: DEFRA

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1. Summary of Proposal

The policy aims to improve farm animal welfare outcomes by reducing the pain associated with lamb castration and tail docking procedures, through updated regulatory requirements. The policy intends to drive better welfare outcomes by increasing the accessibility of new methods that have been shown to be less harmful to welfare than traditional methods, requiring the use of pain relief for methods that are known to cause significant pain, and setting restrictions on who can carry out each method, how and when.

The proposal seeks to maximise lamb welfare across diverse holdings, while ensuring that the domestic sector remains viable and that the transition to higher welfare practices is practical and proportionate.

To support successful policy delivery, we developed the following Critical Success Factors (CSFs), informed by Green Book guidance and stakeholder input. These factors reflect the need for both welfare improvement and business practicality.

| No. | Critical Success Factor | Explanation |
|-----|--|---|
| 1 | Meeting strategic fit and business need | How well the option: <ul style="list-style-type: none">• Fits with the Government's ambition to continue to improve farm animal welfare.• Reduces pain and suffering from necessary procedures, and ensures that the freedom from pain, injury or disease, one of the Five Freedoms developed by the Farm Animal Welfare Committee (now known as the Animal Welfare Committee), is better met for lambs. |
| 2 | Value for money | How well the option optimises social value considering: <ul style="list-style-type: none">• The benefits from animal welfare to society.• Economic costs to business and households.• Environmental costs/benefits. |
| 3 | Achievability | How well the option can be implemented by producers within the proposed timeframe, including: <ul style="list-style-type: none">• Feasibility of adopting alternative methods and pain relief.• Continuity of supply chain operations during the transition. |
| 4 | Affordability | How manageable the required changes are for lamb holdings of all types and sizes, and whether the cost burden can be absorbed or offset over time. |

2. Strategic Case for Proposed Regulation

Across the UK, castration and tail docking are routinely carried out on lambs. Castration is the removal or destruction of the testes, or prevention by other means of their normal functioning, to render a ram lamb infertile. Tail docking is the partial removal of a sheep's tail. Castration and tail docking procedures are typically carried out using the 'rubber ring' method without the use of anaesthesia or analgesia. Rubber ring castration and tail docking cause significant acute and chronic pain. These welfare issues could be mitigated with the widespread use of alternative methods or the administration of effective pain relief.

Additionally, the legislation regarding castration and tail docking is complex, difficult to understand and inconsistent across administrations. This creates an uneven playing field for sheep holdings in different administrations, despite the integrated supply chain.

There is a growing risk to the UK's reputation as a leader in animal welfare in continuing castration and tail docking procedures without scrutiny and enhanced welfare standards, particularly as public expectations around farm animal welfare strengthen. Several EU countries have already banned or implemented stricter regulations on these practices, for example, Italy, Belgium, the Netherlands and Germany.

The Animal Welfare Committee (AWC) Opinion on the Implications of Castration and Tail Docking for the Welfare of Lambs¹ was published in 2023 in Wales and Scotland, and in 2024 in England. Anecdotal evidence gathered throughout this review confirmed that rubber ring castration and tail docking are routinely carried out without anaesthesia or analgesia across Great Britain. There is extensive scientific evidence that these procedures cause significant acute and chronic pain, and that this can be mitigated by short-acting pain relief, such as local anaesthetics, and longer-acting pain relief, such as non-steroidal anti-inflammatory drugs (NSAIDs). Research also shows that alternative methods can be less harmful to welfare than traditional techniques².

There is strong public support for improved farm animal welfare standards. While public awareness of castration and tail docking is limited, acceptance of such painful procedures is generally low and depends on perceptions of pain and necessity³. There is also desire from the sheep sector to have common rules across the UK and increased accessibility of new methods that have been shown to be less detrimental to welfare than traditional methods.

Government intervention is necessary to improve the welfare of lambs in the UK. The UK Government, the Welsh Government, the Scottish Government, and the Northern Ireland Executive are committed to high standards of welfare for of animals at all stages of life. The government intent is to reduce the unnecessary use of mutilations and safeguard animal welfare where these procedures are properly justified.

The most recent report from the AWC builds on earlier positions set out by the Farm Animal Welfare Council in 1994 and 2008. Each of these reports recommended that castration and tail docking should not be carried out routinely. Despite long-standing awareness within the sector of the negative welfare impacts of lamb castration and tail docking, there is limited evidence of voluntary behavioural change among producers. This points to the presence of a market failure, where the private incentives available to producers do not align with the socially optimal outcome of higher animal welfare.

These reports also advocate for the use of methods that cause the least pain and distress. Despite this long-standing guidance, there has been limited voluntary uptake of alternative methods across the sector. Existing legal requirements and Codes of Practice set only minimum standards and there has been little incentive to drive producers towards alternatives beyond these legal baselines.

Government intervention is therefore warranted to address this misalignment. While existing regulations set out the conditions under which procedures are permitted to be carried out, these provisions have not kept pace with advancements in welfare science and technological advancements. In addition, there is a persistent information asymmetry between producers and consumers. Many consumers express a clear preference for high-welfare products, yet they lack sufficient information at the point of purchase to distinguish between high- and low-welfare lamb. As a result, consumer preferences are not accurately reflected in the market, and

¹ [Animal Welfare Committee \(AWC\) Opinion on the Implications of Castration and Tail Docking for the Welfare of Lambs](#)

² [Assessment of the welfare implications of alternative devices for sheep castration and tail docking - AW0303](#)

³ Connor, M., & Cowan, S.L. (2020). Consumer evaluation of farm animal mutilations. *Research in Veterinary Science*, 128, 35–42.

producers face limited demand-side pressure to adopt less painful practices. Research shows that acceptance of farm animal mutilations depends on perceived pain and necessity, with overall public knowledge being low⁴. However, consumers consistently rate animal welfare as a top purchasing priority⁵, indicating support for higher welfare standards even if awareness of specific procedures is limited.

This represents a classic negative externality, where the welfare costs to animals, and therefore society, are not factored into the market price of lamb. Without intervention, these external costs remain uncorrected, and suboptimal welfare outcomes persist. Policy action to reduce the pain associated with these procedures can help internalise these externalities and better align private decision-making with broader societal welfare objectives.

Without government intervention, significant welfare risks will persist in the UK sheep sector. Lamb welfare in the UK is likely to remain compromised if the current practices of rubber ring castration and tail docking without pain relief continue without change. In the absence of updated requirements that reflect current welfare science and technological advancements, there is no clear driver for farmers to adopt less painful methods or use effective pain relief, allowing current practices to persist.

Many farmers still rely on traditional methods, often due to uncertainty or a lack of clear incentives to switch to alternatives that are less harmful to welfare. This risk-averse behaviour allows poor welfare practices to persist, even when better options are available.

Without further intervention, progress towards improved welfare standards may slow. Castration and tail docking using rubber rings without pain relief remains widespread in the UK sheep sector. Allowing this to continue without updated welfare standards could undermine both the UK's leadership position on welfare and public confidence in the sector.

There have been no post-implementation reviews of the existing regulation in this area.

⁴ Connor, M., & Cowan, S.L. (2020). Consumer evaluation of farm animal mutilations. *Research in Veterinary Science*, 128, 35–42.

⁵ Ammann, J., et al. (2024). Consumers across five European countries prioritise animal welfare above environmental sustainability when buying meat and dairy products. *Food Quality and Preference*, 117, 105179.

3. SMART Objectives for Intervention

The policy aims to improve farm animal welfare outcomes by reducing the pain and distress caused by lamb castration and tail docking, where these procedures continue to take place. It focuses on increasing the accessibility of new methods that have been shown to be less harmful to welfare than traditional methods, requiring the use of pain relief for methods that are known to cause significant pain, and setting restrictions on who can carry out each method, how and when. The approach is designed to be flexible and practical, so that lamb welfare can be improved across a range of farm types without placing disproportionate pressure on the viability of the domestic sector.

The following objectives have been developed using the SMART framework:

| No. | Policy Objective |
|-----|---|
| 1 | Improve the welfare of lambs in the UK by reducing pain and distress associated with castration and tail docking, through the use of methods that are less harmful to welfare and provision of effective pain relief. |
| 2 | Minimise the impact on businesses during transition by ensuring changes are practical, proportionate, and allow for a transition period. Maintain farm viability across all holding sizes. |

The intended outcomes of intervention are to reduce the pain and distress caused by lamb castration and tail docking by increasing the accessibility of new methods that have been shown to be less harmful to welfare than traditional methods, requiring the use of pain relief for methods that are known to cause significant pain, and setting restrictions on who can carry out each method, how and when. This will also improve consistency in welfare standards across the UK and support the farming sector in adopting higher welfare practices without harming business viability.

The intended outcomes can be described using the SMART framework:

- Specific: Each objective focuses on a clear outcome, such as reducing pain or supporting farmers.
- Measurable: Progress can be tracked by monitoring feedback from producers and stakeholders.
- Achievable: The policy focuses on practical changes that can be delivered within existing farming systems, rather than banning procedures altogether.
- Realistic: The approach takes account of different farm sizes and practices and aims to reduce impact on business operations.
- Time-limited: The changes are linked to a set implementation year, with plans for a review within five years to assess progress.

Additional indicators of success could help evaluate whether the intended outcomes are being achieved. Public perception of UK animal welfare standards, tracked through consumer research or surveys, could serve as an important indicator of success by reflecting changes in public confidence and societal expectations. In addition, methods for valuing animal welfare benefits, such as those set out in the University of Reading 2025 report⁶ on the economic valuation of animal welfare for policy appraisal, could be used to estimate the societal value of welfare improvements over time. Combining perception surveys with such valuation methods would provide a more comprehensive assessment of whether the policy is delivering meaningful welfare outcomes that are recognised and valued by the public.

