Keeping Animals Safe from Disease
A National Farmed Animal Biosecurity Strategy (2021-2024)
Raising the standard of biosecurity on all Irish livestock farms will impact positively on many aspects of Irish agriculture as well as Irish society as a whole.
# Table of Contents:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministerial Foreword</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Executive Summary</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Chapter 1</td>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Chapter 2</td>
<td>A Vision for Farmed Animal Biosecurity in Ireland</td>
<td>7</td>
</tr>
<tr>
<td>Chapter 3</td>
<td>The Consultation</td>
<td>9</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>Realising the Vision through Behaviour Change</td>
<td>13</td>
</tr>
<tr>
<td>Chapter 5</td>
<td>Working in Partnership to Implement the Strategy</td>
<td>19</td>
</tr>
</tbody>
</table>
Foreword by
Minister for Agriculture, Food and the Marine, Charlie McConalogue TD
I am very pleased to launch my Department’s National Farmed Animal Biosecurity Strategy. With its strategic focus on biosecurity for the farmed animal sectors, it continues the shift in emphasis towards disease prevention, previously articulated in the National Farmed Animal Health Strategy (2017-2022).

This Strategy sets out a vision for the future of a livestock sector in which the high biosecurity status of the holding is something which is valued by the individual farmer. In this vision, the farmer has the knowledge, skills and supports necessary to protect and maintain the biosecurity status of the holding, while at the national level, farmers and all stakeholders are collectively aware of the value of biosecurity to the health of the national herd and flock, to our ability to access international markets and to the economic performance of the agricultural sector as a whole.

Raising the standard of biosecurity on all Irish livestock farms will impact positively on many aspects of Irish agriculture as well as Irish society as a whole. The focus on disease prevention is a clear example of the holistic ‘One Health One Welfare’ approach my Department is developing across a range of policy areas. The ‘One Health One Welfare’ concept explicitly links animal health and welfare, public health and wellbeing and environmental health.

Improvements in any one of these areas will result in enhanced collective health and welfare and in an enhanced natural environment.

The National Farmed Animal Biosecurity Strategy complements the Plant Health and Biosecurity Strategy (2020-2025) and gives effect to commitments contained in the Programme for Government to improve Animal Health through a One Health approach and to support and improve biosecurity in the intensive pig and poultry sectors.

This strategy was developed following consultation with a broad range of stakeholders and its success will rely on all stakeholders, including my Department, working in partnership to ensure that we collectively achieve a substantial improvement in all aspects of farm biosecurity.

I would like to take this opportunity to thank all stakeholders for their contributions to this document, which provides a clear path for raising farm biosecurity standards in Ireland. I look forward to supporting all stakeholders in delivering the desired impacts of this strategy over the coming years. I am confident that it can provide benefits for animal health, animal welfare, public health, the environment, the economy and society as a whole.
Executive Summary

This strategy builds on many of the key principles of the National Farmed Animal Health Strategy [NFAHS](2017-2022), which emphasises the need to work in partnership, to acknowledge roles and responsibilities, to reflect costs and benefits, and to shift the focus from curing to preventing animal disease. Keeping the animals in our national herd and flock safe from disease – starting inside the farm gate - is an integral part of the ‘One Health One Welfare’ approach and entirely consistent with the principles set out in the NFAHS.

The good health status of our farmed animals is fundamental in underpinning the continued success of the Irish livestock sector. The ability to raise our defences in the face of a specific threat (such as African Swine Fever) is important, but it is equally important that effective, routine farm biosecurity practices are put in place and are practiced consistently every day of the year, whether or not a specific disease threat has been identified. When good biosecurity practices are in place on farm and when they are implemented routinely and effectively, they reduce the risk of introducing disease into, and of spreading it within, the farm. The level of risk reduction will be determined by how effectively and routinely good biosecurity measures are implemented and practiced.

This strategy outlines a vision of what an effective farmed animal biosecurity strategy in Ireland will look like.

