What can be done to reduce the impacts of animal disease in Europe (…and who should pay for it?)

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SUSTAINABLE LIVESTOCK INTERGROUP MEETING

WOAH'S OVERVIEW OF ANIMAL DISEASE MANAGEMENT

Evolution of Disease Management

Animal disease management has been evolving from the use of vaccination, zoning, compartmentalization, as well as implementation of biosecurity.

Modern Technological Tools

Genomics, digital tools, and predictive analytics now play a major role in animal health strategies. Sources: WAHIS, ANIMUSE, Observatory

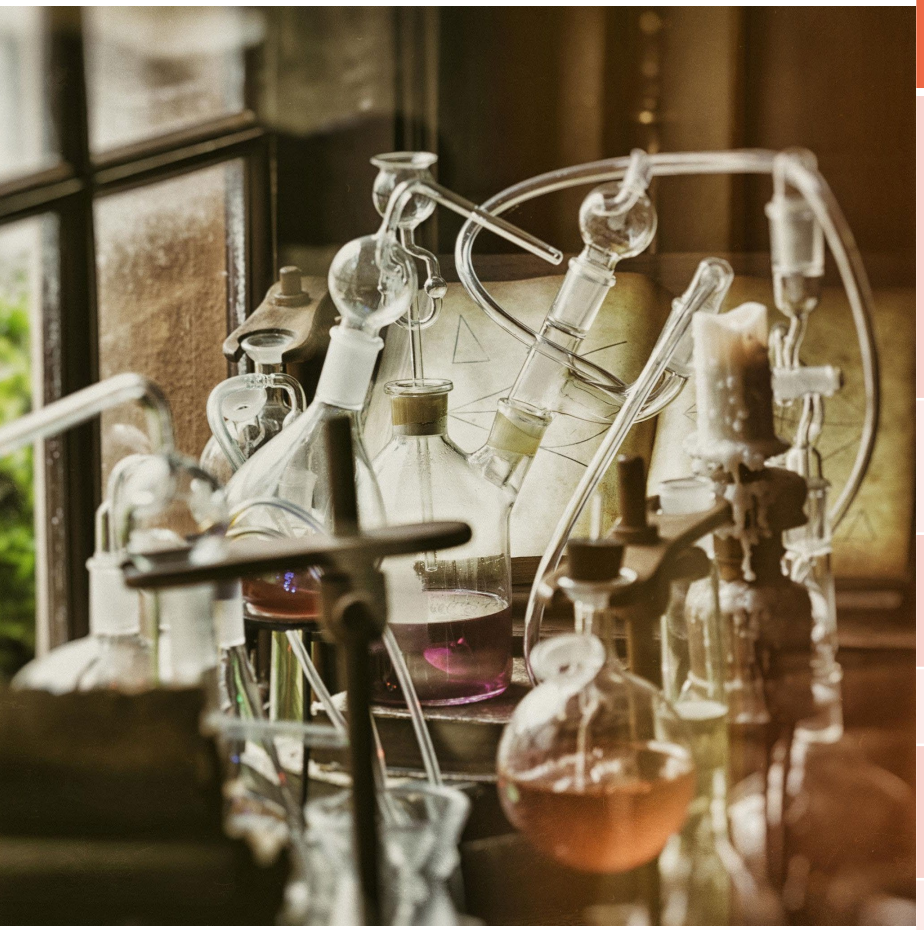
Emerging Health Challenges

Challenges like zoonotic diseases and antimicrobial resistance demand integrated and sustainable solutions.

One Health Principles

One Health emphasizes the link between animal, human, and environmental health in disease management.