⁶ [Provision of a method for the economic valuation of animal welfare benefits suitable for use in policy appraisal - Main Report January 2025.pdf](#)

The policy aligns with wider HMG objectives on animal welfare, growth, and food security. The animal welfare strategy for England⁷ (published 22 December 2025) sets out the government's priorities for improving animal welfare, and the steps needed to deliver them. This includes a commitment to work with the sheep sector to implement the advice and recommendations in the AWC's 'Opinion on the Implications of Castration and Tail Docking for the Welfare of Lambs' (2024) and update the Sheep Welfare Code.

In relation to the HMG growth objective, the policy seeks to deliver welfare benefits in a manner that is proportionate and mindful of impacts on farmers and market production. There may be short term effects, including increased demand for approved pharmaceutical products or alternative castration methods and technologies. This has potential to support innovation and growth within related supply chains.

The UK Government recently published the Food Strategy for England⁸. By improving animal welfare, the proposal also links with Outcome 7 of the food strategy: Resilient domestic production for a secure supply of healthy food⁹. Transitioning to methods that are less harmful to welfare supports the modernisation of domestic lamb production, helping it remain viable and competitive. Investment in high-welfare systems enables producers to access premium markets and maintain stable demand, strengthening resilience over time.

⁷ [*Animal Welfare Strategy for England*. Department for Environment, Food & Rural Affairs \(Defra\) \(2025\)](#)

⁸ [*Department for Environment, Food & Rural Affairs \(Defra\) \(2022\). A UK government food strategy for England: Considering the wider UK food system.*](#)

⁹ [*Department for Environment, Food & Rural Affairs \(Defra\) \(2022\). A UK government food strategy for England: Annex A – Outcome summaries. Outcome 7: Resilient domestic production for a secure supply of healthy food.*](#)

4. Description of Proposed Intervention and Explanation of the Logical Change Process whereby this achieves SMART Objectives

The preferred option is to introduce updated regulatory requirements across all UK sheep holdings by 2028. These changes will increase the accessibility of new methods that have been shown to be less harmful to welfare than traditional methods, require the use of pain relief for methods that are known to cause significant pain, and set restrictions on who can carry out each method, how and when. The government also intends to update the Code of Practice for the Welfare of Sheep (there are similar codes for England, Wales, Scotland and Northern Ireland) with guidance on justifications for these procedures. Changes to the codes would be consulted on separately.

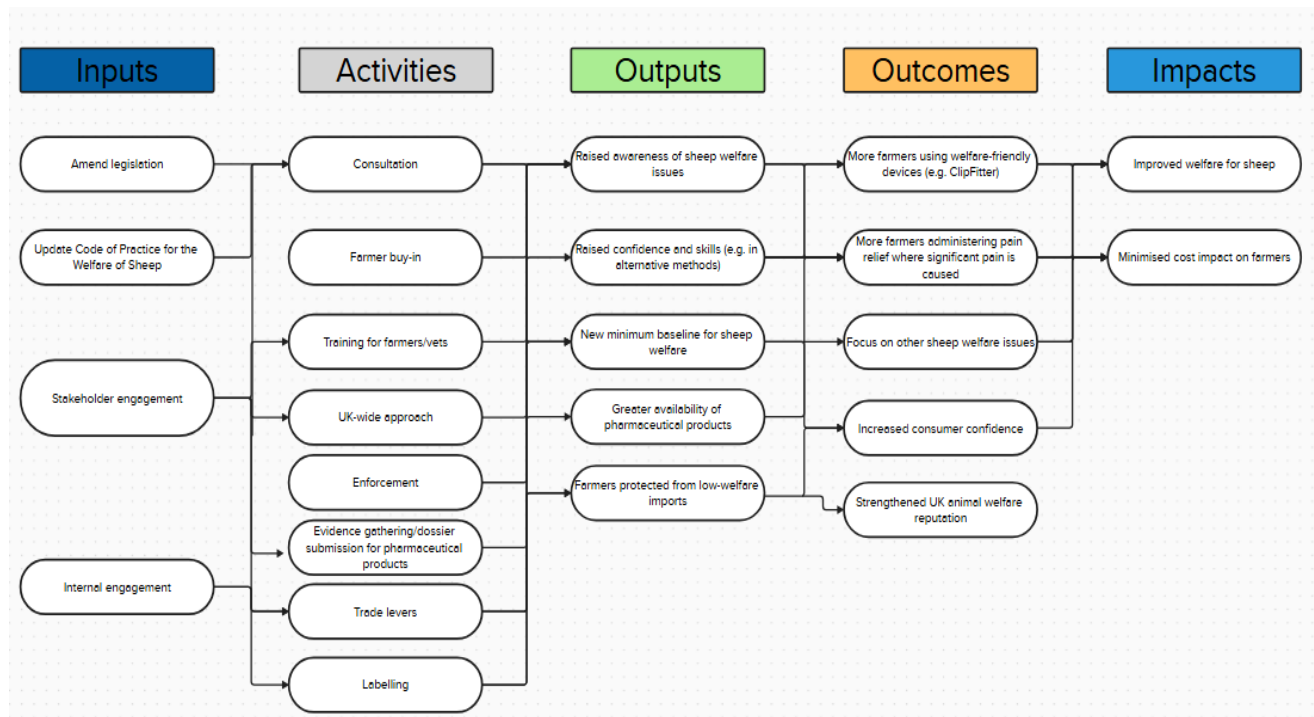
This approach continues to meet the policy objectives by:

- **Improving animal welfare:** It reduces the pain associated with castration and tail docking by increasing the accessibility of new methods that have been shown to be less harmful to welfare than traditional methods, requiring the use of pain relief for methods that are known to cause significant pain, and setting restrictions on who can carry out each method, how and when.
- **Maintaining business viability:** It allows for a transition period and accommodates different farm sizes and production systems, ensuring the changes are proportionate and practical.

This proposal involves amending the existing legislation on permitted mutilations in the UK, rather than creating entirely new legislation. It builds on the current regulatory framework by introducing updated requirements, such as the mandatory use of pain relief for methods that are known to cause significant pain. While these legal changes are new, the methods themselves are already used on some farms, meaning they are tried and tested in practice.

Theory of Change

Figure 1: Theory of Change



5. Summary of Long-list and Alternatives

Defra undertook a detailed longlisting exercise in line with Options Assessment guidance to demonstrate rigour and support transparency. This approach allows for the identification of additional viable options through consultation.

A wide range of regulatory and non-regulatory options were considered across three key dimensions:

- **Scope** – who the regulation applies to.
- **Solution** – the type of intervention.
- **Implementation Timing** – when the changes take effect.

All options were tested against SMART objectives and Critical Success Factors (CSFs) during a policy workshop. Each was supported by a high-level SWOT analysis. Options failing to meet core policy aims or CSFs were ruled out.

Options Considered

Scope Options

- **All Holdings:** Apply changes to all lamb holdings across the UK.
- **Holdings with >50 Sheep:** Apply changes only to medium and large holdings; smaller producers excluded.
- **Commercial Holdings Only:** Target commercial-scale operations, responsible for the majority of procedures.

Solution Options

- **Do Nothing:** Maintain existing regulations.
- **Public Awareness Campaign:** To encourage consumer-driven change.
- **Retailer Campaign:** To influence procurement policies.
- **Assurance Scheme Campaign:** To raise assurance scheme standards.
- **Update Code Only:** Revise guidance with no legislative change.
- **AWC-Aligned Regulatory Reform:** Allows both procedures under restrictions that safeguard welfare.
- **Ban Castration and Tail Docking:** Full prohibition of both procedures.

Implementation Timing Options

- **2026:** Most ambitious implementation date.
- **2028:** Balanced implementation date.
- **2032:** Most achievable implementation date.

A description of alternatives considered and an assessment against CSFs and SMART objectives:

Option 0 – Do Nothing (Baseline)

Under this option, no changes would be made to current legislation, and lamb castration and tail docking would continue using current methods, primarily rubber rings without pain relief. While this approach would impose no additional costs on businesses, as existing practices remain unchanged, it fails to address known welfare concerns. This option failed to meet the SMART criteria, therefore, Option 0 did not undergo a CSF assessment. It is retained as a comparator to assess the costs and benefits of regulatory change.

Option 1 – Non-Regulatory Alternatives (*Discounted*)

Several non-legislative options were considered:

- Public Awareness Campaign - to encourage consumer-driven change
- Retailer Engagement Campaign - to influence procurement policies
- Voluntary Assurance Scheme Reforms - to raise assurance scheme standards

Why Discounted:

These options were rejected due to very limited likely impact. Consumers are currently unable to distinguish between lamb that has been castrated or tail docked and lamb that has not, so even with increased awareness, they would not be able to shift demand effectively. Retailers lack the public pressure to change procurement policies. Voluntary assurance scheme uptake in the sheep sector remains low. All failed to meet the SMART criteria, therefore, Option 1 did not undergo a CSF assessment.

Option 2 – Do Minimum (*Update Code of Practice Only*)

This option would be to update Codes of Practice in England, Wales, Scotland and Northern Ireland with new guidance on castration and tail docking. While we still intend to update the Codes as part of the wider package, this option alone was discounted. It would not rectify the legislative inconsistency between administrations or remove outdated statutory provisions that are inconsistent with current welfare science.

Assessment:

- Strategic Fit: Weak – unlikely to reduce pain and distress from procedures.
- Value for Money: Low – unlikely to provide animal welfare benefits to society.
- Achievability: High – quick to implement.
- Affordability: High – low cost.
- **Status: Retained as comparator but not preferred**

Option 3 – AWC-Aligned Regulatory Reform

This option introduces proportionate new regulation aligned with AWC advice. It includes proposals to:

- Increase the accessibility of new methods that have been shown to be less harmful to welfare than traditional methods.
- Require the use of pain relief for methods that are known to cause significant pain.
- Set restrictions on who can carry out each method, how and when.

