

Shaping veterinary health policies in a global and evolving context

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Summary

National animal health policies have at their foundation the overarching need to address society's concerns about animal disease control, the welfare of animals and the safety and security of the animal production food supply. However, in today's global, complex and interdependent context, national animal health policies also impact a broader range of policy outcomes, ranging from public health protection through ecosystem health and biodiversity to the economic well-being and performance of many countries. As a result, there are several fundamentally important elements that must be considered in the elaboration of effective and relevant animal health policies. Policies must be *(i)* proportionate to the risk to be managed, *(ii)* transparent (to ensure easy understanding and implementation), and *(iii)* responsive to constantly evolving and changing hazards and risk pathways. In addition, it is critical that there are sufficient resources and capacity to implement the policies as well as incentives for compliance on the part of affected parties.

Keywords

Animal health policy – Animal welfare – Compliance – Disease control – Food safety – Food security – Incentive – Public health protection – Transparency.

Introduction

Veterinary health policies affect people's daily lives through social outcomes such as protection from diseases that may be readily transmissible from animals to humans, access to a sustainable and nutritious food supply or the well-being associated with the human–animal bond. Veterinary health policies also affect people's daily lives through economic outcomes such as the productivity derived from good health, the value associated with the protection of ecological systems and the preservation of biodiversity, the affordability of food, and the employment and income opportunities derived from the agriculture and the agri-food industry, as well as the financial returns derived from animals and animal products in commerce.

The acknowledgement, recognition and awareness of the impact of veterinary health policies on society is an

important fundamental aspect in their design and implementation at the local, national and global level.

The basic purpose of policies, and the legal and regulatory frameworks on which they are founded, is to manage risk or to facilitate the achievement of a government's priorities or objectives. Clearly defining the risk or risks to be managed (social, economic, political, biological, environmental, etc.), the level of risk tolerance or risk acceptance to be achieved and the consequential impacts of the policy objectives are all critical to successful policy outcomes. Optimal policy frameworks have five key attributes, as follows (Fig. 1) (2).

Proportionate

A proportionate policy is one in which the chosen approach is commensurate with the risk involved and therefore justifies the costs of compliance.

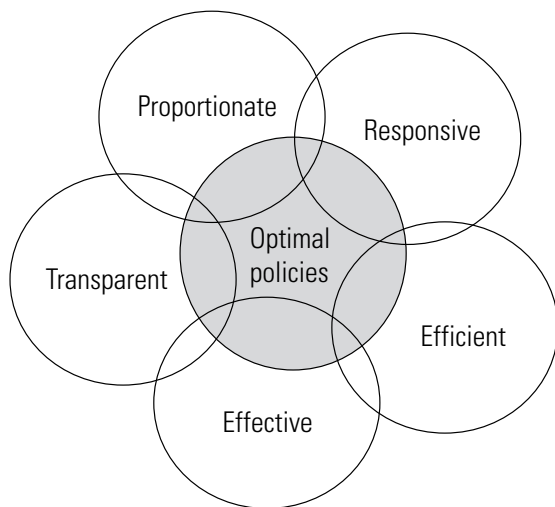


Fig. 1
Key attributes of an optimal policy framework
 Source: Created by the co-author referring to Bloom, Grant & Slater (2)

Responsive

A responsive system creates or refines the right policy as and when the need arises, based on continuous environmental scans that identify changing drivers or circumstances, scientific or evidence-based risk assessments and consultation with stakeholders.

Efficient

Efficiency refers to the cost of policy implementation in relation to the benefit. Efficient policies produce a predictable outcome at the lowest cost.

Effective

Effective policies achieve their desired outcomes while minimising unintended consequences.

Transparent

Transparent policies are easily understood, easily implemented, easily enforced and strongly supported. All stakeholders are able to understand the context for their actions to ensure compliance with the policy objectives.

