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"Lives versus livelihoods": Conflict and coherence between policy objectives in the COVID-19 pandemic

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ABSTRACT

Many policies were put in place during the COVID-19 pandemic in the United States to manage the negative impact of the coronavirus. Limiting severe illness and death was one important objective of these policies, but it is widely acknowledged by public health ethicists that pandemic policies needed to consider other factors. Drawing on semi-structured interviews with 38 people across 17 states who participated in the state-level COVID-19 pandemic policy process, we examine how those actors recounted their engagement with four different objectives over the course of the pandemic: protecting public health with respect to COVID-19 (which we refer to as pathogen-focused disease prevention), protecting the economy, promoting the public's broader health and wellbeing, and preserving and restoring individual freedoms. We describe the different ways that pathogen-focused disease prevention was thought to have conflicted with, or to have been coherent with, the other three policy objectives over the course of the pandemic. In tracing the shifting relationships between objectives, we highlight four reasons put forward by the participants for why policy changes occurred throughout the pandemic: a change on the part of decisionmaker(s) regarding the perceived acceptability of the negative effects of a policy on one or more policy objectives; a change in the epistemic context; a change in the 'tools in the toolbox'; and a change in the public's attitudes that affected the feasibility of a policy. We conclude by considering the ethical implications of the shifting relationships that were described between objectives over the course of the pandemic.

1. Introduction

Many policies were put in place during the COVID-19 pandemic in the United States (US) to manage the negative impact of the coronavirus. Limiting severe illness and death was one important objective, but it is widely acknowledged by public health ethicists that pandemic policies needed to consider other important priorities (for example, see Bernstein et al., 2020; Gostin and Hodge, 2020; Studdert and Hall, 2020). Throughout the pandemic, there were times—particularly during the early days of lockdowns, stay-at-home orders, and mask mandates—where containing the direct health effects of the pathogen was widely thought to conflict with protecting the economy and people's livelihoods, promoting the public's broader health and wellbeing (for example, mental health and social wellbeing), and preserving individual freedoms. The character of the conflict between these objectives depended on numerous factors, such as the public's attitudes towards COVID-19 mitigation measures.

This paper starts from the proposition that it was ethically imperative for COVID-19 pandemic policymakers to explicitly consider numerous objectives in addition to protecting the public from the direct effects of COVID-19. While reducing the morbidity and mortality of COVID-19, and maintaining hospital capacity, were important objectives, many of the policies put in place to advance those objectives had harms that should have been considered in policymaking decisions. This is in line with widely cited public health ethics frameworks, which call for policies to not only advance the public's health but to do so in ways that

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respect other interests and rights, minimize burdens, and attend to considerations of justice (see Childress et al., 2002; Kass, 2001; Marckmann et al., 2015). However, there is a gap in the literature with respect to how public health policymakers and advisors address these different objectives in practice.

Since much of government policymaking in response to the pandemic occurred at the state and not the federal level in the US (Hale et al., 2021), we focus on state-level policymaking processes. There was variation across states as to the types of policies that were put in place, and for how long (Hallas et al., 2020). Drawing on semi-structured interviews with 38 people across 17 states who participated in the state-level COVID-19 pandemic policy process, in this paper we contribute to the understanding of these policymaking processes by examining the accounts (Orbuch, 1997) of those involved in the COVID-19 pandemic response regarding their past (and/or present) understanding of the relationship between aligning and/or competing pandemic policy objectives. We outline the different ways that pathogen-focused disease prevention was described as having conflicted with, or having been coherent with, the objectives of protecting the economy, promoting the public's broader health and wellbeing, and preserving and restoring individual freedoms. In tracing the shifting understandings of the relationships between objectives, we highlight the participants' accounts regarding four reasons why policy changes occurred throughout the pandemic: a change on the part of decision-maker(s) regarding the perceived acceptability of the negative effects of a policy on one or more policy objectives; a change in the epistemic context; a change in the 'tools in the toolbox'; and a change in the public's attitudes that affected the feasibility of a policy. We conclude by considering the ethical implications of the shifting relationships that were described by the participants between objectives over the course of the pandemic.

2. Literature review

Empirical examinations of public health in practice have detailed how officials and experts understand the boundaries of their mandate and their role (Esmonde et al., 2024; Pedersen et al., 2017), how they engage in intersectoral partnerships (Perkins et al., 2020), how social determinants of health are or are not addressed (Decoteau and Garrett, 2022), and how public health emergencies and concerns are constructed (Gislason, 2013). This paper similarly takes a social science approach to the process of policymaking in a public health emergency, aiming to understand how those involved in these efforts describe, in retrospect, how they understood the shifting relationships between different policy objectives.