Assessment:

- Strategic Fit: Strong – would reduce pain and distress from procedures.
- Value for Money: High - substantial welfare gains relative to cost.
- Achievability: Strong - builds on known practices with adequate transition time.
- Affordability: Reasonable - costs are minimised via flexible compliance options.
- **Status: Preferred Option**

Option 4 – Ban Castration and Tail Docking (*Do Maximum*)

This option would prohibit all lamb castration and tail docking. It does not reflect the nuanced evidence base or sectoral need. There remain cases, such as where there is a high risk of flystrike, where these procedures may still be justified. A ban could therefore result in unintended harms to welfare.

Assessment:

- Strategic Fit: Weak - does not reflect evidence that some procedures may still be needed (e.g. to prevent blowfly strike).
- Value for Money: Poor - may lead to unintended consequences.
- Achievability: Low - major change to current practice.
- Affordability: Risk of sector disruption and higher costs.
- **Status: Retained as a high-regulation comparator but not recommended**

Summary of Longlist Appraisal

At the conclusion of the longlist appraisal, all non-regulatory options have been ruled out from shortlisting. This is due to their failure to meet key policy objectives and CSFs, particularly around improving welfare outcomes and delivering meaningful behavioural change. While these options may support awareness or voluntary uptake in the long term, they are not expected to deliver the scale or consistency of impact required on their own.

During the forthcoming consultation, Defra and the Devolved Governments will seek stakeholder views on whether there are any viable non-regulatory or hybrid alternatives not currently captured. Any additional options proposed will be appraised using the same SMART objectives and CSF framework in the final post-consultation De Minimis Assessment.

| Appraisal Area | Options Assessed | Shortlisted | Rationale for Inclusion/Exclusion |
|---------------------------|---------------------------------------|---------------------------------|--|
| Scope | All holdings (Do Maximum) | Yes (All holdings – Preferred) | The “All holdings” option maximises improvements in animal welfare, but it also impacts all businesses regardless of solution. “Holdings with over 50 sheep” affects only a subset of businesses, but also only provides some welfare improvements. While the “Commercial holdings” option offers limited welfare gains but impacts the fewest businesses. “All holdings” is the preferred option as it best achieves the first SMART objective. For the Scope choice, the businesses that could be covered by the policy were considered. This stage focuses on the ‘who’ the policy is directly aimed toward, not the ‘how’. Therefore, the scope options were not scored against the second policy objective. |
| | Holdings with over 50 sheep | No | |
| | Commercial holdings only (Do Minimum) | No | |
| Solution – Part I | Ban both castration and tail docking | High-regulation Comparator only | The AWC-aligned reform is preferred for balancing welfare gains with feasibility. ‘Do nothing’ and ‘ban both’ are included as comparators only – the former as baseline and the latter to reflect maximum regulatory ambition (though the latter is not considered practical or evidence-based). |
| | Do nothing | Yes (Baseline) | |
| | AWC-aligned reform | Yes (Preferred) | |
| Solution – Part II | Public awareness | No | None met SMART objectives or CSFs. Included as comparators to reflect non-regulatory options, but all would fail to deliver intended impact. |
| | Retailer campaign | No | |
| | Assurance scheme | No | |
| | Update code only | Comparator only | |
| Implementation | 2026 (Do Maximum) | No | 2028 balances achievability and ambition. 2026 is too soon for the sector to adapt; 2032 delays benefit and weakens strategic fit. |
| | 2028 (Preferred) | Yes (Preferred) | |
| | 2032 (Do Minimum) | No | |

6. Description of Shortlisted Policy Options Carried Forward

Summary of Shortlisting Appraisal

In line with Options Assessment guidance, Defra developed a shortlist of viable options capable of delivering the policy objectives and meeting the four Critical Success Factors (CSFs): (1) Strategic fit and business need; (2) Value for money; (3) Achievability; and (4) Affordability. These were developed in line with the Green Book and stakeholder input and are designed to ensure any intervention delivers welfare improvements while being practical for the sector.

A structured, workshop-based appraisal was used to test longlist options against SMART objectives and CSFs. Options that failed to meet these criteria were ruled out with detailed reasoning and analysis as set out in Section 5. Further viable options may be identified through consultation.

Options Shortlisted:

- **Option 0 – Do nothing (Baseline):** Under this option, no changes are made to existing legislation. Castration and tail docking would continue using current methods, primarily rubber rings without pain relief. This option does not meet the key policy objectives to improve lamb welfare. However, it provides a necessary comparator for assessing regulatory impact.
- **Option 3 – AWC-Aligned Regulatory Reform (Preferred option):** Introduces updated regulation aligned with Animal Welfare Committee (AWC) recommendations. Key measures include increasing the accessibility of new methods that have been shown to be better for welfare than traditional methods, requiring the use of pain relief for methods that are known to cause significant pain, and setting restrictions on who can carry out each method, how and when. It applies to all holdings from 2028 and ensures consistency across UK administrations. While it imposes a higher cost than the baseline, it delivers significantly improved welfare outcomes and meets all policy objectives and CSFs.

SaMBA and medium-sized business impact

The preferred option primarily affects small and micro businesses, which make up the entire domestic lamb sector. As a result, the full Net Present Cost to business is borne by these holdings. Medium-sized businesses (50–499 employees) are not impacted, as they are not present in the target population.

SaMBA and medium-sized business mitigations

No specific exemptions are proposed for small or micro businesses, as animal welfare outcomes are size-neutral. However, proportionality has been built into the preferred option by:

- Allowing producers flexibility in how they comply (e.g. through choice of method)
- Designing requirements that are achievable within normal operations
- Allowing a reasonable implementation timeline (from 2028) to spread transition costs

These design features aim to reduce disproportionate impacts on smaller farms while still delivering improved animal welfare.

7. Regulatory Scorecard for Preferred Option

Green – positive impact, **Red** – negative impact, **Amber** – neutral, negligible, or no impact, **Blue** – uncertain impact. This assessment draws on definitions provided in Annex 4: Technical Note of the *Better Regulation Framework Guidance* (Department for Business & Trade, 2023).

Part A: Overall and stakeholder impacts

| (1) Overall impacts on total welfare | | Directional rating |
|---|--|---|
| Description of overall expected impact | The preferred option increases the accessibility of new methods that have been shown to be less harmful to welfare than traditional methods, requires the use of pain relief for methods known to cause significant pain, and sets restrictions on who can perform each method, how, and when. This substantially improves welfare outcomes for millions of lambs annually by reducing pain where castration and tail docking are carried out. These welfare improvements have now been monetised, based on public willingness to pay for improved farm animal welfare, as estimated in a 2025 University of Reading study. The central estimate suggests a total discounted household benefit of approximately £2.4 billion over 10 years, reflecting significant non-market gains in animal welfare and public confidence. These benefits also support the government's ambition to uphold world-leading animal welfare standards. | Positive Based on all impacts (incl monetised) |
| Monetised impacts | Total £1.6bn NPSV Household welfare benefit: £1.7.bn Business compliance cost (NPV): -£55.9m | Positive Based on likely £NPSV |
| Non-monetised impacts | Improved reputational value for UK farming; increased public trust in lamb products; potential long-term consumer preference benefits. | Positive |
| Any significant or adverse distributional impacts? | Yes Impacts are expected to be proportionate across regions. All businesses in scope are small/micro and will be affected, but larger holdings will face higher upfront costs. Policy flexibility allows low-cost compliance routes for smaller holdings. | Neutral |

(2) Expected impacts on businesses

| | | |
|---|---|--------------------------------------|
| Description of overall business impact | Overall, businesses face additional compliance costs in the short term due to equipment and training investments. However, the preferred option allows flexibility in methods and does not prohibit practices outright. Costs are proportionate to farm size and largely manageable, especially for small holdings using rubber rings with pain relief. | Neutral |
| Monetised impacts | Business NPV: £55.9 million (10-year, discounted) Approx net financial cost to business EANDCB: £6.5 million per year of which admin costs £1.6 million (familiarisation cost) | Based on likely business £NPV |
| Non-monetised impacts | Potential long-term sustainability benefits from adopting new tools; possible indirect gains to UK suppliers of equipment and analgesics. | Positive |
| Any significant or adverse distributional impacts? | No Impacts may be greater for larger commercial holdings using extensive practices or with high numbers of procedures. No evidence of disproportionate burden on specific regions or business sectors. | Neutral |

(3) Expected impacts on households

| | | |
|--|---|-----------------|
| Description of overall household impact | No direct monetary impact on households is expected. The regulation does not impose any financial or time burden on consumers. Indirect effects on lamb prices are expected to be negligible due to the small scale of cost increases relative to the overall size of the market. | Positive |
| Monetised impacts | Household NPV £1.7bn (over 10-years discounted total, based on University of Reading research on willingness to pay for improved lamb welfare). | Positive |
| Non-monetised impacts | Indirect impacts via food prices are minimal due to the small increase in production costs. The regulation may contribute to improved consumer confidence in British lamb production by aligning welfare standards with public expectations. While not directly quantifiable, this could support more ethical consumer choices and strengthen the UK's position in domestic and international markets. | Neutral |

| | | |
|---|--|----------------|
| Any significant or adverse distributional impacts? | <p>No</p> <p>There are no disproportionate impacts expected across income groups or regions. While lower-income households generally allocate a larger share of their budget to food, the scale of any potential change is too minor to result in meaningful differences. Due to a negligible expected impact on lamb prices, no household sub-groups are expected to face additional burdens as a result of the policy.</p> | Neutral |
|---|--|----------------|

Part B: Impacts on wider government priorities

| Category | Description of impact | Directional rating |
|--|--|--------------------|
| Business Environment | The measure introduces additional requirements for lamb producers by requiring the use of pain relief for methods that are known to cause significant pain and setting restrictions on who can carry out each method, how and when. While the regulatory burden is modest, it may marginally reduce ease of doing business for some smaller farms due to increased compliance costs and familiarisation requirements. However, the impact is limited in scope and mitigated by allowing flexible routes to compliance. The measure may also encourage innovation among veterinary suppliers and equipment manufacturers. | Neutral |
| International Considerations | The regulation could support long-term trade by reinforcing the UK's high welfare standards. While there are no EU-wide rules on lamb castration or tail docking, some Member States have introduced restrictions, and EU interest in animal welfare is increasing. Any proposals will need to be assessed for compliance with our international trade obligations. The overall trade impact remains uncertain pending further consultation. | Uncertain |
| Natural Capital and Decarbonisation | The measure is not expected to have a significant direct impact on natural capital or decarbonisation. While castration is associated with longer finishing times and marginally higher emissions, the policy does not actively reduce procedure prevalence and thus does not directly contribute to carbon reduction. Increased productivity and reduced risks to health from pain reduction, as well as potential uptake of biodegradable tools may support minor environmental improvements over time. | Neutral |

8. Monitoring and Evaluation of Preferred Option

At this stage, no statutory review provision is proposed. The policy does not meet the statutory criteria requiring a review clause and including one would be disproportionate given the limited scope, low risk of unintended consequences, and low level of business impact (below the £10 million threshold). This position will be kept under review following consultation, where further views may be gathered on the appropriateness of a review clause.