Six broad strategic actions, considered central to the successful implementation of this strategy, are outlined. These are grouped into 3 areas, organised around the concept of behaviour change (see Figure 1).
A. Awareness to drive behaviour change

Strategic Action 1  Creation of an online central information hub for key biosecurity information.

B. Knowledge & ‘Know-how’ to drive behaviour change

Strategic Action 2  DAFM and all stakeholders to identify data and knowledge gaps in relation to factors constraining and promoting the adoption of good biosecurity practices. These gaps to be addressed through research, including the DAFM funded research calls.

Strategic Action 3  Develop and publish Codes of Practice for farm biosecurity and use risk assessment tools to measure how effectively they are applied.

C. Policy to drive behaviour change

Strategic Action 4  DAFM to utilise new and existing legislative provisions to encourage adoption of appropriate biosecurity measures.

Strategic Action 5  Collaboration between the Competent Authorities in Ireland and Northern Ireland in relation to the biosecurity status of the island of Ireland is further enhanced to give full effect to its status as a single epidemiological unit for the purposes of animal health and welfare.

Strategic Action 6  DAFM will provide an appropriate governance structure to ensure implementation of this strategy by all stakeholders.

The successful implementation of the National Farmed Animal Biosecurity Strategy requires all stakeholders to work closely together in partnership. Regular communication on progress will be disseminated at interactive stakeholder forums and events, such as the annual Animal Health Awareness Week. The already established Review Body for the National Farmed Animal Health Strategy will be the vehicle for the oversight and governance of this strategy.

Stakeholder input was of critical importance in the development of this strategy, and the outcome of the consultation strongly influenced the strategic actions. An ambitious but achievable pathway is proposed, placing biosecurity front and centre in the plan for the success and sustainability of Irish livestock farming.
Chapter 1
Introduction

Farm-level biosecurity can be described as the combination of both management and physical measures which, if practiced effectively and routinely, reduce the risk of the introduction, development and spread of disease to, from and within a farm. Practicing good biosecurity on farm is key to protecting and improving animal health, welfare and productivity, as well as ensuring good public health, through reduced antimicrobial and antiparasitic medicine usage, reduced transmission of zoonotic disease and improved environmental health. Ultimately, good biosecurity helps underpin sustainable and productive agricultural practices in Ireland.

In the international context, the Food and Agriculture Organisation of the United Nations (FAO), the World Organisation for Animal Health (OIE) and the World Health Organisation (WHO), recognise that the health of humans is intrinsically connected to that of animals and to the environment.

EU and national legislation provide legislative powers to enable competent authorities strengthen the standards of farm biosecurity in their states. In Ireland, fostering good biosecurity practices has been identified by DAFM as an essential component of a holistic approach to improving both animal and public health, giving effect to the ‘One Health, One Welfare’ principle. Consistent with this principle, the National Farmed Animal Biosecurity Strategy is intended to complement and reinforce a number of DAFM strategies (see Figure 2), including those for animal and plant health, animal welfare, disease eradication and surveillance as well as for food safety and antimicrobial resistance.

Achieving the desired impacts (see Figure 3), will depend on the active engagement and support of all stakeholders.
Figure 2:
Key DAFM and National Strategies

Current:
- National Farmed Animal Health Strategy (NFAHS) 2017-2022
- Ireland’s National Action Plan on Antimicrobial Resistance 2017-2020 (iNAP)
- National Animal Health Surveillance Strategy 2016-2021
- Food Safety & Food Authenticity Strategy (FSFA) 2017-2020
- Foodwise 2025
- Plant Health & Biosecurity Strategy 2020-2025
- Climate Action Plan 2019
- Programme for Government ‘Our Shared Future’ 2020

In development:
- Ireland’s Animal Welfare Strategy
- 2030 Agri-Food Strategy
- A Ten Year Roadmap to Reduce bTB and Drive Towards Eradication 2020-2030

Figure 3:
Desired Impacts of the National Farmed Animal Biosecurity Strategy:

