

Towards an ethics of vigilance in public health

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To cite: Webb J. Towards an ethics of vigilance in public health. *JME Pract Bioeth* 2026;**2**:e000074. doi:10.1136/jmepb-2025-000074

Received 2 December 2025
Accepted 8 January 2026

ABSTRACT

Public health authorities across the globe have reassured members of the public that they are vigilant to the threat of bird flu's pandemic potential. But they have also made requests of members of the public to play their own role in vigilance mechanisms, most notably requiring poultry farmers to adopt biosecurity measures at their farms. When should vigilance be practised, and under what circumstances are vigilance requests of publics ethically justified? This paper begins by considering the sociological literature on vigilance in public health. In doing so, it discusses the relationship between vigilance, surveillance and other concepts in public health and establishes the need for moral reflection on vigilance as a distinct category in public health ethics. It then considers the requests for vigilance made to poultry farmers during bird flu as an ethical case study, before ending by providing a series of ethical questions that must be answered by government health authorities considering instituting systems of vigilance and making vigilance requests of publics.

INTRODUCTION

As of 7 January 2026, 82 cases of bird flu have been detected in UK bird populations since the beginning of the current outbreak in October 2025.¹ In the USA, where the outbreak has been particularly severe, 185.16 million cases of bird flu have been detected in commercial and backyard flocks since 8th February 2022.² According to the CDC, there have been 71 confirmed human cases of bird flu in the USA since 2024.³ January 2025 marked the first recorded death as a result of infection in the USA.⁴ Of major concern to public health authorities is the disease's pandemic potential if it mutates so that human-to-human transmission becomes common. While most recent human cases of bird flu have been mild, the historical case fatality proportion is greater than 50%.⁵

Government public health agencies have attempted to reassure the public that they are being vigilant in the face of this danger. Following one outbreak, the UK Health Security Agency stated, "We therefore remain vigilant for any evidence of changing levels of risk and keep this under constant review".⁶ But health agencies have also asked individual citizens to be vigilant. In the UK, members of the public have been

asked to avoid sick birds and report any sightings of dead ones.⁷ A press release from the Michigan Department of Agriculture and Rural Development urged animal owners to remain vigilant to bird flu.⁸ Particularly substantive requests have been made of poultry farmers. They are required by law to prevent contact between poultry and wild birds, clean housing, equipment and footwear and keep records of bird movements, among other measures. Bird flu is a notifiable disease in the UK and USA, meaning you are legally obliged to report suspected cases to the Animal and Plant Health Agency⁹ or relevant state authorities.¹⁰ In the UK, and some US states, failure to follow these rules could lead to imprisonment.^{11 12}

Although there is a great deal of literature on the ethics of public health surveillance,¹³ there is relatively little on the ethics of vigilance, particularly the ethics of health authorities requesting non-public health professionals to be vigilant to public health crises. Due to this lack of analysis of vigilance as a distinct phenomenon in public health ethics, it is first necessary to turn to the recent sociological literature on vigilance in public health where the concept has been given more attention. This paper then discusses the differences among vigilance, surveillance and other concepts in public health ethics, establishing the need for specific ethical reflection on vigilance as a distinct ethical category. It then considers requests for vigilance from poultry farmers during bird flu as an ethical case study, before ending with a series of normative questions that must be answered by health authorities considering instituting systems of vigilance and making vigilance requests of publics.

CONCEPTUALISING VIGILANCE

Both Weir and Mykhalovskiy¹⁴ and Williams *et al*¹⁵ provide a sociological analysis of vigilance in public health. Weir and Mykhalovskiy characterise vigilance as a state response to political pressures to take care of health, the environment and lifestyle in the face of ongoing dangers from a variety of sources.



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This requires the creation of vigilance apparatuses ‘to monitor events thought to be precursors of catastrophic incidents’,¹⁴ which provide a stream of monitoring data to identify cases and launch alerts if necessary.

Williams *et al*¹⁵ expand on Weir and Mykhalovskiy’s account by focussing on the distinction between macrolevel and microlevel vigilance. Williams *et al* characterise macrolevel vigilance as being a feature of global ruling relations (the focus of Weir and Mykhalovskiy’s analysis), while microlevel vigilance occurs when states or local authorities make vigilance requests to publics. Writing in the context of COVID-19, they describe the way the New South Wales government set out rules for policed public behaviour. These involved both a moralised version of a self-surveilling individual and the creation of a vigilant collective which was empowered to monitor and report other individuals who were breaking pandemic restrictions, in the name of individual and collective safety.¹⁵

Considering these sociological accounts, can we provide a conceptualisation of vigilance that will be useful for public health ethics? Given the extensive literature on the ethics of public health surveillance,¹³ the case for considering the ethics of vigilance as a distinctive practice requires there being some distinction between the two. Consider a paradigmatic case of disease surveillance: a public health authority tracking the number of COVID-19 cases, hospitalisations and deaths during the pandemic. What, if anything, distinguishes cases of vigilance and surveillance?