Nonetheless, a proportionate monitoring and evaluation (M&E) plan will be developed to assess the effectiveness of the policy post-implementation. This will focus on tracking progress against the core policy objective: improving welfare outcomes for lambs during castration and tail docking procedures.

A Theory of Change (ToC) has been developed which describes the key inputs and activities delivered by the intervention, as well as the objectives and outcomes (see Figure 1 on Page 9).

A robust evaluation plan will articulate the intended outcomes of the intervention, and propose how these can be evaluated, including key success measures and data requirements, timeline, available resources, the key challenges of evaluating the programme and how the findings will be used. The evaluation will follow the Green book (HM Treasury, 2022), Magenta book (HM Treasury and Evaluation Task Force, 2020) and Theory of Change Toolkit (Defra, 2022), and will encompass a range of approaches including process evaluation (what can be learned from how the intervention was delivered?), impact evaluation (what difference did the intervention make?), and value-for-money (was this good use of resources?).

Monitoring and evaluation activities will take place at timely intervals, to understand effectiveness and whether improvements can be made to the way the measures are being delivered (e.g. the stakeholder engagement approach).

Social research, including surveys and interviews, could also be conducted to provide insight into experiences with the new policy, challenges faced, and how the policy has impacted on operations. Key stakeholders include sheep farmers, retailers, veterinary organisations and consumers. Social research could answer evaluation questions such as:

- To what extent have different stakeholder groups been impacted in different ways, how and why?
- Were there any unintended consequences of the intervention?
- Do farmers feel able to adapt to the new requirements? What support or guidance do they feel is needed?
- How do consumers perceive the welfare of lambs? Has this been affected by the intervention?
- Have stakeholders incurred any additional costs because of the new requirements?
- How have the business models/logistics of stakeholders (such as farmers and retailers) adapted to the new regulations?

Learning from the monitoring and evaluation activities will feed into the development of the intervention by several routes, which could include presentations and development of future training material, discussions, debate and challenge at senior level.

Stakeholder engagement will continue to play a key role. The consultation will provide further insights into implementation feasibility and monitoring opportunities. The M&E framework will be refined following the consultation to ensure proportionality, practicality, and relevance.

9. Minimising Administrative and Compliance Costs for Preferred Option

The preferred option has been designed to minimise administrative burdens on business and individuals by focusing on proportionate, practical regulation. The policy avoids the introduction of any formal reporting, approval, or registration requirements. Instead, compliance is integrated into routine livestock management practices, supported by clear, updated guidance.

No New Approval or Reporting Requirements

Farmers will not be required to submit forms or apply for approvals. This avoids creating new paperwork or ongoing reporting obligations. The preferred option maintains flexibility and reduces regulatory overhead.

Familiarisation Time and Guidance

The main administrative burden is associated with initial familiarisation. Each affected holding is assumed to require approximately one hour to understand the changes. This estimate is informed by precedent, including the Food Standards Agency's estimate of 30-60 minutes for familiarisation with new raw milk labelling rules. Familiarisation will be further supported through:

- An updated statutory Code of Practice for the Welfare of Sheep, clearly outlining permitted methods and requirements.
- Sector-wide communications from government and industry bodies, which could include webinars, factsheets, and veterinary advice.
- Engagement with assurance schemes and supply chain actors to ensure clarity and alignment with on-farm practices.

This option focuses on practical, physical requirements (e.g. how and when each method can be used by whom) rather than paperwork, making it easier for producers to implement changes during existing handling and management routines.

No Ongoing Administrative Requirements

There are no anticipated recurring administrative burdens. Once producers have adopted the appropriate tools and pain relief methods, compliance becomes a matter of following standardised procedures, not record-keeping or form submission.

Behavioural Compliance Model

The approach relies on a behavioural compliance model, where regulation is enforced through clear, understandable rules and reinforced by practical guidance and sector norms. This model is widely used in farm welfare regulation and is effective in encouraging uptake without increasing formal burdens.

Proportionality and Support

The policy has been developed with small and medium-sized businesses in mind. The absence of formal registration, reporting, or external verification processes helps keep compliance costs low across all holding sizes.

In summary, the proposed regulatory changes ensure that administrative burdens remain minimal. This approach balances effective regulation with ease of implementation, supporting compliance without creating unnecessary bureaucracy.

10. Annex A: Summary: Analysis and Evidence

Price base year: 2025

PV base year: 2025

| | Option 0 – Do Nothing (baseline) | Option 3 – AWC-Aligned Regulatory Reform (preferred) |
|---|--|--|
| Net present social value | <p>£0</p> <p>This option reflects the status quo, with no changes to legislation. Total estimated annual cost to business from existing castration and tail docking procedures is £2.7 million, covering labour and equipment costs. No monetised benefits or regulatory changes are assumed.</p> | <p>£1.6 billion</p> <p>Total household welfare benefit is estimated at £1.7 billion (NPV over 10 years), based on public willingness to pay for pain relief during castration and tail docking (University of Reading study). Total business costs are £55.9 million (NPV), including: £1.5m familiarisation, £4.6m equipment, £49.8m ongoing labour and material costs.</p> <p>Net present social value (benefit minus cost) = £1.62. billion.</p> |
| Public sector financial costs | <p>£0</p> <p>No changes to monitoring, enforcement, or guidance are required under this option, so no additional public sector financial costs are incurred.</p> | <p>£0</p> <p>No direct public sector costs are expected. Code of Practice updates will be managed within existing budgets.</p> |
| Significant un-quantified benefits and costs | <p>None</p> <p>No significant unquantified costs or benefits are expected under the status quo. Welfare concerns</p> | <p>Unquantified benefits include:</p> <ul style="list-style-type: none"> - Increased public and retailer confidence - Reputational and trade benefits for UK lamb sector |

| | | |
|--|--|---|
| | remain unaddressed, and reputational risks persist. | Unquantified costs include: - Producer adaptation burden - These are expected to be limited and manageable. |
| Key risks | Continued use of methods which cause significant pain without pain relief may undermine UK welfare standards, erode public trust, and threaten access to high-welfare trade markets. No optimism bias applied. | Risk that some holdings may underuse pain relief or adopt non-modelled practices. Farmer adaptation and retailer behaviour remain uncertain. No optimism bias applied; costs conservatively estimated to reflect worst-case assumptions. |
| Results of sensitivity analysis | Not applicable. No policy intervention is modelled, so no sensitivity testing is required. | Sensitivity testing models a worst-case scenario with: - 50% increase in material costs - Higher wage and procedure times In this case, business NPV worsens to –£57.8m and EANDCB rises to £6.7m, but still remains below the £10m/year EANDCB threshold, confirming suitability for a De Minimis Assessment. |

Evidence Base

Problem under consideration, with business as usual, and rationale for intervention

Across the UK, castration and tail docking are routinely carried out on lambs. Castration is the removal or destruction of the testes, or prevention by other means of their normal functioning, to render a ram lamb infertile. Tail docking is the partial removal of a sheep's tail. Castration and tail docking procedures are typically carried out using the 'rubber ring' method without the use of anaesthesia or analgesia. Rubber ring castration and tail docking cause significant acute and chronic pain. These welfare issues could be mitigated with the widespread use of alternative methods or the administration of effective pain relief.

Additionally, the legislation regarding castration and tail docking is complex, difficult to understand and inconsistent across administrations. This creates an uneven playing field for lamb holdings in different administrations, despite the integrated supply chain.

There is a risk to the UK's reputation as a leader in animal welfare if routine castration and tail docking procedures continue without scrutiny and enhanced welfare standards. Several EU countries have banned or implemented stricter regulations on these practices, for instance, in Italy, Belgium, the Netherlands and Germany.

The Animal Welfare Committee (AWC) Opinion on the Implications of Castration and Tail Docking for the Welfare of Lambs¹⁰ was published in 2023 in Wales and Scotland, and in 2024 in England. Anecdotal evidence gathered throughout this review confirmed that rubber ring castration and tail docking are routinely carried out without anaesthesia or analgesia across Great Britain. There is extensive scientific evidence that these procedures cause significant acute and chronic pain, and that this can be mitigated by short-acting pain relief, such as local anaesthetics, and longer-acting pain relief, such as non-steroidal anti-inflammatory drugs (NSAIDs). Research also shows that alternative methods can be less harmful to welfare than traditional techniques¹¹.