FUTURE PROOFING STANDARDS TO CONSIDER BIOSECURITY, CULLING AND VACCINATION



Period Key	WOAH Developments
1992-2002	In 1992, the OIE adopted the first standards/criteria for classifying *Highly pathogenic avian influenza* (HPAI) *(fowl plague)* – Terrestrial disease. Definitions for pathogenicity evolved as scientific knowledge of the disease increased (such as clevage sites 2022).
2014–2016	Terrestrial Manual updated with biotechnology diagnostics, test validation, and sequencing
2015 2026	Added a chapter on *biosafety in veterinary labs* A new chapter on Biosecurity will be presented for adoption GS94
2024	Chapter 7.6 – Killing of animals for disease control purposes
2024	Animal Health Forum on Vaccination gs92-2025-res-29-tech-technical-item-en-3.pdf
2022–2024	Terrestrial Manual additions: *vaccine banks*, *QA*, *computational genomics*, *sterility*, and *wildlife surveillance*
2022–2025	Observatory reports assessment of members capacities

Domain	Past (1970's-1990s)	Present (2010s-2020s)
Prevention	- Conventional vaccines (live attenuated, inactivated) - Basic farm hygiene - Antibiotic growth promoters	- Recombinant, DNA/RNA vaccines, DIVA strategies - Biosecurity - Antimicrobial stewardship & alternatives - WOAH standards on AMR and biosecurity
Diagnostics	- Culture-based tests - ELISA serology - Microscopy	- PCR, real-time PCR - Next-Generation Sequencing (NGS) - Point-of-care rapid tests - WOAH Terrestrial Manual includes molecular diagnostics & validation protocols
Containment	- Manual quarantine & movement control - Paper-based traceability - Passive surveillance	- Zoning and Compartmentalization - GIS-based disease mapping (integrated in WAHIS) - Predictive analytics & modeling - WOAH WAHIS for real-time global reporting
Standards & Governance	- Basic disease definitions - Limited international coordination - Trade restrictions ad hoc	- WOAH recognized by WTO (SPS Agreement) - Annual updates to Terrestrial & Aquatic Manuals - Observatory monitoring compliance - Wildlife health integrated into standards
Technology Integration	- Minimal automation - Localized lab capacity	- WOAH guidelines for biosafety & sequencing

DISEASE CHAPTER	DATE OF LAST UPDATE OF CHAPTER	GENERAL DESCRIPTION OF THESE UPDATES	CONDITIONS FOR USE OF VACCINATION IF ANY	CONDITIONS FOR RECOVERY OF FREE STATUS
LSD This chapter is under revision. Revised chapter was circulated for comments in TAHSC Sep 2025 report	2018-improve clarity on case definition 2017	Comprehensive revision of the chapter including: -Develop case definition -Develop safe commodities -Clarify the criteria of country or zone free from LSD -Update the recommendations for importation of animals and their products with the latest scientific information -Develop provisions regarding surveillance	Yes, such as preventive vaccination, risk mitigation measures for trade of live animals	Article 11.9.4. -'Stamping-out policy' has been applied -When 'preventive vaccination' is conducted in a free country/zone, free status may be regained 8 months after the last vaccination.
ASF	2024-add dry pet food and protein meal as safe commodities 2019-develop article on safe commodities 2017	Comprehensive revision of the chapter including: -Develop case definition -Clarify the criteria of country, zone or compartment for the determination of the ASF status -Develop provisions of country or zone free from ASF, especially freedom in 'all suids' and in 'domestic and captive wild pigs' -Develop provisions of compartment free from ASF -Develop provisions of containment zone within a country or zone free from ASF -Develop and revise the recommendations for importation of animals and their products, including procedures for the inactivation of ASFV in some products -Develop provisions regarding surveillance	No	Article 15.2.7. Free status may be restored 3 months after the disinfection of the last infected establishment, provided that: -'Stamping-out policy' has been implemented -'surveillance' has been carried out
PPR This chapter is under revision. Revised chapter was circulated for comments in TAHSC Sep 2025 report	2021	Harmonisation of the provisions for official recognition and maintenance of free status, and endorsement and maintenance of official control programmes in disease-specific chapters with official recognition of status	Yes, such as risk mitigation measures for trade of live animals and WOAH endorsed official control programme	Article 14.7.7. Free status may be recovered 6 months after the disinfection of the last affected establishment, provided that: -'stamping-out policy' has been implemented -'surveillance' has been carried out As PPR is WOAH official recognised disease, PPR free status will be reinstated only after the submitted