- The prevalence of endemic disease is reduced.
- Ireland is better protected against exotic disease.
- The health and welfare of the national herd and flock improves.
- There is improved collection, use, dissemination and communication of information on biosecurity.
- There is a significant reduction in the use of antimicrobials and antiparasitic medicines.
- Food safety improves.
- There is improved farm productivity and efficiency.
- There is a clear contribution to the reduction in agricultural greenhouse gas emissions, to improved public health and well-being, and to better environmental health.
- Ireland’s efforts to expand access to international markets are supported.
The vision is of an Irish livestock farming sector in which the high biosecurity status of the farm is valued and where farmers are properly equipped to address general and specific risks to this status, supported by high quality, real-time information and farm-specific advice provided by their veterinary practitioner and other relevant advisors. All stakeholders are aware of the high value of biosecurity to the health of the national herd/flock, to our ability to access international markets, and to the economy as a whole.
In order to realise this vision, the following outcome indicators will need to be achieved:

**Improved Awareness**
- Farm service providers and suppliers are aware of their role in achieving farm biosecurity standards appropriate to the level of disease threat and they observe the standards set out in the relevant biosecurity plans and/or biosecurity codes of practice.
- DAFM provides a central hub for biosecurity information, containing sector specific codes of practice (including those for farm service providers and suppliers) which, if implemented, can effectively mitigate the threat posed by endemic or exotic diseases and can be adapted to take account of the level of risk posed.
- All stakeholders implement the National Farmed Animal Biosecurity Strategy, are aware of their roles and responsibilities and work in partnership to improve the health of the national herd/flock by reducing the prevalence and impacts of endemic diseases and by acting to prevent the incursion of exotic diseases.

**Effective Policy Implementation**
- All Industry Partners and Government Agencies have the resources, expertise and tools to support farmers to measure their farm specific biosecurity risks, to upskill their biosecurity practices and to improve their biosecurity standards on farm.
- DAFM continues to implement the All Island Health & Welfare Strategy with DAERA.
- DAFM effectively communicates to farmers during periods of medium and high disease risk and farmers implement their on-farm contingency plans accordingly.

**Improved Knowledge**
- In consultation with their veterinary practitioners and other relevant advisors, and with direct access to real-time disease surveillance information relevant to their own herds/flocks, farmers have a good understanding of the baseline animal health status of their holdings.
- Farmers develop, implement and regularly review tailored herd/flock health programmes for their farms, with biosecurity as an integral element.
- Farmers are equipped to rapidly implement enhanced biosecurity practices in response to specific disease threats.
- Codes of practice are jointly produced by the relevant stakeholders, working together collaboratively. These include Farm Organisations, DAFM, State Agencies, Research Organisations, Public-Private Partnerships and Industry.
Chapter 3
The Consultation

Underpinned by the same set of broad principles set out in the National Farmed Animal Health Strategy, DAFM took the initiative in 2019 to work with stakeholders to develop a National Farmed Animal Biosecurity Strategy. Stakeholders were engaged in a phased consultation process, the outputs of which strongly inform and guide this strategy.

Internal Gap Analysis

An internal gap analysis was conducted within DAFM in early 2019, attracting responses from a wide range of DAFM Divisions. The analysis showed that, although biosecurity advice is available for all livestock species, the information tends to be disease specific, with a focus on certain Part A Notifiable Diseases, such as Foot and Mouth Disease, TB, Avian Influenza and African Swine Fever. There was limited evidence of availability of general biosecurity advice for farmers (see Strategic Actions 1 & 3), although in many cases, the disease-specific guidance could be easily applied or adapted for a range of disease agents.
A stakeholder survey, conducted during the National Ploughing Championships in September 2019, was aimed at the wider agricultural sector. The objective of the survey was to gain an understanding of current attitudes towards, and understandings of, farm-level biosecurity.