Basic tenets of veterinary health policies

To state the obvious, a policy must have a purpose. Public policy can be seen as a 'purposive course of action followed

by an actor or set of actors in dealing with some problem or matter of concern' (1).

Defining the problem or concern in order to develop the appropriate policy is not an easy task. In today's interdependent, multi-jurisdictional, global context, problems tend to be 'ill defined' because they are part of a complex system of problems that involve high levels of conflict among competing priorities and stakeholders; consensus on goals and objectives is rare, and it is exceedingly difficult to identify the full range of solutions and their related consequences (3).

Meaningful, relevant and rational policies for animal disease prevention cannot be developed solely on the basis of academic theory. In most situations, a disease may infect more than one species and may have ecological and other determinants. In addition, the morbidity and mortality may differ between species, and therefore the economic significance in terms of production may not be uniform. Furthermore, when a disease is capable of being transmitted between animals and humans, the public health impacts may further compound the difficulty of developing a policy response that is proportionate to the risk posed for all sectors and allows for an acceptable burden or apportioning of the cost among stakeholders in an equitable manner. Finally, the consequences of disease occurrences may extend well beyond agriculture and thus introduce social, economic and political dimensions to the policy framework.

As a result, veterinary health policies must be subject to continuous evaluation and evolve in response to changing social contexts, risk pathways and technologies. For example, for many years, in an effort to comply with international standards to facilitate safe trade and international market access, countries employed animal disease prevention and response policies that were designed to achieve and maintain freedom from specified animal diseases categorised as 'List A' diseases by the World Organisation for Animal Health (OIE). The net result was the dedication of virtually all available veterinary programme resources to surveillance and control of List A diseases in order to demonstrate the country's freedom from these diseases as a prerequisite for export certification and the economic benefits derived from market access.

The unintended consequences fell largely into two areas. The first was the absence of any knowledge of the prevalence and control of those diseases not on List A and, as a result, their subsequent global spread. In the absence of such knowledge it would be difficult to validate veterinary health policies as truly proportionate. The second was the pressure on countries not to report the detection of diseases on List A, which could result in disruption of trade and cause significant economic harm. In this context, veterinary health policies were lacking in transparency.

In order to more effectively address these problems, the OIE introduced two fundamental changes. Disease-reporting obligations were revised to require countries to report diseases using an established set of epidemiological criteria (5). At the same time, international standards for safe trade were amended to incorporate the recognition of zoning of countries based on geographical or political boundaries to disease movement, compartmentalisation to recognise production system biosecurity practices and the introduction of commodity-based risk (6).

The net achievement of these changes has been to reduce the economic consequences for a country should a disease event be identified and thus to make disease reporting more timely, more transparent, and more effective in achieving global security objectives. These changes have also made it possible for veterinary health policies to be more proportionate.

Disease prevention and control policies in many jurisdictions have also been profoundly impacted by the improved availability and efficacy of vaccines and by changing societal values with respect to i) animal welfare, ii) ecosystem health impacts, and iii) the loss of genetic value, biodiversity and animal protein associated with mass animal depopulation.

Communication and consultation

Stakeholder engagement and consultation in the policy development process is a critical determinant of success for veterinary health policies.

Given the impact of veterinary health policies on ecosystem health, on animal health and on human health, the community of stakeholders can be quite large. Nevertheless, the investment of effort to engage all stakeholders in meaningful consultation is imperative in order to ensure transparent consideration of unintended consequences, assure a broad base of support from those affected by the policy and to ensure the use of the most appropriate policy instrument to achieve the policy objectives.

Transparent and inclusive consultation in veterinary health policy development contributes to both awareness and understanding. Having an understanding of veterinary health policies for disease prevention and control in advance of disease detection can greatly facilitate an effective response at the industry, public and political level. Predictable and consistent actions on the part of Veterinary Services in line with previously agreed policy frameworks provide a strong basis for maintaining trust and respect.