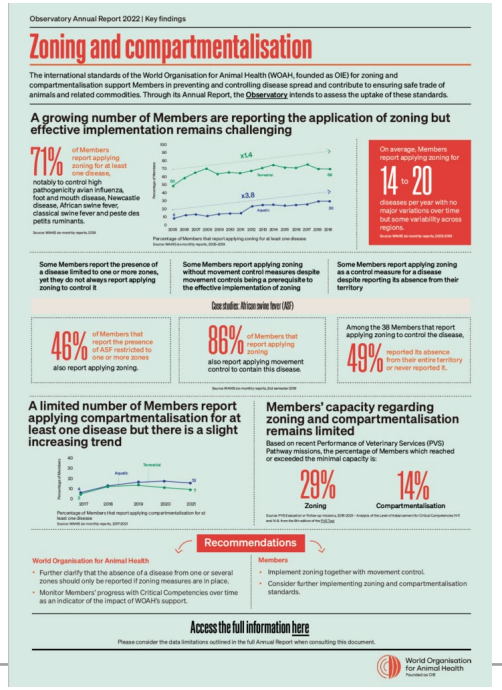
DISEASE CHAPTER	DATE OF LAST UPDATE OF CHAPTER	GENERAL DESCRIPTION OF THESE UPDATES	CONDITIONS FOR USE OF VACCINATION IF ANY	CONDITIONS FOR RECOVERY OF FREE STATUS
FMD	2024	Comprehensive revision to address risk mitigation at import, surveillance for freedom status, address consistency and clarity	Article 8.8.42 Target populations and geographic areas, proper srtain of vaccine, monitor vaccination coverage and population immunity, proper surveillance	Article 8.8.11 Stamping out policy is applied, surveillance, 3-6 month waiting period depending on use of vaccination, reapply for status
HPAI	2025 minor 2021	2021 – comprehensive review, new article on safe commodities, decreased focus on LPAI, new articles on compartments	Article 10.4.1, 10.4.28 Target populations and geographic areas, proper stain of vaccine, monitor vaccination coverage and population immunity, proper surveillance	Article 10.4.6., 10.4.28 Stamping out policy is applied, surveillance, 28 day waiting period after disinfection of all establishments.
BTV	2024 minor 2018	2018 – updated case definition, revised semen import recommendations	Article 8.3.17. Target populations and geographic areas, proper stain of vaccine, monitor vaccination coverage and population immunity, proper surveillance	None, must meet criteria for freedom- Article 8.3.3. or 8.3.4.

BIOSECURITY , ZONING AND COMPARTMENTALISATION

The biosecurity chapter (new chapter) was originally proposed for adoption in May 2025.
Due to the large number of comments received from Members, the TAHSC addressed the comments at its February 2025 meeting, again at its September 2025 meeting and has circulated the chapter again for comments.
It is proposed for adoption in May 2026.

Chapter 4.4. 'Zoning and compartmentalisation' of the Terrestrial Code is currently under review to ensure key principles and definitions for the implementation of zoning are clear and fit for purpose. review the current

Monitoring zoning and compartmentalisation - WOAH



STRATEGY	MODERN ADAPTATIONS & EVIDENCE SUPPORT
Biosecurity	Multi-layered, audited, evolving with behaviour insights
Vaccination	Shifting toward integrated strategies, conditional approvals, global trade compliance gs92-2025-res-29-tech-technical-item-en-3.pdf
Culling	Reduced use, nuanced models favored, Review of **Chapter 7.6 – Killing animals for disease control**
Governance	Guidelines updated with evidence grading, multi-secotral coordination (PVS)
Surveillance	Real-time data, AI, metagenomics, capacity assessments

KEY TAKEAWAYS

Future proofing standards:

Who: governance review committee/8th SP/ workplan of specialist commissions

How: designing standards and the system around them to be adaptive, flexible, data-centric, risk-proportionate, and globally implementable.

-Increase commenting based on science

- Follow up recommendations of the observatory

Prevention:

It's a shared responsibility-public authorities, private sector, and international partners must collaborate to ensure sustainable financing for vaccination and other preventive measures.

Technological advances:

WOAH's databases and digital tools: to provide **reference data models**, controlled vocabularies, and open API'S that align with our partners and stakeholders

One health and AMR Mitigation

One health principles link animal disease management to global health security and sustainability goals.

Future collaboration and innovation

Ongoing innovation and interdisciplinary collaboration are essential for future challenges and health protection.

Thank you

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