Key findings in the survey were:
- The vast majority of respondents were aware that biosecurity included both physical and management measures and that on-farm biosecurity involved both internal and external biosecurity measures.
- Regarding the ability to prevent, identify and respond to biosecurity challenges, farmers gave themselves an average score of 90%. On average, farmers awarded both their immediate farming neighbour and DAFM a score of 70%.
- In order of importance, respondents felt farmers had the most responsibility for farm biosecurity in Ireland, with veterinary practitioners ranked second and DAFM ranked third.
- Respondents ranked the cost of making structural changes as the greatest barrier to implementing effective biosecurity practices, followed by the cost of labour and then purchasing stock of unknown disease status.
- Discussion groups were deemed the preferred mode for raising awareness and for knowledge transfer, followed by farm walks/visits and then publications and newsletters. Online educational material was preferred over hardcopy versions.
Stakeholder Forum

A wide range of stakeholders was represented at the stakeholder forum, held in late 2019, including farmers, vets, hauliers, researchers, regulators and representatives of semi-state bodies. The objectives of the forum were to firstly gain a better understanding of the status quo in relation to farm biosecurity and secondly to broadly discuss possible measures for inclusion in the National Farmed Animal Biosecurity Strategy.

Stakeholders’ views on Ireland’s current approach to biosecurity:

- The importance of biosecurity for public health (including transmission of antimicrobial resistant organisms) is not recognised as it should be (see Strategic Action 1).
- Current approach is disease specific.
- Farmers could do more to reduce the numbers of visitors to their farms.
- Biosecurity measures are critical for managing both endemic and exotic diseases.
- There is a perception amongst farmers that they have a low level of control over certain aspects of disease control, which can de-motivate.
- Veterinary practitioners are an under-used resource for disease prevention. They are not just a fire-brigade service (see Strategic Action 3).
- There is a need for biosecurity standards to be established (see Strategic Action 3).
- Farmers are responsible for farm biosecurity and DAFM is responsible for national biosecurity.
Stakeholders’ vision for a new approach:

- Awareness of the cost of a disease outbreak on a farm should be a driving factor. Economic benefits of good biosecurity should be examined (see Strategic Action 2).
- Education and awareness are key. If resources and supports are available, improving one’s biosecurity ‘know-how’ doesn’t necessarily have to cost money and improvements in this area will be critical to implementing the strategy (see Strategic Actions 1 & 3).
- Biosecurity risk assessments are key to identifying farm-specific risks. Follow-up visits are required to ensure areas of weakness are addressed (see Strategic Action 3).
- Herd/flock owners should be aware of their own biosecurity risk and that of the herds/flocks they purchase from.
- There is no lack of biosecurity information, but correct dissemination of information is critical. A central biosecurity information ‘hub’ is required (see Strategic Action 1).
- At a minimum, sector specific biosecurity standards are required (see Strategic Action 3).
- The meeting of agreed biosecurity standards was suggested as a possible condition for herd/flock registration.
- Farmers were identified as key in the implementation of the National Farmed Animal Biosecurity Strategy.
- DAFM was identified as having a leadership role for the delivery of the strategy and ensuring compliance with any biosecurity standards or legislation (see Strategic Action 4).
- DAFM should consider linking supports to the farmed animal sector to their meeting agreed biosecurity standards (see Strategic Action 4).
- The possibility of a ‘One Health’ label or similar for products originating from farms that meet agreed biosecurity standards should be explored, perhaps using Bord Bia Quality Assurance Schemes (see Strategic Action 3).
- Ultimately, a behaviour change is required (see Chapter 4).
- Information is power. Empowering farmers through collecting farm specific data and feeding this back in a user-friendly way will help drive implementation on farm (see Strategic Action 3).
- Public awareness of farm biosecurity is essential; for example, tourists, walkers and hunting organisations (see Strategic Action 1).
- A holistic approach to biosecurity is vital and should go beyond just a focus on the farm itself. It should include feed, farm service providers, marts & exhibitions or shows (see Strategic Action 3).
Chapter 4
Realising the Vision through Behaviour Change

Biosecurity is not a new concept. The consultation showed that the theory of biosecurity is well understood amongst farming stakeholders. However, putting that theory into practice will ultimately require a marked behaviour change and a definite shift towards a culture of ‘prevention is better than cure’. Effective biosecurity must be considered and practiced at all times and not just in the face of disease outbreaks. The word ‘practice’ is key here - biosecurity is not only about physical measures. It is also about day to day behaviour and herd/flock health management, both for the prevention of diseases not present and for the containment of diseases that are already present. All stakeholders must adopt a meaningful biosecurity culture and ensure that biosecurity is considered and practiced when carrying out all farming related tasks no matter how routine.