Disease prevention and control

It is ironic that finding funding support for veterinary health policy frameworks for disease prevention is challenging, even though the cost–benefit ratio has been well documented (7).

However, this is not surprising when one recognises the difficulty in defining sound performance indicators and measurements as they relate to prevention programmes and the natural tendency of governments to focus their resources in areas where the impact can be clearly measured and visible results obtained in a short period of time.

The globalisation of people, products and pathogens means that disease prevention approaches must not be applied only at the border and within the country. In order to be effective, veterinary health policies for disease prevention must include pre-border activities to maximise disease intelligence and international capacity-building to improve detection of disease emergence and expression at source and its transparent reporting. In the absence of knowledge of the geographic proximity of risks and the potential risk pathways for disease introduction, veterinary health policies that are limited to border-related inspections and domestic disease control activities are not sufficient to assure animal and public health.

In a similar manner, veterinary health policies for disease prevention and control must consider the interface that exists between animal populations. As the majority of animal diseases infect multiple species, veterinary health policies require a foundation of integrated surveillance to identify and detect potential hazards in a timely manner in order to demonstrate achievement of the policy objectives and outcomes.

Historically, the aim of national animal health disease prevention and control policies has been primarily to manage the consequences for food-producing animals as they relate to the economic consequences of lost production, sustainability of the food supply and market access. Increasingly, the impacts of national animal disease prevention programmes and control policies on animal welfare, ecosystem health, biodiversity and public health are becoming front-of-mind issues for society and politicians. This has resulted in a commensurate need to augment the contribution of biological science to policy development by including the views of social science, political science and economic science.

With this evolution or shift towards considering a broader range of consequences, there has been a requirement to consult a wider range of stakeholders and sectors as part of the policy development process. In several countries, both developed and transition countries, this process has also

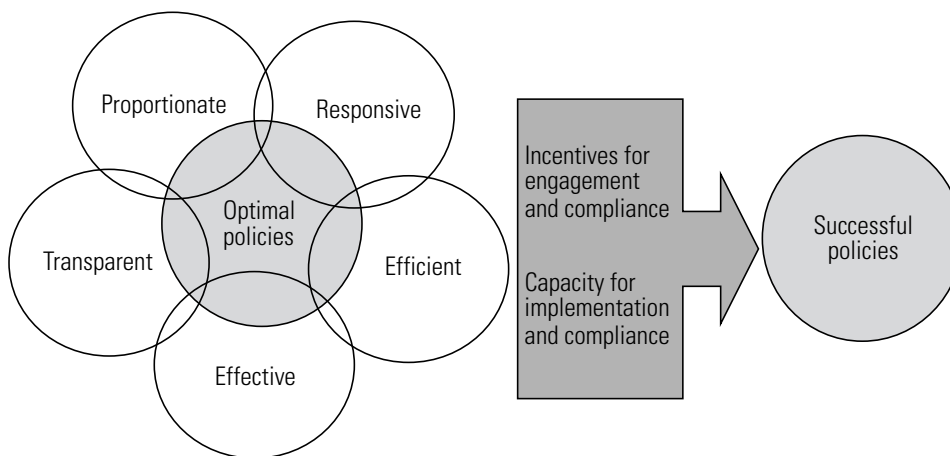


Fig. 2
From optimal to successful policies

included the emergence of new models for policy development that include advisory boards or the establishment of shared governance structures that involve national and sub-national government entities, as well as private-sector partners and third parties.

Furthermore, given the ever-increasing bilateral and multilateral integration of economies and animal production systems, there has also been the establishment of regional governmental animal health policy partnerships.

Two concrete examples of such partnerships are the Permanent Veterinary Committee involving the governments of Argentina, Brazil, Paraguay, Uruguay, Chile and Bolivia (established in 2003) and the North American Animal Health Tripartite Committee involving the United States, Mexico and Canada.

The former was established to harmonise approaches to animal disease control among the six countries and align their collective efforts in the verification of animal health measures for the region in response to common threats such as foot and mouth disease.