Weir and Mykhalovskiy¹⁴ distinguish between surveillance and vigilance on the grounds that while the sociological literature in surveillance studies focuses on the human subject, tools for public health vigilance on a macrolevel collect data not restricted to humans, for example, warnings of environmental disasters. Williams *et al* add to Weir and Mykhalovskiy’s distinction by claiming that vigilance ‘is not concerned solely with detecting disease or a focus on the human subject’.¹⁵ They also cite Weir and Mykhalovskiy’s claim that vigilance ‘describes a network of interactions operating among statements, human actors and technological devices’¹⁵ as another factor that distinguishes vigilance from surveillance.

There are several issues with using this sociological analysis to distinguish surveillance from vigilance as public health activities. First, establishing that surveillance studies as a branch of sociology focuses on human health does not establish a difference between vigilance and surveillance as public health activities. The surveillance of wastewater systems, wet markets or bird migration patterns does not focus on the human subject, but they are paradigmatic cases of public health surveillance.

Second, even if surveillance is concerned solely with detecting disease, many examples of public health vigilance share this focus, for example, through monitoring for human-to-human transmission of bird influenza. Finally, the ‘network of interactions’, Williams *et al* call attention to do not distinguish vigilance from surveillance,

given the array of state and non-state technical apparatus that were involved in providing COVID-19 disease surveillance during the pandemic. The sociological accounts fail to provide conceptual clarity on the distinctiveness of vigilance and surveillance as public health practices.

Instead, paying attention to the different linguistic contexts in which we use the term ‘vigilance’ can illustrate the relationship between vigilance and surveillance. If, as thieves tore through your house unchallenged, you said you were staying ‘vigilant’ to the threat of burglary, this would strike me as extremely strange. This case, in fact, represents a failure of vigilance. This is recognised in the cited literature, even though they do not integrate it into their distinctions between vigilance and surveillance. As Weir and Mykhalovskiy¹⁴ argue, systems of vigilance ‘are a form of social action oriented to foresight’, while Williams *et al*¹⁵ point out that vigilance is concerned with ‘emergent risks’. Vigilance is preventative and forward-looking. It is perfectly coherent to talk about the surveillance of case rates in an out-of-control pandemic. But for a public health authority to say they are being vigilant for disease transmission in the context of exponential growth is a misuse of the term.

It is true, however, that public health authorities could say they were being vigilant to hospitalisations or deaths if there was not yet evidence of high case numbers translating to cases of severe illness. Vigilance is possible within a crisis, not just before, but still has a focus on prevention. For example, the main ethical rationale for individuals being empowered to report lockdown breaches of their fellow citizens is to discourage such behaviour from occurring and prevent human-to-human transmission. This focus on the future distinguishes vigilance, even though the same tools could be used for surveillance and vigilance. For example, a public health authority might use wastewater monitoring to track the spread of disease during an ongoing pandemic, or in a spirit of vigilance to monitor for and prevent a disease outbreak.

Another important contrast occurs at the microlevel. Vigilance requests generally impose greater positive duties on members of the public compared with disease surveillance. Public health surveillance efforts may raise concerns over data privacy, as when potentially identifiable health data are collected to monitor disease spread. They may also involve infringements on patients’ individual liberty, for example, by requiring clinicians to disclose an individual patient’s health status regardless of the wishes of the patient. They may also impose some limited positive duties on members of the public: for example, individuals may be required to engage with contact tracing teams to provide details of who they may have interacted with during the period they were an infection risk. But the positive duties associated with public health surveillance would primarily fall on the state and health professionals to collect and report data and ensure it is used securely and effectively. More stringent positive duties that may be imposed on individuals as a result of disease surveillance—for example, quarantine

or lockdown requirements—are conceptually distinct from the processes of disease surveillance itself.

In contrast, calls for vigilance directed at publics impose positive duties on them. For example, the demands for action from poultry farmers during the bird flu crisis have been extensive, requiring both reporting of threats and biosecurity steps to make an outbreak less likely. It is true that vigilance requests are not always so demanding. The British Transport Police slogan ‘See it. Say it. Sorted.’ asks the public to report suspicious activity on the rail network.¹⁶ The slogan is not ‘Take steps to make it less likely. See it. Say it. Sorted’. But a security guard who has not checked that the doors and windows of the warehouse they are guarding are locked and bolted would not be said to be properly vigilant, even if they were attentive in watching for signs of a break-in. A general principle can be inferred from these cases: the extent to which duties of vigilance require an individual to take preventative measures depends on the nature of their role and attendant responsibilities.

These distinctions matter because the ethics of public health surveillance literature focuses mainly on the positive duties of health authorities and the negative rights of citizens.¹³ Similar themes will apply to the ethics of vigilance on a macrolevel. But the ethics of vigilance on a microlevel needs to consider the positive duties of those asked to be vigilant and the conditions under which governments should impose them.