There is strong public support for improved farm animal welfare standards, on painful procedures such as castration and tail docking. While public awareness of these specific practices is limited, acceptance of such mutilations is generally low and depends on perceptions of pain and necessity¹².

The policy aims to improve farm animal welfare outcomes by reducing the pain and distress caused by lamb castration and tail docking, where these procedures continue to take place. It focuses on increasing the accessibility of new methods that have been shown to be less harmful to welfare than traditional methods, requiring the use of pain relief for methods that are known to cause significant pain, and setting restrictions on who can carry out each

¹⁰ [Animal Welfare Committee \(AWC\) Opinion on the Implications of Castration and Tail Docking for the Welfare of Lambs](#)

¹¹ [Assessment of the welfare implications of alternative devices for sheep castration and tail docking - AW0303](#)

¹² Connor, M., & Cowan, S.L. (2020). Consumer evaluation of farm animal mutilations. *Research in Veterinary Science*, 128, 35–42.

method, how and when. The approach is designed to be flexible and practical, so that lamb welfare can be improved across a range of farm types without placing disproportionate pressure on the viability of the domestic sector.

The following objectives have been developed using the SMART framework and are aligned with Defra's wider goals and the UK Government's commitment to raising animal welfare standards.

| No. | Policy Objective |
|------------|--|
| 1 | Improve the welfare of lambs in the UK by reducing pain and distress associated with castration and tail docking, through the use of methods that are less harmful to welfare and effective pain relief. |
| 2 | Minimise the impact on businesses during adaptation by ensuring changes are practical, proportionate, and allow for a transition period. Maintain viability across all holding sizes. |

Lamb welfare in the UK is likely to remain compromised if the current practice of rubber ring use without pain relief continues without change. The legislation allowing the castration and tail docking of sheep differs in England, Wales, Scotland and Northern Ireland. In the absence of updated requirements that reflect current welfare science and technological advancements, there is no clear driver for farmers to adopt less painful methods or use effective pain relief. This regulatory gap risks allowing outdated practices to persist across the sector.

Many farmers still rely on traditional methods, often due to uncertainty or a lack of clear incentives to switch to more humane alternatives. This risk-averse behaviour allows poor welfare practices to persist, even when better options are available.

Without further intervention, progress towards improved welfare standards may slow. Allowing current practice to continue without updated welfare standards could undermine both the UK's position as a world leader on animal welfare and public confidence in the sector.

The UK Government, the Welsh Government, the Scottish Government, and the Northern Ireland Executive are committed to the welfare of animals at all stages of life. The government intention is to reduce the prevalence of mutilations and safeguard animal welfare where these procedures are properly justified.

The most recent report from the Animal Welfare Committee (AWC) builds on earlier positions set out by the Farm Animal Welfare Council in 1994 and 2008. Each of these reports recommended that castration and tail docking should not be carried out routinely. Despite long-standing awareness within the sector of the negative welfare impacts of lamb castration and tail docking, there is limited evidence of voluntary behavioural change, including uptake of methods that are less harmful to welfare, among producers. This points to the presence of a market failure, where the private incentives facing producers do not align

with the socially optimal outcome of higher animal welfare.

These reports also advocate for the use of methods that cause the least pain and distress. Despite this long-standing guidance, there has been limited voluntary uptake of alternative methods across the sector. Existing legal requirements and Codes of Practice set only minimum standards and there has been little incentive to drive producers towards alternatives beyond these legal baselines.

Government intervention is therefore warranted to address this misalignment. While existing regulations set out the conditions under which procedures are permitted to be carried out, these provisions have not kept pace with advancements in welfare science and technological advancements. In addition, there is a persistent information asymmetry between producers and consumers. Many consumers express a clear preference for high-welfare products, yet they lack sufficient information at the point of purchase to distinguish between high- and low-welfare lamb. As a result, consumer preferences are not accurately reflected in the market, and producers face limited demand-side pressure to adopt less painful practices. Research shows that acceptance of farm animal mutilations depends on perceived pain and necessity, with overall public knowledge being low¹³. However, consumers consistently rate animal welfare as a top purchasing priority¹⁴, indicating support for higher welfare standards even if awareness of specific procedures is limited.

This represents a classic negative externality, where the welfare costs to the animal, and therefore society, are not factored into the market price of lamb. Without intervention, these external costs remain uncorrected, and suboptimal welfare outcomes persist. Policy action to reduce the pain associated with these procedures can help internalise these externalities and better align private decision-making with broader societal welfare objectives.

¹³ Connor, M., & Cowan, S.L. (2020). Consumer evaluation of farm animal mutilations. *Research in Veterinary Science*, 128, 35–42.

¹⁴ Ammann, J., et al. (2024). Consumers across five European countries prioritise animal welfare above environmental sustainability when buying meat and dairy products. *Food Quality and Preference*, 117, 105179.

Policy Objective

The intended outcomes of the intervention are to reduce the pain and suffering caused by lamb castration and tail docking by increasing the accessibility of new methods that have been shown to be less harmful to welfare than traditional methods, requiring the use of pain relief for methods that are known to cause significant pain, and setting restrictions on who can carry out each method, how and when. This will also improve consistency in welfare standards across the UK and support the farming sector in adopting higher welfare practices without harming business viability.

The intended outcomes can be described using the SMART framework:

Specific: Each objective focuses on a clear outcome, such as reducing pain or supporting farmers.

Measurable: Progress can be tracked by monitoring feedback from producers and stakeholders.

Achievable: The policy focuses on practical changes that can be delivered within existing farming systems, rather than banning procedures altogether.

Realistic: The approach takes account of different farm sizes and practices and aims to reduce impact on business operations.

Time-limited: The changes are linked to a set implementation year (2028), with plans for a review within five years to assess progress.

At this stage, no statutory review provision is proposed. The policy does not meet the statutory criteria requiring a review clause and including one would be disproportionate given the limited scope, low risk of unintended consequences, and low level of business impact (below the £10 million threshold). This position will be kept under review following consultation, where further views may be gathered on the appropriateness of a review clause.

Nonetheless, a proportionate monitoring and evaluation (M&E) plan will be developed to assess the effectiveness of the policy post-implementation. This will focus on tracking progress against the core policy objective: improving welfare outcomes for lambs during castration and tail docking procedures.

A Theory of Change (ToC) has been developed which describes the key inputs and activities delivered by the intervention, as well as the objectives and outcomes (see Figure 1 on Page 9).

A robust evaluation plan will articulate the intended outcomes of the intervention, and propose how these can be evaluated, including key success measures and data requirements, timeline, available resources, the key challenges of evaluating the programme and how the findings will be used. The evaluation will follow the Green book (HM Treasury, 2022), Magenta book (HM treasury and Evaluation Task Force, 2020) and Theory of Change Toolkit (Defra, 2022), and will encompass a range of approaches including process evaluation (what can be learned from how the intervention was delivered?), impact evaluation (what difference did the intervention make?), and value-for-money (was this good use of resources?).

Monitoring and evaluation activities will take place at timely intervals to understand effectiveness and whether improvements can be made to the way the measures are being delivered (e.g. the stakeholder engagement approach).

Social research, including surveys and interviews, could also be conducted to provide insight into experiences with the new policy, challenges faced, and how the policy has impacted on operations. Key stakeholders include sheep farmers, retailers, veterinary organisations and consumers. Social research could answer evaluation questions such as:

- To what extent have different stakeholder groups been impacted in different ways, how and why?
- Were there any unintended consequences of the intervention?
- Do farmers feel able to adapt to the new requirements? What support or guidance do they feel is needed?
- How do consumers perceive the welfare of lambs? Has this been affected by the intervention?
- Have stakeholders incurred any additional costs because of the new requirements?
- How have the business models/logistics of stakeholders (such as farmers and retailers) adapted to the new regulations?

Learning from the monitoring and evaluation activities will feed into the development of the intervention by several routes, which could include presentations and development of future training material, discussions, debate and challenge at senior level.

Stakeholder engagement will continue to play a key role. The consultation will provide further insights into implementation feasibility and monitoring opportunities. The M&E framework will be refined following the consultation to ensure proportionality, practicality, and relevance.

Description of options considered

Defra undertook a detailed longlisting exercise in line with Options Assessment guidance to demonstrate rigour and support transparency. This approach allows for the identification of additional viable options through consultation.

A wide range of regulatory and non-regulatory options were considered across three key dimensions:

- **Scope** – who the regulation applies to
- **Solution** – the type of intervention
- **Implementation Timing** – when the changes take effect

All options were tested against SMART objectives and Critical Success Factors (CSFs) during a policy workshop. Each was supported by a high-level SWOT analysis. Options failing to meet core policy aims or CSFs were ruled out.

Options Considered

Scope Options

- **All Holdings:** Apply changes to all lamb holdings across the UK.
- **Holdings with >50 Sheep:** Apply changes only to medium and large holdings; smaller producers excluded.
- **Commercial Holdings Only:** Target commercial-scale operations, responsible for the majority of procedures.

Solution Options

- **Do Nothing:** Maintain existing regulations.
- **Public Awareness Campaign:** To encourage consumer-driven change.
- **Retailer Campaign:** To influence procurement policies.
- **Assurance Scheme Campaign:** To raise assurance scheme standards
- **Update Code Only:** Revise guidance with no legislative change.
- **AWC-Aligned Regulatory Reform:** Allows both procedures under restrictions that safeguard welfare.
- **Ban Castration and Tail Docking:** Full prohibition of both procedures.

Implementation Timing Options

- **2026:** Most ambitious implementation date.
- **2028:** Balanced implementation date.
- **2032:** Most achievable implementation date.