The latter was driven by the deepening of the economic integration of the three countries as signatories to the North American Free Trade Agreement and the shared desire to mitigate the economic consequences of disease occurrences by establishing policy frameworks that proactively recognise zoning, regionalisation and compartmentalisation approaches to disease control. It has further evolved in response to emerging zoonotic threats, including highly pathogenic H5N1 avian influenza and the H1N1 pandemic, by integrating surveillance efforts and response plans among both animal health and public health agencies in the three countries.

Incentives for engagement and compliance

One area of long-standing contention in veterinary health policy development and implementation is the issue of private *versus* public good and the resulting attribution of costs. It is not the intent of this paper to address this paradigm in a substantive manner, nevertheless it is important to recognise that incentives for engagement and compliance of affected parties with veterinary health policies is paramount for their effective and efficient implementation.

Such incentives largely fall into three broad areas: regulatory enforcement, sector ownership and financial programmes.

Enforcement of and compliance with veterinary health policies is best viewed as a continuum of activities that runs from awareness, education and training through verbal and written warnings, administrative monetary penalties, suspension of licensing or operating privileges to prosecution, depending on the severity of the consequence, the previous history of violations and whether the contravention was intentional. In many developing countries the activities are complemented by transparency efforts to make public the names of individuals or businesses that are non-compliant with veterinary health policies.

Sector ownership of veterinary health policies is a critical element of achieving high levels of compliance. For example, in those jurisdictions in which development of sector-specific biosecurity strategies to support disease

prevention and control objectives has been led by industry, there is a sense of stewardship on the part of the industry leaders and they feel a responsibility to encourage producers to adopt and comply with the strategies. Such leadership can have a profound impact on behaviours and influencing voluntary compliance.

Policy really entails going from what is, to what should be (4). Consequently, when the sector strongly supports and shares the commitment to achieving the veterinary health policy objectives and is able to determine the most practical means of achieving the stated policy objectives, there is both empowerment and ownership, leading to a higher level of compliance.

With respect to financial incentives for compliance, while there is broad recognition of the value of compensation programmes in encouraging producer participation in disease surveillance and control programmes and compliance with reporting obligations, the design and funding of such programmes continue to be problematic in many countries.

The basis of the problem lies in two primary areas. The first is the previously espoused principle that veterinary health policies are considered a public good. The corollary then is that a public good should be financed by the public purse. However, in some jurisdictions, there is a view that the public purse should not subsidise the business risk-management practices of the private sector, and therefore industry-funded compensation schemes, cost-sharing arrangements or private insurance are advocated. This conflict between economic and social policy outcomes can pose challenges for Ministries of Agriculture and Ministries of Finance and create political tension if not addressed.

The second problem is that in many countries the fiscal position of the government is such that the use of public funds for compensation in the face of major disease occurrences is not possible. This may serve as an impediment to the achievement of the veterinary health policy objectives unless third-party funding can be accessed to provide meaningful compensation to livestock owners for animals ordered to be destroyed.

Capacity for implementation and compliance

Another significant challenge for many national Veterinary Services in developing meaningful disease prevention policies is whether the level of resources is sufficient for the surveillance, inspection, investigation and enforcement necessary to effectively achieve the policy intent. The most well-designed and articulated and scientifically sound

policy approaches are doomed to fail in the absence of the commitment of resources necessary to support their implementation and enforcement. Failure to achieve policy objectives can become a source of both liability and embarrassment to governments, resulting in poor economic performance, erosion of public confidence and loss of stakeholder support.

The inability of many Veterinary Services to effectively describe, communicate and position their disease-prevention policies in a manner that reflects the overall priorities of their government is a major impediment to engaging political leaders and leveraging financial support for their policies and programmes. Veterinary health policies should contribute to food security and safety, ecosystem health and biodiversity, national economic performance, public health outcomes and protection from potential deliberate threats (Fig. 2).