But although the ethics of surveillance in public health may not focus on the positive duties of citizens, other concepts in public health ethics do. This includes the concept of solidarity.^{17 18} Here, I understand solidarity broadly as a relationship of care, reciprocity and mutual obligation, expressed through collective action for the benefit of a community. What is the relationship between vigilance and solidarity? The two concepts are distinct: vigilance is compatible with, but does not require, relations of solidarity across a community. When vigilance is voluntary and relatively non-hierarchical (e.g., such as may occur among members of a neighbourhood watch group) it may well be motivated by solidarity. But the top-down imposition of some vigilance requests, such as when they are mandated by public health authorities or governments, does not require the existence of communal bonds to have moral force, especially when they are enforced through law. Some vigilance measures may even risk undermining solidarity: for example, if asking citizens to report on the behaviour of others undermines bonds of trust within a community. Furthermore, solidarity is more likely to be invoked (‘we’re all in this together!’) during a crisis.^{17 18} But because prevention is the focus of vigilance, many such requests will occur ‘in peacetime’, before a crisis has occurred.

The foregoing analysis demonstrates that vigilance can be positively conceptualised as a form of precautionary action. Precautionary acts are intended to make an event less likely, or to mitigate the impact of an event if it occurs. Consider that requests for vigilance of poultry

farmers fit both meanings, being aimed at both trying to prevent dangerous mutations and trying to identify mutations as early as possible if they do occur to stop their spread. When acts of surveillance are motivated by a precautionary stance, they should be characterised as acts of vigilance.

It is worth noting here that the sociological literature provides a very different answer. Weir and Mykhalovskiy¹⁴ contrast the precautionary principle—which they characterise as a conceptual tool invoked to prohibit activities viewed as potentially catastrophic—with vigilance apparatuses, which allow potentially dangerous activities to continue through monitoring for potential harms stemming from them.

But is this articulation of the precautionary principle accurate? Weed identifies the core idea of the precautionary principle as ‘anticipatory preventative action in the face of uncertain scientific evidence’.¹⁹ Acting in line with this principle may involve, but does not necessarily require, prohibitive action. Concerns over the depletion of the ozone layer led to the Montreal Protocol,²⁰ which prohibited the use of ozone-depleting substances like chlorofluorocarbons (CFCs) before definitive evidence of harm was available. But a response to antimicrobial resistance (AMR) in line with the precautionary principle may involve the prohibition of some uses of antibiotics, for example, in factory farming, while monitoring its use in others, for example, the clinical environment. The health benefits of antibiotic use for non-life-threatening conditions may mean their use is retained even under the precautionary principle. And even if a practice is entirely foreclosed, some vigilance practices may still be required to ensure the prohibition is enforced.

These examples demonstrate the indeterminacy of invoking the precautionary principle,²¹ and the need to be clear about how we weigh different costs and benefits when deciding what we wish to prohibit or monitor to mitigate a public health risk. The force of Weir and Mykhalovskiy’s point—that vigilance accompanies high risk activity—is compatible with the precautionary principle and therefore compatible with vigilance being a form of precautionary action.

In providing this account, I hope to have addressed a previously undertheorised topic in public health ethics. But I do not wish to claim that ethical issues pertaining to public health vigilance have been entirely neglected. Ethical analysis of prevention as a paradigm in public health,²² antimicrobial stewardship measures,²³ the culling of pigs to prevent the spread of the Nipah virus,²⁴ and the ethics of persisting with preventative behaviours following the COVID-19 pandemic²⁵ all speak to the ethics of vigilance. In particular, work on establishing the reasonable limits of public health demands on individual citizens considers similar issues to this paper.²⁶ But by focusing on a case study, we can establish a general framework for analysing the ethics of vigilance requests which will be useful in considering these related topics. An ethical analysis of the biosecurity and reporting demands

placed on poultry farmers in response to the threat of bird flu is the subject of the next section.

POULTRY FARMERS, BIRD INFLUENZA AND THE ETHICS OF VIGILANCE

Vigilance is not always good. The Stasi's use of a network of hundreds of thousands of informal collaborators to monitor and report on the potentially suspicious activities of their East German colleagues, friends and family members was a moral tragedy. The normative desirability of a particular call for vigilance is a function of a range of factors, which will be explored through the following case study.

One important factor is the level of risk individuals are asked to take on in performing acts of vigilance. The 'See it. Say it. Sorted.' British Transport Police slogan does not ask the public to put themselves at risk of harm to stop possible threats. In contrast, the call to vigilance for poultry farmers does put them at some risk of harm. This is not the risk of physical harm of contracting bird flu: in fact, heightened sanitation requirements are likely to decrease, not increase, the chance of exposure for workers. However, suspected cases of bird flu may lead to culls of entire farms, including healthy birds, which could have severe economic impacts for affected farms. Vigilance may carry significant economic costs to the vigilant.