Summary and Preferred Option with Description of Implementation Plan

Sensitivity

Sensitivity analysis on cost estimates

To test the robustness of our central cost estimates, we conducted a sensitivity analysis based on a worst-case scenario. This scenario models a combination of pessimistic assumptions relating to adoption rates, input prices, labour costs, and task duration. Specifically, we assume:

- 50% increase in the cost of needles and syringes
- An additional £1/hour added to the hourly wage rate
- The time taken to round up lambs and perform each procedure (e.g. ring with pain relief, clip-fitter) is assumed to rise 50%, increasing overall labour costs.

Under these assumptions, the discounted cost to business over the 10-year appraisal period rises to £57.8 million, or £6.7 million (EANDCB).

Even under these extreme assumptions, the estimated cost to business remains below the £10 million per year threshold, confirming that the use of a De Minimis Assessment (DMA) remains appropriate.

Sensitivity analysis on household benefits – household WTP switching values:

We recognise that the benefits associated with this policy are high and have therefore tested how much lower willingness to pay values from the University of Reading research¹⁵ on valuing welfare benefits could be before there is no net benefit to society from the policy i.e. the costs are equal to the benefits. In the central analysis, the benefit cost ratio is 30 and willingness to pay for one point of welfare improvement for lambs is £3.75¹⁶. The WTP would need to be 97% lower at £0.13 for the BCR to be 1. Our assessment is that it is highly unlikely that the WTP will be 97% lower than the research.

| Household WTP Switching Values | |
|--------------------------------|------------------------------|
| For BCR = 1, and NPV = 0 | WTP = £0.125 97% decrease |

¹⁵ [Provision of a method for the economic valuation of animal welfare benefits suitable for use in policy appraisal - Main Report January 2025.pdf](#)

¹⁶ Average WTP increase for one point of welfare improvement for the move from castration to castration with pain relief.

Costs and Benefits to Business Calculations

Monetised Costs

- £4.6m – One-off equipment costs (direct): Clip tools required by holdings transitioning from rubber rings. Assumes £200 per tool and no tool sharing.
- £1.5m – Familiarisation costs (direct): Based on one hour per affected holding at the National Living Wage (plus 22% uplift), using Defra benchmarks.
- £7.5m/year – Ongoing labour and material costs (direct): Additional time and supplies (pain relief, clips) needed to comply with new procedural standards. Present value across period ~£55.9m.

Unmonetised Costs

- Producer adaptation burden (indirect): Transitioning to unfamiliar methods or revising internal practices.

Monetised Benefits

- £1.7 billion (10-year total, discounted) household welfare benefit: Estimated using a willingness to pay (WTP) value of £11.25 per household per year for lamb castration with pain relief, based on University of Reading research¹⁷. Tail docking is conservatively assumed to deliver 50% of the castration benefit.
- £204.5 million/year average annual d benefit: Reflects the societal value of improved lamb welfare through pain mitigation.

Unmonetised Benefits

- Animal welfare improvements (direct) through pain mitigation and the use of less harmful methods.
- Market and consumer confidence (indirect): Higher standards may support UK lamb reputation and future trade access.
- Producer flexibility maintained (direct): No ban imposed; producers retain choice in methods, timing, and whether to conduct procedures at all.

¹⁷ The policy of moving from current castration practices to castration with pain relief was scored as improving the welfare of sheep from an assessed welfare score of 53 to a score of 56. The benefit of this policy in terms of willingness to pay is the cumulative wtp valuation for moving from 53 to 56 (£3.82 + £3.75 + £3.68 = £11.25 per household per year).

Impact on Small and Micro Businesses

- The sheep farming sector is dominated by small and micro businesses. Across the UK, there are approximately 69,000 sheep holdings, of which around 53,000 are small and 15,000 are large holdings. Most qualify as SMBs under standard employment and turnover thresholds. The policy is therefore highly relevant to small and micro businesses.
- The regulatory change does not introduce new reporting, approval, or registration obligations. However, it does place ongoing operational requirements on affected holdings, such as the use of pain relief for specific methods.
- Cost modelling suggests the Equivalent Annual Net Direct Cost to Business (EANDCB) is below £10 million. These costs are proportionate and mitigated by the policy design, which allows farmers flexibility and aligns with existing practices for some holdings. Familiarisation and training costs are expected to be one-off, while clip or pain relief purchases may result in low ongoing costs.
- Benefits to SMBs may arise from improved market confidence, reduced risk of reputational harm, and enhanced commercial appeal as they are placed on the same footing as EU member states with the highest welfare standards.

Costs and Benefits to Households' Calculations

| | |
|---|--|
| Description of overall household impact | No direct monetary impact on households is expected. The regulation does not impose any financial or time burden on consumers. Indirect effects on lamb prices are expected to be negligible due to the small scale of cost increases relative to the overall size of the market. However, households are expected to benefit from improved lamb welfare, which has been monetised using willingness-to-pay (WTP) estimates. |
| Monetised impacts | Based on University of Reading research, the estimated household willingness to pay for improved welfare (i.e., castration with pain relief) is £11.25 per household per year. Applying this to the relevant lamb population and including tail docking (at 50% of the castration benefit), the total discounted household welfare benefit is £1.7 billion over 10 years, or £204 million per year on average. |
| Non-monetised impacts | <p>Indirect impacts via food prices are minimal due to the small increase in production costs.</p> <p>The regulation may contribute to improved consumer confidence in British lamb production by aligning welfare standards with public expectations. While not directly quantifiable, this could support more ethical consumer choices and strengthen the UK's position in domestic and international markets.</p> |
| Any significant or adverse distributional impacts? | There are no disproportionate impacts expected across income groups or regions. While lower-income households generally allocate a larger share of their budget to food, the scale of any potential change is too minor to result in meaningful differences. Due to a negligible expected impact on lamb prices, no household sub-groups are expected to face additional burdens as a result of the policy. |

Business Environment

- The entirety of the domestic lamb farming sector consists of small and micro sized businesses. This means the cost impact to business outlined in this De Minimis Assessment are relevant to businesses of this size. This equates to £55.9 m over the assessment period.
- In the long-list appraisal, Defra colleagues explored options to mitigate the potential impacts on the smallest lamb holdings. These alternate options were disregarded, as welfare outcomes are identical regardless of farm size.
- When assessing the impact on the smallest lamb holdings, it is assumed that farmers will adopt the most practical and cost-effective approaches available under the new regulations. Where these procedures continue, small and micro businesses are expected to make low-cost adjustments by administering pain relief alongside rubber ring castration and tail docking.

Trade implications

- Some EU member states have banned or restricted castration and tail docking procedures to safeguard welfare, for example in Italy and Belgium. In others, such as the Netherlands and Germany, the use of rubber rings is specifically legislated against. The EU remains the UK's largest and only significant export destination for lamb and transitioning away from more painful procedures could enhance the commercial appeal of UK exports, placing them on the same footing as member states with the highest welfare standards.
- This may result in increased divergence between domestic standards and international standards of significant global lamb exporters that serve the domestic markets. Australia and New Zealand are the largest global exporters of lamb, and there are already differences in the regulations with regards to age restrictions, methods and pain relief, though New Zealand is looking to move away from castration without pain relief. We will always consider whether overseas produce has an unfair advantage and any impact that may have.

Environment: Natural capital impact and decarbonisation

- Castration in UK lamb production contributes to environmental inefficiencies, primarily due to longer finishing times and increased feed intake. Castrated lambs require an estimated 13 additional days to reach target slaughter weight and consume approximately 4.8 kg more feed per lamb than entire rams. With each kilogram of feed producing around 0.50 kg of CO₂e, this results in approximately 2.4 kg of additional CO₂e per castrated lamb. While this impact is individually modest, the cumulative effect across the national flock contributes to higher greenhouse gas emissions and increased production costs.
- The preferred option does not mandate a reduction in the prevalence of castration or tail docking procedures. However, by increasing the regulatory requirements this could lead to gradual shifts in practice over time, including a potential decline in procedure rates as producers weigh costs, practicalities, and welfare considerations. Pain reduction itself can also have a positive environmental impact through increased productivity and reduced risks to health.
- Additionally, castration and tail docking generate plastic waste, particularly from rubber rings, which weigh approximately 2 grams each. Based on current usage, this contributes an estimated 38.7 tonnes of plastic waste annually, with a lifecycle emissions footprint of around 231.9 tonnes of CO₂e. The increased use of syringes and needles to administer anaesthesia and analgesia under the preferred option further adds to the environmental burden from single-use plastics.

- While alternatives include plastic clips, biodegradable options are available and may help reduce long-term environmental impacts if adoption becomes widespread. However, due to the relatively marginal scale of these emissions within the wider agricultural sector, monetised environmental impacts are not included in the central cost-benefit analysis.

Other wider impacts

- Environment: No significant environmental impacts are anticipated.
- Society / Regional Distribution: Regional distribution impacts are expected to be minimal.
- Income and Wealth Distribution: Not expected to affect income distribution materially.
- Protected Characteristics: No differential impacts identified.
- Trade and Investment: The EU remains the UK's largest and only significant export destination for lamb and transitioning away from more painful procedures could increase the commercial appeal of UK exports, placing them on the same footing as member states with the highest welfare standards. This may result in increased divergence between domestic standards and international standards of significant global lamb exporters that serve the domestic markets. Australia and New Zealand are the largest global exporters of lamb, and there are already differences in the regulations with regards to age restrictions, methods and pain relief, though New Zealand is looking to move away from castration without pain relief. We will always consider whether overseas produce has an unfair advantage and any impact that may have.
- Justice Impact Tests: Not applicable.
- New Burdens: No unfunded duties are placed on local authorities or regulators.
- Public Sector Equalities Duty: No equality implications identified.
- Rural Proofing: The majority of sheep farms are rural. The policy has been designed to be flexible and proportionate, supporting viability in rural areas.
- Powers of Entry: No new powers of entry or enforcement routes are proposed.

Risks

Implementation challenges may arise due to the large number of lamb holdings spread across rural areas in the UK, particularly where practices vary between regions and production systems. Work will continue during the consultation period to better understand on-farm practices and identify any practical issues that may affect uptake of the proposed changes.