However, in many countries, veterinary health policies continue to be described through the narrow lens of animal production and social values.

Conclusion

The complexity, interconnectedness and inter-jurisdictional nature of the current global animal and veterinary public health context continue to shape veterinary health policies in most countries.

In response to this dynamic, there are three clear trends emerging that must be recognised. The first is the redefining of veterinary health policy objectives to consider outcomes across a broader range of areas, including animal health, animal welfare, food security, food safety, public health, economic performance, ecosystem health and biodiversity.

The second is the resulting need to expand the number and diversity of interests in the development of veterinary health policy frameworks to be more inclusive of a broader group of stakeholders.

The third trend is the emergence of bilateral, multilateral or regional governance models that transcend borders.

These trends must be fully considered in order to ensure that veterinary health policies are proportionate, responsive, efficient, effective and transparent.



L'orientation des politiques de santé animale dans un contexte mondialisé et changeant

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Résumé

Les politiques de santé animale ont pour dessein général de répondre aux préoccupations de la société concernant la lutte contre les maladies animales, le bien-être des animaux, la sécurité sanitaire des aliments d'origine animale en phase de production et la sécurité de l'approvisionnement alimentaire. Toutefois, dans le contexte mondialisé, complexe et interdépendant qui prévaut aujourd'hui, les politiques de santé animale ont également un impact plus vaste qui touche divers autres domaines couverts par l'élaboration des politiques, depuis la protection de la santé publique et de la santé des écosystèmes à celle de la biodiversité, en passant par la prospérité et les performances économiques de nombreux pays. En conséquence, plusieurs éléments fondamentaux doivent être pris en compte en vue d'élaborer des politiques de santé animale à la fois efficaces et pertinentes. Ces politiques doivent être *(i)* proportionnelles au risque à gérer, *(ii)* transparentes (afin d'être bien comprises et correctement appliquées) et *(iii)* réactives face à l'évolution et aux transformations constantes des dangers et des voies de risque. En outre, il est vital de consacrer des ressources et des capacités suffisantes à la mise en œuvre de ces politiques, et de mettre en place des mesures incitatives destinées à assurer la conformité des parties prenantes.

Mots-clés

Bien-être animal – Conformité – Lutte contre les maladies animales – Mesure incitative – Politique de santé animale – Protection de la santé publique – Sécurité alimentaire – Sécurité sanitaire des aliments – Transparence.



Formulación de las políticas veterinarias en un contexto marcado por la mundialización y por una constante evolución

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Resumen

El fundamento último de las políticas zoonosológicas de los países reside en la necesidad suprema de responder a las preocupaciones de la sociedad acerca del control de las enfermedades animales, el bienestar animal y la higiene y protección del suministro de alimentos derivados de la producción animal. Sin embargo, en el contexto mundializado, complejo e interdependiente de hoy en día, las políticas zoonosológicas nacionales también influyen en los resultados de otras muchas políticas de diversa índole, desde la protección de la salud pública por medio de la salud de los ecosistemas y la biodiversidad hasta el desempeño y el bienestar económicos de muchos países. En consecuencia, para elaborar

políticas zoonositarias eficaces y pertinentes hay que tener en cuenta varios elementos de suma importancia. Esas políticas deben ser: *(i)* proporcionales al riesgo que se trata de controlar; *(ii)* transparentes (para que sean fáciles de entender y aplicar); y *(iii)* flexibles ante la constante evolución y modificación de los peligros y las rutas de riesgo. Además, es indispensable contar con recursos y capacidad suficientes para ejecutar las políticas y con incentivos para que las partes interesadas se atengan a ellas.

Palabras clave

Bienestar animal – Control de enfermedades – Cumplimiento – Incentivo – Inocuidad de los alimentos – Política zoonositaria – Protección de la salud pública – Seguridad alimentaria – Transparencia.



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