A further challenge is that, unlike some other microlevel acts of vigilance, like keeping an eye on your bag in a public space to ensure it is not stolen, proper vigilance from poultry farmers is a collective endeavour. Farmers face a coordination problem, with individual farms facing some disincentive to act with vigilance—for fear of a cull at their farm, and in the knowledge that outbreaks at other farms causing supply shortages may mean higher prices for their own produce—while at the same time having a collective interest in safety. If only a small number of farms operate through vigilance practices, it increases the risk of significant disease spread, creating risks to them all. This suggests a benefit to farmers of legal enforcement: it may make it more likely that their peers take the necessary steps for collective safety.

The risk of disease spread suggests several reasons that poultry workers have for fulfilling their duties of vigilance. The first is the obvious general interest that all citizens have in preventing a bird flu pandemic. The second is their own economic interest in taking steps to prevent an outbreak on their farm. The third is their particular duty of welfare to the animals in their care. The fourth is the fact that their professional role means they are well positioned to fulfil biosecurity vigilance requests in a way that their fellow citizens are not. These final two reasons provide an answer to why it is permissible to require them to take mitigation responsibilities as well as reporting ones. Like the security guard with responsibilities to protect the warehouse they are guarding, farm

workers have a particular role-responsibility to look after the animals in their care that a regular citizen does not, and could not have. That they occupy a special position to fulfil these societally important duties is itself good reason to impose them.

Another important normative factor is who is making the request. If a random passer-by demanded farm workers report outbreaks, this request would not be binding. It needs to come from a relevant and recognised authority: a public health or government agency whose requirements the farm's operations are subject to. This is primarily because only these authorities are well placed to fulfil obligations of reciprocity towards the vigilant.

One such obligation is the requirement to support those they ask to be vigilant when they are taking on risks in doing so. In this case, reciprocity may require financial subsidies for biosecurity measures or financial compensation if livestock need to be culled. Another is the obligation to use the time, resources and opportunity provided by the vigilant to monitor, prepare for and take steps to prevent the harm being guarded against. In the absence of such measures, the moral (if not legal) obligations of farm workers are weakened in one sense: they have less reason to think that their efforts will help fulfil the general interest in avoiding a bird flu pandemic. Nevertheless, a failure of vigilance on the part of central authorities does not exhaust the workers' own role responsibilities towards the welfare of animals in their care.

But these references to animal welfare nod to the elephant in the room. Vigilance on a macrolevel represents the attempt to continue with at least some potentially hazardous activities while taking preventive steps to mitigate their risks. The cramped and unsanitary conditions of factory farming create significant risk of avian disease spread and subsequent pathogen spillover into human populations.²⁷ This fact alone creates some obligations of vigilance for poultry workers: they are part of a system that makes the risks they are asked to be vigilant of more likely.

More than this, however, intensive poultry farming is a fundamentally harmful practice to the welfare of animals and the environment.²⁸ The harms to poultry welfare of being confined to cramped and overcrowded sheds are well established. The deaths they may face to prevent a bird flu outbreak can be equally horrifying: past culls of livestock suspected of bird flu in the USA have involved ventilation shutdown, which kills poultry by sealing off the airflow to poultry sheds and increasing temperatures to lethal levels. One worker involved in a 2022 cull remarked, "They cooked those birds alive."²⁹ These harms exist to support humanity's ever-increasing appetite for meat consumption, a major contributory factor to the climate emergency.³⁰ It is necessary to ask whether this practice is worth sustaining alongside an apparatus of vigilance to limit pandemic risk or whether it is so harmful that it should be abandoned entirely.

This question is even more pressing because of the financial incentives of the poultry industry that make

proper vigilance more challenging. One way for governments to support biosecurity efforts would be to offer vaccines for poultry to stop the spread of disease. But the poultry meat industry—whose birds are less genetically susceptible to the virus than egg laying hens—is opposed to vaccination because of concerns that vaccination could mask infection and bring the virus across borders, thus threatening billions of dollars in international trade deals.³¹ Here, microlevel vigilance is hampered by macrolevel economic concerns.

This is indicative of a complex relationship between the macro and micro levels. Governments may make requests or demands of individual farmers, but the nature of these requests may be influenced by the pressures of the poultry industry. Individual health officials may work committedly to address the spread of bird flu, but they may be hampered by institutional inertia. Turning to the USA, sources suggest that since the inauguration of Donald Trump on 20 January 2025, two federal agencies responsible for monitoring and responding to the bird flu outbreak have withheld reports while cancelling congressional briefings and meetings with state health officials.³² Since then, over 600 CDC employees have been fired from the agency, including employees working on the government's infectious disease response, including bird flu.³³ Individual poultry workers may still be bound by legal reporting requirements and their normative and legal obligations to the birds in their care, but they would have no normative obligations grounded in playing a part in a coordinated public health response if their acts of vigilance were to go unheeded. There is no point in ringing the alarm if the fire department has been disbanded. This suggests that the ethics of both making and following microlevel vigilance requests cannot be fully assessed without an understanding of the wider political and economic contexts in which those requests are made.