There is no identified risk to the Windsor Framework or Northern Ireland's trading position. The proposed measures are compatible with WF requirements, as they do not create new barriers to trade or regulatory divergence that would affect the movement of lamb products between Northern Ireland, Great Britain, or the EU. Northern Ireland may choose to align with the proposed changes, but this is not required under the WF. Stricter measures applied in some EU member states do not affect imports from other EU member states or from Northern Ireland, so there are no direct trade risks arising from differences in welfare standards.

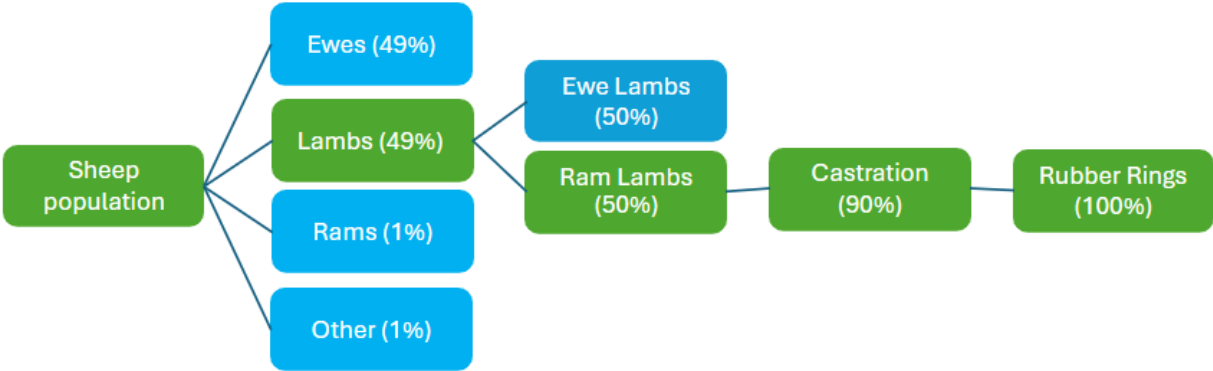
The preferred option introduces regulatory restrictions on how castration and tail docking procedures are carried out, with the aim of minimising pain caused to lambs. While these procedures are not banned, more harmful methods, such as rubber ring castration without pain relief, will no longer be permitted. Farmers retain flexibility in how they comply and are expected to adopt the most viable options based on their business needs. Clip-based methods are assumed to be a practical alternative for large holdings due to their low labour requirements and lack of need for additional pain relief. For smaller holdings, the use of rubber rings with appropriate pain relief is considered the most cost-effective route. A key assumption underpinning this assessment is that producers will adjust their management practices in line with the new requirements. There is another risk that some producers may prefer less common alternatives, but these are unlikely to be widely adopted given cost and practicality considerations.

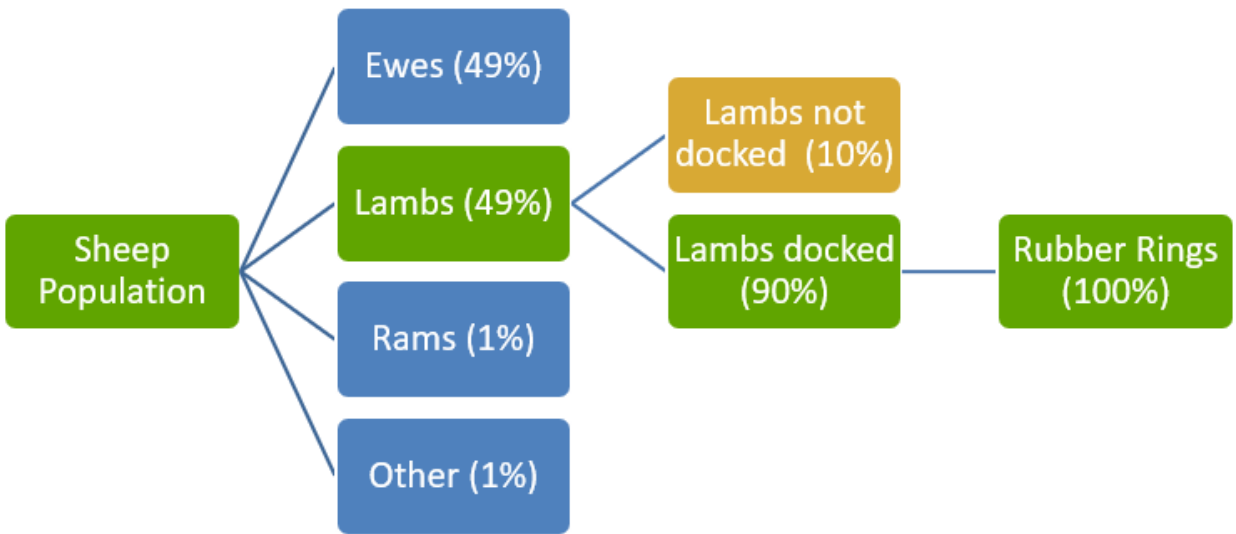
Modelled impacts do not include regional analysis. While the effects of the policy are likely to be concentrated in rural areas across the UK, a detailed breakdown by region is not included due to data limitations. Regional-level data on sheep and lamb holdings is more readily available for England than for Scotland, Wales, and Northern Ireland, making any UK-wide regional comparison incomplete.

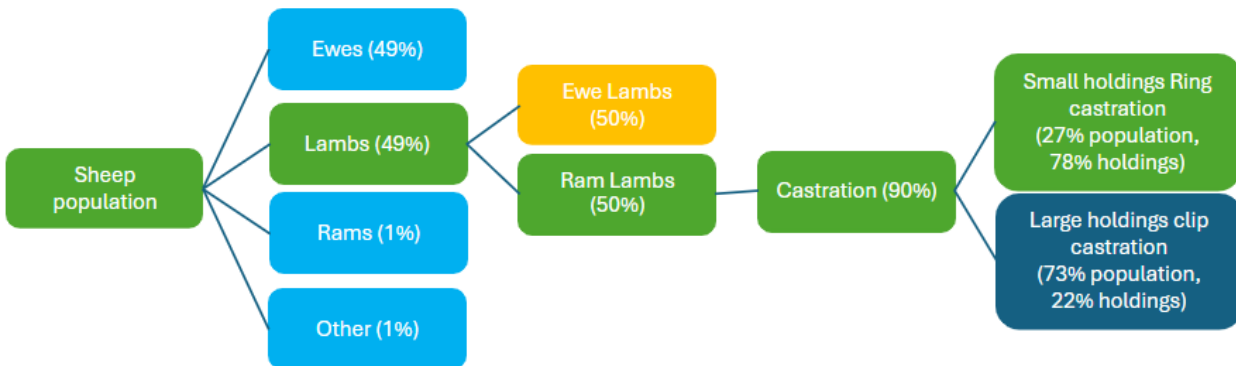
Assumptions

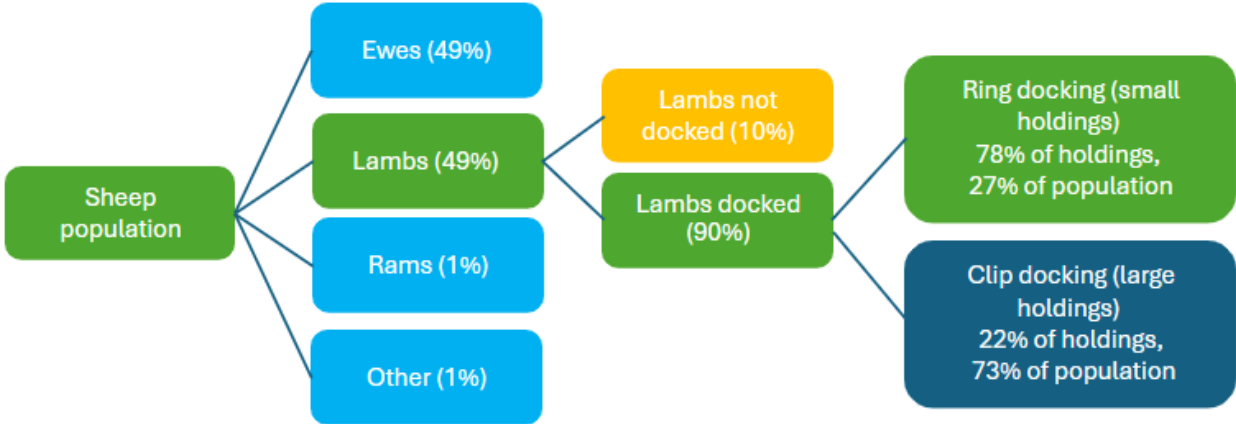
Data and Assumptions – Baseline (Do Nothing – Option 0)

| Description | Assumption | | | Source |
|------------------------------|------------------|----------|-----------------|---|
| Holdings and Lamb Population | Country | Holdings | Lamb Population | Lamb population and sheep holding estimates are based on official data from agricultural statistics in Great Britain and Northern Ireland. Approximately 66,799 holdings across the UK are estimated to keep sheep or lambs, with a total lamb population of around 16.2 million. The figures for England, Scotland, and Wales are drawn from published agricultural census data. For Northern Ireland, the number of holdings is estimated indirectly using DAERA sheep population data and assuming a similar average holding size to the rest of Great Britain due to the lack of disaggregated holding-level data. These estimates inform cost modelling across regions and support assessment of the policy's impact on producers of varying scale and management practices. |
| | Total | 66,799 | 16,169,739 | |
| | England | 38,931 | 7,987,032 | |
| | Scotland | 14,741 | 4,180,606 | |
| | Wales | 13,127 | 4,002,101 | |
| | Northern Ireland | 4,017* | 972,273 | |
| | | | | |