Six strategic actions are outlined in this chapter and are central to the successful implementation of this strategy. The strategic actions are grouped into 3 areas:

A. Awareness to drive behaviour change
B. Knowledge and ‘Know-how’ to drive behaviour change
C. Policy to drive behaviour change
Awareness to drive behaviour change

The consultation highlighted the need for a single and central point of biosecurity information. There is no lack of biosecurity information available to stakeholders, but it was felt that there is often duplication of information from multiple sources. Correct dissemination of agreed sector-specific biosecurity standards and supporting toolkits was proposed.

**Strategic Action 1**

Creation of an online central information hub for key biosecurity information.

**Action required**

Collate existing information, previously developed by DAFM or by organisations such as Teagasc and Animal Health Ireland, and generate new content to develop an online centralised hub for biosecurity information to include:

- Sector specific Codes of Practice.
- A toolkit to assist all stakeholders in incorporating the Code of Practice into their biosecurity plan.
- Links to relevant organisations and schemes.

An awareness campaign on the importance of farm biosecurity for animal health and productivity, animal welfare, public health and the environment, aimed at both farming stakeholders and the general public, will coincide with the launch of the ‘biosecurity hub’ on the DAFM website.

**Responsibility**

DAFM and all stakeholders.

**Key Performance Indicator**

Links to relevant biosecurity information are available in the central information hub on the DAFM website.
Knowledge & ‘Know-how’ to drive behaviour change

Establishing baseline standards of biosecurity for each sector will inform all farming stakeholders, such as farmers, farm service providers, hauliers, mart owners and agricultural show organisers of the minimum biosecurity requirements that must be put in place to protect animals from disease. Measuring the effectiveness of biosecurity measures by carrying out regular biosecurity risk assessments will assist farmers in identifying and prioritising areas for improvement and provide them with a set of measures for addressing any deficiencies.

The establishment and implementation of tailored herd/flock health programmes with biosecurity as a core component can play a key role in safeguarding animal health. Knowing the financial cost of poor biosecurity and any other barriers to behaviour change is also required.

The following strategic actions will help drive improvements in knowledge and ‘know-how’:

**Strategic Action 2**

DAFM and stakeholders to identify data and knowledge gaps in relation to factors constraining and promoting the adoption of good biosecurity practices. These gaps to be addressed through research, including the DAFM funded research calls.

**Action required**

DAFM and stakeholders, working in partnership, to form a working group to identify data and knowledge gaps in relation to the factors constraining and promoting the adoption of good biosecurity practices.

DAFM to take account of the identified knowledge gaps in shaping future funded research calls.

**Responsibility**

DAFM and all stakeholders.

**Key Performance Indicator**

Number of research projects on factors affecting the adoption good biosecurity practices.
Strategic Action 3

Develop and publish Codes of Practice for farm biosecurity and use risk assessment tools to measure how effectively they are applied.

Action required

All stakeholders, including farm service providers, will work together to develop sector specific codes of practice appropriate to the degree of risk. Toolkits will also be developed to assist stakeholders with incorporating the code of practice into their biosecurity plans and daily tasks.

The Minister will establish or adopt sector specific codes of practice for biosecurity measures. Intensive sectors will be prioritised.

For farmers, the code of practice will include a requirement for the development, implementation and regular review of farm specific biosecurity plans in close collaboration with their attending veterinary practitioner. The effectiveness of farm biosecurity plans will be measured, using standardised and validated biosecurity risk assessments.