TOWARDS AN ETHICS OF VIGILANCE

What follows from this discussion is a series of ethical questions public health authorities must ask themselves when making vigilance requests of citizens. These concern two overarching and related questions. First, should health authorities practise vigilance? And second, what do they owe individuals asked to be vigilant?

The first set of questions focuses on the macrolevel and concerns the obligations of states and government health authorities to institute practices of vigilance. They are less focused on the extent of health authorities' particular obligations to the individual citizens enlisted in vigilance requests than on the impersonal duties to impose these demands at all. As such, this first set of questions is broadly consequentialist in nature, concerning the risks and benefits of different courses of action, including status quo persistence, blanket prohibition or the maintenance of vigilance. If impersonal welfarist concerns justify practising vigilance, health authorities must then

turn to the microlevel and consider their obligations to any individual citizens made subject to vigilance requests. These obligations are not just a function of the overall benefits of practising vigilance, but concern the particular vulnerabilities and responsibilities of those asked to be vigilant. I shall now consider each set of questions in turn.

Should we practise vigilance? If so, should ordinary citizens be involved?

Is the 'risk' against which we require vigilance actually normatively undesirable?

In the case of AMR, for example, the answer to this first question is obvious: yes, a world without effective antibiotics would be normatively undesirable. Why even bother asking it? Because it is possible for a state to be vigilant in pursuing entirely undesirable ends: the suppression of political dissent, for example. While a totalitarian regime is unlikely to stop in its tracks if it asks itself this question, a level of reflexivity may be valuable for democratic states who might risk overreach in pursuing public health vigilance. For example, a public health authority considering placing restrictions on children's use of digital technology must carefully consider whether such use is harmful to their physical and mental well-being—a question currently the subject of heated contention³⁴—before doing so. Some questions in public health decision-making will be more difficult than deciding whether we should attempt to prevent pandemics or AMR.

Should we simply stop the dangerous practice altogether?

Vigilance is a response to risk. Supposing a practice brings with it dangers, we must ask whether it is worth persisting with at all. If the dangerous practice is foreclosed entirely, then substantive vigilance—beyond monitoring to ensure the practice is not pursued—is not required. You do not need a security guard to check for burglars if you demolish the warehouse.

For some practices that may require vigilance, the answer may be a resounding yes: nuclear power is going to be essential in the green transition, and its risks are manageable and limited. Others will be more uncertain: are the scientific benefits of gain-of-function (GOF) research sufficient to justify maintaining vigilance apparatus to stop lab leaks or should the practice just be abandoned altogether? The previous section has provided several reasons—on the grounds of environmental and animal welfare—why factory farming is not a practice worth being vigilant to protect. Of course, any democratic government convinced by those arguments would still face considerable obstacles to ending the practice: resistance from the powerful dairy lobby, lost votes from carnivorous voters and the economic shock of closing a profitable industry and putting an entire sector out of work. Such questions are complex because they concern wider societal interests beyond the particular crisis vigilance aims to prevent. But the temporal requirements of vigilance—that it is an attempt to prevent negative

outcomes—mean that considering the desirability of pursuing risky actions goes hand in hand with considering the necessity of vigilance.

How can vigilance be pursued effectively?

Sometimes vigilance could be pursued effectively within a single nation, for example, the possibility of banning social media use for children within a particular country. This policy could be enacted even if other nations did not do the same. But sometimes they concern challenges that are global in nature. For example, even policies that could be instituted nationally, like a ban on factory farming, do not stop the threat of spillover infection that could spread to that nation unless other countries do the same. Sometimes national governments and health authorities will be faced with collective action problems, where being the only nation to regulate a practice is individually disadvantageous in the absence of unified decision making to advance proper vigilance. Full vigilance may therefore require international cooperation, a significant challenge in an era of declining multilateralism and the weakening of transnational organisations.

A further example of the political challenges health authorities must consider when instituting vigilance practices is institutional fatigue and atrophy. A common pattern across public health is the establishment of an infectious disease vigilance apparatus following a crisis (for example, the 2002 SARS outbreak) and then the gradual diminishment of such programmes as the crisis that precipitated its development fades further in the rear-view mirror.³⁵ Part of setting up a vigilance apparatus therefore requires making clear what conditions it operates under, when it must be sustained and under what conditions it could be rolled back.

What will be done in response to vigilance?