| | | |
|---|--|---|
| Equipment cost for rubber ring is low | Rubber rings are priced at approximately £0.03 each, representing a minimal variable cost per procedure. | Market prices, industry feedback |
| Clip castration is higher-cost alternative | Clip-based castration methods cost approximately £0.40 per clip, considered a worst-case unit cost. However, costs may fall as uptake increases due to economies of scale. | Industry estimates, assumed economies of scale |
| Labour costs averaged across holdings | Despite variability in labour input between farm types, average labour cost estimates are used across all holdings for national modelling. | Internal modelling assumptions |
| (baseline): 100% of ram lambs are castrated using rubber rings. |  <pre> graph LR A[Sheep population] --> B[Ewes 49%] A --> C[Lambs 49%] A --> D[Rams 1%] A --> E[Other 1%] C --> F[Ewe Lambs 50%] C --> G[Ram Lambs 50%] G --> H[Castration 90%] H --> I[Rubber Rings 100%] </pre> | Defra policy expertise; Animal Welfare Committee (AWC); Flowchart shows assumptions |

| | | |
|---|---|--|
| | <p>It is assumed that 49% of the sheep population are lambs, with a 50:50 split between ewe and ram lambs. Of the ram lambs, 100% undergo castration using rubber rings, which is considered the dominant method in current practice. This assumption simplifies modelling given limited national prevalence data and is based on internal Defra expertise and supported by the AWC report.</p> | |
| <p>Tail docking outcomes (baseline): 90% of lambs are docked using rubber rings; 10% are not docked</p> |  <pre> graph LR A[Sheep Population] --> B[Ewes 49%] A --> C[Lambs 49%] A --> D[Rams 1%] A --> E[Other 1%] C --> F[Lambs not docked 10%] C --> G[Lambs docked 90%] G --> H[Rubber Rings 100%] </pre> | <p>Defra policy expertise; Animal Welfare Committee (AWC); Flowchart shows assumptions</p> |

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|--|---|------------------------|
| | It is assumed that 49% of the sheep population are lambs, and that 90% of these lambs undergo tail docking, all using rubber rings. The remaining 10% are not docked. This assumption simplifies modelling in the absence of detailed prevalence data and reflects internal understanding of current on-farm practices. | |
| Holding size determines post-implementation method | Holdings with fewer than 250 lambs are assumed to continue using rubber rings with pain relief. Large holdings (>250 lambs) are expected to adopt clip-based methods due to better cost efficiency over time. | Defra policy expertise |
| 22% of holdings use clip-based methods for castration (castration outcome) | <p>Post-implementation, it is assumed that large holdings move to clip castration.</p>  <pre> graph LR A[Sheep population] --> B[Ewes 49%] A --> C[Lambs 49%] A --> D[Rams 1%] A --> E[Other 1%] C --> F[Ewe Lambs 50%] C --> G[Ram Lambs 50%] G --> H[Castration 90%] H --> I[Small holdings Ring castration 27% population, 78% holdings] H --> J[Large holdings clip castration 73% population, 22% holdings] </pre> <p>The flowchart illustrates the breakdown of the sheep population and the resulting castration methods. It starts with the 'Sheep population' (green box), which branches into 'Ewes (49%)', 'Lambs (49%)', 'Rams (1%)', and 'Other (1%)' (all in blue boxes). The 'Lambs (49%)' category further branches into 'Ewe Lambs (50%)' (yellow box) and 'Ram Lambs (50%)' (green box). The 'Ram Lambs (50%)' category leads to 'Castration (90%)' (green box). Finally, 'Castration (90%)' branches into 'Small holdings Ring castration (27% population, 78% holdings)' (green box) and 'Large holdings clip castration (73% population, 22% holdings)' (dark blue box).</p> | Defra assumptions |

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| <p>22% of holdings use clip docking; 78% continue with rubber rings and pain relief (tail docking outcome)</p> | <p>For tail docking, holdings are split: 22% adopt clip docking, 78% use rubber rings with pain relief. This aligns with the split by holding size.</p>  <pre> graph LR A[Sheep population] --> B[Ewes 49%] A --> C[Lambs 49%] A --> D[Rams 1%] A --> E[Other 1%] C --> F[Lambs not docked 10%] C --> G[Lambs docked 90%] G --> H[Ring docking small holdings 78% of holdings, 27% of population] G --> I[Clip docking large holdings 22% of holdings, 73% of population] </pre> | <p>Based on size-distribution assumptions</p> |
| <p>No change in ewes, rams, or other population breakdown</p> | <p>The assumed baseline population distribution remains constant across options: 49% ewes, 49% lambs, 1% rams, 1% other.</p> | <p>Baseline sheep population structure; Defra agricultural census data</p> |
| <p>Farmer hourly labour cost</p> | <p>Farmworker hourly wage is based on the National Living Wage, with an uplift applied to reflect that the average hourly earnings of farms (derived from an estimated average annual salary of £25,000) falls below the current NLW.</p> | <p>RPC guidance</p> |

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| Castration procedure time | Time to complete a rubber ring castration is assumed to be 10 seconds per lamb. | Anecdotal evidence; Defra expert policy expertise |
| Herding time per lamb by holding size | For small holdings (<250 lambs), herding time per lamb is assumed to be 30 seconds. For large holdings (>250 lambs), 15 seconds per lamb. These times are added to labour cost calculations. | Defra assumption; based on expected differences in flock management by scale |
| Farm labour hourly cost = £14.90 | Labour time costs are calculated using the 2025 National Living Wage, with a 22% uplift applied to account for non-wage labour costs in line with RPC guidance. This uplifted rate is used consistently across all time-related cost estimates. ¹⁸ | National Living Wage (2025); uplift applied per RPC guidance |

¹⁸ The ONS' Annual Survey of Hours and Earnings (ASHE) tables reference wages for farm workers. The latest ASHE data is provisional April 2024 data where average farm workers are paid £11.44 and it is stated that this is in line with the 2024 National Living Wage (NLW). The updated 2025 NLW has been used for this analysis.

Data and Assumptions – Option 3 (Preferred)

| Description | Assumption | Source |
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| Variable equipment cost for rubber ring castration / tail docking with pain relief is low | Rubber rings are priced at approximately £0.03 each, and effective pain relief (anaesthetic and analgesic) costs approximately £0.28 per lamb. Some holdings may already use anaesthesia, so overall estimates may slightly overstate costs. | Market prices, industry feedback, Defra policy expertise |
| Variable equipment costs for clip-based procedures are higher but expected to fall | Clip castration and tail docking methods cost approximately £0.40 per clip. This is treated as a worst-case scenario, with unit costs expected to decline over time as uptake increases and economies of scale are realised. | Industry estimates, assumed economies of scale, Defra policy expertise |
| Labour costs averaged across holdings | Despite variability in labour input between farm types, average labour cost estimates are used across all holdings for national modelling. | Internal modelling assumptions |
| Holding size determines post-implementation method | Holdings with fewer than 250 lambs are assumed to continue using rubber rings with pain relief. Large holdings (>250 lambs) are expected to adopt clip-based methods due to better cost efficiency over time. | Defra policy expertise |

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| Farmer hourly labour cost | Farmworker hourly wage is based on the National Living Wage, with an uplift applied to reflect that the average hourly earnings of farms (derived from an estimated average annual salary of £25,000) falls below the current NLW. | RPC guidance |
| Castration procedure time | Time to complete a rubber ring castration is assumed to be 10 seconds per lamb. | Anecdotal evidence; Defra expert policy |
| Herding time per lamb by holding size | <p>For small holdings (<250 lambs), herding time per lamb is assumed to be 30 seconds. For large holdings (>250 lambs), 15 seconds per lamb. These times are added to labour cost calculations.</p> <p>However, in hill farming systems, lamb gathering may take longer regardless of holding size. These assumptions reflect averages and may understate labour time for some farms.</p> | Defra assumption; based on expected differences in flock management by scale |
| Farm labour hourly cost = £14.90 | Labour time costs are calculated using the 2025 National Living Wage, with a 22% uplift applied to account for non-wage labour costs in line with RPC guidance. This uplifted rate is used consistently across all time-related cost estimates. | National Living Wage (2025); uplift applied per RPC guidance |
| Rubber ring castration with pain relief = 70 sec/lamb | Procedure time includes 10 seconds for castration (baseline) and an additional 60 seconds to administer both local anaesthetic and analgesia. This reflects a conservative (worst-case) estimate to allow sufficient time for effective pain relief. | Defra policy assumption based on existing veterinary guidance and practical feasibility |

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| No adjustment for overlapping time costs where lambs are both castrated and tail docked | Although the Code of Practice recommends performing both procedures during the same handling to reduce stress, limited data on how often this occurs means we conservatively assume no overlap in time costs. This ensures a worst-case scenario is modelled, avoiding underestimation of labour requirements. | Defra policy expertise; Code of Practice |
| Clip castration tool equipment cost applied per procedure without adjustment for shared use | <p>The average cost of a clip tool is £200. While some holdings may use the same tool for both castration and tail docking or across multiple holdings owned by the same business, the model does not adjust for these overlaps to ensure a conservative, worst-case estimate of equipment costs.</p> <p>Less common methods like clamp, surgical or hot iron are excluded due to low use. Numnuts and similar rubber ring methods with pain relief are already included. Immunocastration is not approved for use on sheep in the UK.</p> | Defra policy expertise; market price estimates |
| Familiarisation time per holding | Each lamb holding is assumed to require approximately one hour to familiarise themselves with the new regulations. This is in line with estimates from similar regulatory changes. | Defra policy assumptions; based on Food Standard Agency (FSA) estimate for raw drinking milk labelling regulations (30 – 60 minutes per business) |
| No change in prevalence of procedures | It is assumed that castration and tail docking will continue where necessary. | Defra policy assumption |