For farm service providers, the code of practice will include a requirement for the development and implementation of specific procedures by enterprise type.

For mart and agricultural show owners/organisers, the code of practice will include a requirement for the development and implementation of site specific biosecurity plans that are tailored for the relevant species.

For all sectors, biosecurity plans will contain contingency arrangements for periods of both medium and high disease risk.

The relevant stakeholders, including farm service providers, will hold training events or develop formal accredited courses to improve biosecurity knowledge within their sectors.

DAFM and Animal Health Ireland will build on pilot TASAH biosecurity programmes for pigs and poultry and introduce for other species.

Compliance with biosecurity codes of practice will become a requirement for Bord Bia Assurance Schemes. Marketing opportunities will be explored.

Responsibility

DAFM and all stakeholders.

Key Performance Indicator

The number of Codes of Practice published on the DAFM website.

The percentage of relevant holdings and enterprises that have a biosecurity plan in place.

The percentage of relevant holdings and enterprises that have reviewed their biosecurity plan in the relevant review period.

The number of TASAH supported biosecurity reviews completed.

The qualitative outcomes of the TASAH biosecurity reviews, which provide an indication both of individual farm-level progress and of change at the national level.

Number of biosecurity training events or courses organised by stakeholders.
Policy to drive behaviour change

Giving legal effect to available biosecurity related provisions in new and existing legislation will help drive behaviour change. The Minister has the power to establish or adopt biosecurity Codes of Practice or can reduce or refuse payments to farmers who fail to take appropriate biosecurity measures. DAFM can also avail of mechanisms within the current CAP and within the new CAP Strategic Plan (CSP) Regulations to ensure that relevant supports are made available to the farming sectors.

**Strategic Action 4**

**DAFM to utilise new and existing legislative provisions to encourage adoption of appropriate biosecurity measures.**

**Action required**

DAFM to fully utilise the available biosecurity related provisions of both national (e.g. Animal Health and Welfare Act) and European (e.g. Animal Health Law and CSP Regulation) legislation.

DAFM supports following disease incidents are contingent on the extent to which farmers have implemented their relevant code of practice.

**Responsibility**

DAFM

**Key Performance Indicator**

Number and percentage of holdings availing of biosecurity related supports under the current RDP and future CAP.
Strategic Action 5

Collaboration between the Competent Authorities in Ireland and Northern Ireland in relation to the biosecurity status of the island of Ireland is further enhanced to give full effect to its status as a single epidemiological unit for the purposes of animal health and welfare.

Action required
DAFM to strengthen the existing strong collaborative relationship with DAERA and ensure alignment of biosecurity strategies.

Responsibility
DAFM

Key Performance Indicator
Number of DAFM/DAERA meetings on alignment of biosecurity strategies.

Strategic Action 6

DAFM will provide an appropriate governance structure to ensure implementation of this strategy by all stakeholders.

Action required
The National Farmed Animal Health Strategy Review Body will provide oversight of this strategy.
DAFM will facilitate stakeholder collaboration by providing secretariat.

Responsibility
DAFM

Key Performance Indicator
Number of governance review meetings convened by DAFM. Number of stakeholder engagement sessions facilitated by DAFM.
Successful implementation will require that all stakeholders work together and take responsibility for their respective actions.

Chapter 5
Working in Partnership to Implement the Strategy

Successful Implementation
In order to ensure the successful implementation of the National Farmed Animal Biosecurity Strategy, it is critical that all stakeholders work together and take responsibility for their respective actions. Although there is shared ownership of this strategy, Chapter 4 clearly defines the roles and responsibilities for each of the 6 strategic actions. Annual progress reports will be published and developments will be discussed at annual interactive stakeholder forums, which will help identify challenges and obstacles and facilitate discussion on their resolution. Presentations will be delivered to the general farming community at relevant events, such as the annual Animal Health Awareness Week.

Governance
The National Farmed Animal Biosecurity Strategy will be subject to objective oversight and governance by the already established NFAHS Review Body.