Vigilance efforts are wasted in the absence of a response to warning signs. Governments therefore have an obligation to plan for what action they will take when reports of concerning activity are made. For example, a state must have clear protocols in place for responding to a potential humanitarian crisis if an earthquake early warning system is triggered. The nature and extent of this response will be dependent on the severity of the threat vigilance is guarding against. This is also important on a microlevel. Any vigilance efforts undertaken by citizens are wasted in the absence of a response from the macrolevel. The obligations of the vigilant to promote societal well-being are weakened if there will be no state coordination in response to it. But should citizens be involved at all?

Would the risks of involving citizens in vigilance practices outweigh the benefits?

Supposing vigilance is judged desirable, governments must then assess the risks of making vigilance requests of citizens. Risks may impact individuals or broader communities. Governments must also consider the special obligations they have to prevent harm to their citizens, a

non-consequentialist concern that may outweigh the broader societal benefits of involving them in vigilance. Suppose a public health authority is considering asking individuals to report on the behaviour of their fellow citizens during an infectious disease outbreak. They must weigh up the possible risks to individuals' physical safety from reporting on their neighbours with the seriousness of the disease and its potential spread, before making such a vigilance request. They must consider whether such requests would be counterproductive, for example, through undermining solidaristic bonds sufficiently that the overall pandemic response is undermined. And they must also take into account the more difficult to measure cost of reconceptualising ordinary everyday experiences as risk factors for catastrophic harms.¹

Properly answering this first set of questions requires evidence gathering. This evidence gathering cannot be exhaustive: acting with vigilance is a form of action consistent with the precautionary principle's maxim that preventative action should be taken before we have conclusive knowledge of the risks of inaction. But it needs to be sufficient to justify instituting vigilance practices. First, because surveillance and intervention are expensive and resource intensive. And second, because any decision to involve ordinary citizens in vigilance without evidence that their role is necessary for public health fails to show them full moral respect as citizens: instrumentalisation without justification for the burdens asked of them is a form of objectification inconsistent with the principles of a democratic society. If the decision is made to go ahead with vigilance requests involving publics, questions of what in particular is owed to those citizens follow.

What do we owe the vigilant?

Would being vigilant be in their self-interest or expose them to the risk of harm?

This is a complex question and may encompass a wide variety of forms of benefit and harm. Vigilance requests may pose physical risks, possible social stigma or economic harms to individuals. But benefits and risks that are shared across a whole society should also be considered. For example, a farmer prohibited from using antibiotics on their farm animals has a share in the benefits of pursuing a future with limited AMR. And sometimes, pursuing vigilance may be in the interests of an individual even if it imposes costs on them, if the alternative would be foreclosing the practice that carries risk altogether: for example, imposing biosecurity requirements on factory farming rather than banning it. Our primary goal in making vigilance requests of individuals is to protect the overall well-being of society by preventing communally deleterious outcomes. But such requests are less demanding when acting in accordance with

¹I am grateful to Michael Wee for suggesting this particular form of harm.

them is something the individual has overall rational self-interest to pursue.

Do they have existing obligations that overlap with the obligations of vigilance being asked of them?

For example, a researcher has existing professional obligations to conduct research in a safe and responsible manner, placing substantial duties on them that other citizens do not possess, whatever state level restrictions are placed on GOF research. These concerns are separate from self-interest arguments: professional codes of conduct are intended to protect others from the actions of the professional, not just secure the interests of the professional themselves. But just as with self-interest, vigilance requests that align with an individual's voluntarily chosen existing responsibilities should be considered less burdensome.

Do they have a role in generating the risk that vigilance aims to prevent?

Poultry farmers are to some extent responsible for creating the risk of bird flu that vigilance is guarding against. This causal responsibility generates independent moral responsibilities to limit its dangers. Enforcement of these responsibilities through state regulation may increase the personal consequences of non-compliance but not the nature of the existing moral obligations. The greater the extent to which the risk is generated by the practice in question, the less burdensome state vigilance requirements should be considered.

Are they uniquely placed to practise vigilance?

Members of the public cannot simply walk onto a farm and remove antibiotics from animal feed to prevent AMR. Given the clear value of vigilance in this case, the unique position of livestock farmers strengthens their obligations to act. This point is distinct from the question of role responsibilities or causal responsibility for the threat. Instead, it is simply a matter of who is practicably able to fulfil the responsibility that there is a general societal interest in fulfilling. Being in a special position to fulfil such a socially valuable role provides more reason for those particular individuals to fulfil them. But it does not make those requests any less burdensome.

Should vigilance be compensated?

If the decision is made to proceed with vigilance requests in circumstances where potential harms to the vigilant are significant—considered alongside potential benefits for the vigilant, their existing obligations and particular role responsibilities—then there would be good grounds for providing compensation to individuals harmed through performing vigilance. This principle is grounded in obligations of reciprocity, where the state has a duty to provide assistance to individuals harmed in the pursuit of public health. The form of this compensation may vary depending on the nature of the risks the vigilant are exposed to. It may mean priority for medical treatment to those

who risk exposure to a virus, economic compensation for those financially harmed through performing vigilance or public recognition for individuals acting in the collective interest. Individuals should be made aware of any compensatory measures in advance, both as a sign of respect for their potential sacrifices and to motivate compliance with such measures. Compensation must be proportionate and not provide undue influence for individuals to take significantly greater risks than they would otherwise consider reasonable. For example, citizens should not be incentivised by financial benefit to seek out dead birds to report to the authorities as suspected bird flu cases. The goal is not to provide reward, but compensation for harm.

Should vigilance be legally enforced?

It is possible for governments to recommend, but not enforce, vigilance. The question of whether there should be legal consequences for failures of vigilance is a function of several of the previous questions on a macro and micro level. The more serious the threat, the more significant the responsibilities of individuals enlisted to prevent it and the more useful legal threats would be in securing compliance, the greater the case for legal enforcement.

CONCLUSION

This paper first referred to the sociological literature to discuss and clarify the differences between vigilance, surveillance and other concepts in public health ethics. In doing so, it established the need for specific work on the ethics of vigilance. It then analysed the case study of bird flu and poultry workers to establish a series of questions that must be answered by any government or health authority considering instituting practices of vigilance and making vigilance requests of publics. Further conceptual work in the ethics of vigilance in public health could analyse the above questions in more depth and consider their application to different public health contexts. Work in empirical bioethics³⁶ could directly engage with those asked to be vigilant on their perspectives on their moral responsibilities. Researchers could also turn to different disciplines to consider how they consider the ethics of risk management, for example, the literatures in climate mitigation and adaptation,³⁷ disaster management³⁸ and artificial intelligence (AI) safety,³⁹ to cast further light on the ethics of vigilance in public health.

Acknowledgements I am grateful to the helpful feedback of colleagues at the University of Oxford's Ethox Centre, to whom I presented an in-progress version of this paper.

Contributors This work is entirely the product of the sole author and guarantor, JW.

Funding This work was supported by the Wellcome Trust, 221719/Z/20/Z

Competing interests None declared.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data sharing not applicable as no datasets generated and/or analysed for this study.

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REFERENCES

- DEFRA, APHA. Bird flu (avian influenza): latest situation in England. GOV.UK; 2026. Available: <https://www.gov.uk/government/news/bird-flu-avian-influenza-latest-situation-in-england> [Accessed 07 Jan 2026].
- APHIS. Confirmations of highly pathogenic avian influenza in commercial and backyard flocks. USDA; 2026. Available: <https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/commercial-backyard-flocks> [Accessed 07 Jan 2026].
- CDC. H5 bird flu: current situation. 2026. Available: <https://www.cdc.gov/bird-flu/situation-summary/index.html> [Accessed 07 Jan 2026].
- CDC. First H5 bird flu death reported in United States. 2025. Available: <https://www.cdc.gov/media/releases/2025/m0106-h5-birdflu-death.html> [Accessed 07 Jan 2026].
- CDC. Highly pathogenic avian influenza A(H5N1) virus: interim recommendations for prevention, monitoring, and public health investigations. 2024. Available: <https://www.cdc.gov/bird-flu/prevention/hpai-interim-recommendations.html> [Accessed 07 Jan 2026].
- UKHSA. What is bird flu and how are we protecting people against it in the UK? GOV.UK; 2024. Available: <https://ukhsa.blog.gov.uk/2024/12/03/what-is-bird-flu-and-how-are-we-protecting-people-against-it-in-the-uk/> [Accessed 07 Jan 2026].
- DEFRA, APHA. Report dead wild birds. GOV.UK; 2024. Available: <https://www.gov.uk/guidance/report-dead-wild-birds> [Accessed 07 Jan 2026].
- Michigan Department of Agriculture and Rural Development. Vigilance urged as bird flu risk rises with fall migration. Sooleader.com; 2025. Available: <https://www.sooleader.com/local-news/vigilance-urged-as-bird-flu-risk-rises-with-fall-migration-11225275> [Accessed 07 Jan 2026].
- DEFRA, APHA. Bird flu (avian influenza): how to spot and report it in poultry or other captive birds. GOV.UK; 2022. Available: <https://www.gov.uk/guidance/avian-influenza-bird-flu> [Accessed 07 Jan 2026].
- APHIS. NVPAP reference guide: notifiable diseases and conditions. USDA; 2025. Available: <https://www.aphis.usda.gov/nvap/reference-guide/emergency-management/notifiable-diseases> [Accessed 07 Jan 2026].
- DEFRA, APHA. Bird flu: rules in disease control zones in England. GOV.UK; 2025. Available: <https://www.gov.uk/guidance/avian-influenza-bird-flu-cases-and-disease-control-zones-in-england> [Accessed 07 Jan 2026].
- 2024 California code. CA food & agri code § 9701. Justia Law; 2024. Available: <https://law.justia.com/codes/california/code-fac/division-5/part-1/chapter-3/article-8/section-9701/> [Accessed 07 Jan 2026].
- Klingler C, Silva DS, Schuermann C, et al. Ethical issues in public health surveillance: a systematic qualitative review. *BMC Public Health* 2017;17:295.
- Weir L, Mykhalovskiy E. *Global public health vigilance: creating a world on alert*. New York: Routledge, 2010.
- Williams J, Mayes C, Flint-Peterson E, et al. Vigilance in infectious disease emergencies: Expanding the concept. *Soc Sci Med* 2024;344:116648.
- BTP. See it. Say it. Sorted. 2025. Available: <https://www.btp.police.uk/police-forces/british-transport-police/areas/campaigns/see-it-say-it-sorted/> [Accessed 07 Jan 2026].
- Dawson A, Verweij M. Solidarity: a Moral Concept in Need of Clarification. *Public Health Ethics* 2012;5:1–5.
- Tegama N, Natukunda J, Brown IAF, et al. Can solidarity in global health curb the next outbreak? A commentary on mpox. *BMJ Glob Health* 2025;10:e018116.
- Weed DL. Precaution, prevention, and public health ethics. *J Med Philos* 2004;29:313–32.
- Mäder JA, Staehelin J, Peter T, et al. Evidence for the effectiveness of the Montreal Protocol to protect the ozone layer. *Atmos Chem Phys* 2010;10:12161–71.
- Nordgren A. Pandemics and the precautionary principle: an analysis taking the Swedish Corona Commission's report as a point of departure. *Med Health Care Philos* 2023;26:163–73.
- Faden R, Bernstein J, Shebaya S. Public health ethics. Stanford Encyclopedia of Philosophy; 2020. Available: <https://plato.stanford.edu/Entries/publichealth-ethics/> [Accessed 07 Jan 2026].
- Johnson T. Stewardship and social justice: implications of using the precautionary principle to justify burdensome antimicrobial stewardship measures. *Monash Bioeth Rev* 2024;42:1–15.
- Johnson T, Jamrozik E, Hurst T, et al. Ethical issues in Nipah virus control and research: addressing a neglected disease. *J Med Ethics* 2024;50:612–7.
- Smith MHJ, Earl J, Dawson L. The Ethics of Personal Behaviors for Preventing Infectious Diseases in a Post-COVID-19 Pandemic World. *Public Health Rep* 2023;138:822–8.
- Hoven MA. Reasonable limits to public health demands. In: Dawson A, Verweij M, eds. *Ethics, prevention and public health*. Oxford: Clarendon Press, 2007: 129–44.
- Hayek MN. The infectious disease trap of animal agriculture. *Sci Adv* 2022;8:eadd6681.
- Anomaly J. What's Wrong With Factory Farming? *Public Health Ethics* 2015;8:246–54.
- McGreal C. US egg factory roasts alive 5.3m chickens in avian flu cull – then fires almost every worker. The Guardian; 2022. Available: <https://www.theguardian.com/science/2022/apr/28/egg-factory-avian-flu-chickens-culled-workers-fired-iowa> [Accessed 07 Jan 2026].
- González N, Marqués M, Nadal M, et al. Meat consumption: Which are the current global risks? A review of recent (2010–2020) evidences. *Food Res Int* 2020;137:109341.
- Nathan-Kazis J. Bird flu is threatening chickens. Why farmers don't want a vaccine. Barrons; 2023. Available: <https://www.barrons.com/articles/bird-flu-vaccine-egg-prices-chickens-65602fd9> [Accessed 07 Jan 2026].
- Reuters. Trump disrupting US bird flu response as outbreak worsens. The Guardian; 2025. Available: <https://www.theguardian.com/us-news/2025/feb/14/trump-bird-flu-response> [Accessed 07 Jan 2026].
- Halpert M. Top US health agency permanently fires 600 CDC employees. BBC News; 2025. Available: <https://www.bbc.com/news/articles/cx29rdpg45xo> [Accessed 07 Jan 2026].
- Harverson J, Paatsch L, Anglim J, et al. Digital technology use and well-being in young children: A systematic review and meta-analysis. *Comput Human Behav* 2025;168:108660.
- Witek TJ, Schwartz R. The Evolution of Vigilance and Its Atrophy Preceding the COVID-19 Global Pandemic. *Front Public Health* 2022;10:789527.
- Davies R, Ives J, Dunn M. A systematic review of empirical bioethics methodologies. *BMC Med Ethics* 2015;16:15.
- Wang F, Harindintwali JD, Wei K, et al. Climate change: Strategies for mitigation and adaptation. *Innov Geosci* 2023;1:100015.
- Comfort LK. Risk, security, and disaster management. *Annu Rev Polit Sci* 2005;8:335–56.
- Falco G, Shneiderman B, Badger J, et al. Governing AI safety through independent audits. *Nat Mach Intell* 2021;3:566–71.