Throughout the pandemic, state governments had to make difficult choices when health promotion conflicted with other objectives. These challenges have been highlighted by numerous scholars (see Bavli et al., 2020; Dupont and Galea, 2022; Green and Venkataramani, 2022; Rieder et al., 2020). For example, Dupont and Galea (2022) described the difficulty of managing competing objectives with respect to legal proceedings. On the one hand, the duty to protect defendants, lawyers, witnesses, and jury members from COVID-19 infections often led to lighter trial schedules, social distancing in courtrooms, and virtual court hearings. However, these mitigation measures interfered with other rights: for example, lighter trial schedules interfered with the right to a trial without delay, while virtual court hearings and social distancing in courtrooms may have enabled jurors to become distracted, thus potentially influencing judgments (Dupont and Galea, 2022).

How members of the public evaluated policies aimed at achieving or balancing these objectives was shaped by factors such as the strength of one's identification with their nation, trust in the government, and knowledge about COVID-19, amongst other factors (Jørgensen et al., 2021; Van Bavel et al., 2022). A survey of US and peer country residents exploring how individuals differently valued civil liberties, health security, and reductions in socioeconomic inequities and outcomes in June and July of 2020 suggested that they were more favourable to policies that placed fewer restrictions on their liberty (Amirkhanyan et al., 2023). However, the authors of this study suggest that survey respondents found that all these values were important (albeit to different degrees), rather than "seeking one, such as effectiveness, at the expense of others" (p. 13).

Numerous public health ethics recommendations and frameworks provide guidance on how to address potentially competing objectives and values in the pandemic (for example: Bernstein et al., 2020; Gostin and Hodge, 2020; Kahn et al., 2020; Mello and Wang, 2020; Studdert and Hall, 2020), in public health more generally (Childress et al., 2002; Kass, 2001; Marckmann et al., 2015), and in health construed broadly, including non-human health (Rock and Degeling, 2015). However, little is known empirically about how officials and experts balance multiple policy considerations in their deliberations. In this paper we focus on this gap in the literature, by examining the retrospective accounts of those involved in state-level COVID-19 pandemic policymaking of the deliberations that occurred. In so doing, we contribute to the empirical public health ethics literature and to scholarly understandings of pandemic ethics and preparedness.

3. Methods

3.1. Data and sampling

Interviews with 38 participants form the basis of this paper (see Table 1). Participant recruitment occurred from February to December 2022. Recruitment and semi-structured interviews occurred in two phases.

1) *Interviews with state government officials, state government advisors, and external experts involved in (or knowledgeable about) the state-level pandemic policymaking process across nine states that were selected for their political and geographic diversity.* Potential participants were identified through outreach to governor's offices, snowball sampling, and Internet searches. Recruitment emails were sent to an average of 17 people in 9 states. This led to 25 interviews with 26 individuals across 6 states (one participant was interviewed twice, and two interviews were conducted with two participants together).

Table 1
List of participants and their roles in pandemic policymaking.

Interviewee Number	Interviewee Role
100-1; 100-2; 108; 119; 120; 123	State government official
101	Senior advisor to a governor
102	Former chief of staff to a governor
103; 105	Government official who was an advisor to a governor
104-1; 104-2	State public health leadership
106; 118	External advisor to a governor
107; 112	State public health official
109	Government official and vaccine task force lead
110	External member of a state-level COVID-19 task force
111	State-level COVID-19 task force member who worked at a large healthcare institution
113; 121; 122; 202-1	State health official
114	Person outside of state government involved in the state-level COVID-19 response
115	Local health official and health company CEO who interacted with state officials in the COVID-19 response
116	External public health advisor to a governor
117	Chief of staff to a governor
200; 201; 202-2; 203, 204; 205; 206; 2–7; 208; 209; 210	State epidemiologist

Table 2
The number of participants in states that are represented by a governor of each party affiliation, and the number of participants in states of different political complexions based on the 2020 presidential election electoral college ratings.

Political information	Number of participants
Republican governor	27
Democrat governor	11
Total	38
Red state	17
Purple state	2
Blue state	19
Total	38

The states in which most of the participants were based were primarily small to medium in population size.

2) *Interviews with state epidemiologists, who could come from any state.* Through this process 11 interviews were conducted with 12 individuals from 11 states (two participants were interviewed together). Of those 12 participants, 11 were state epidemiologists and one was a state health official who was interested in participating. Prospective participants were identified using Internet searches of both official government websites and secondary sources.

The political affiliation of the state governor (Republican or Democrat) at the time of the interview, and whether the state was a "red" (Republican), "blue" (Democrat), or "purple" (a "swing state" that is neither strongly Republican nor Democrat) in the 2020 presidential election[2] is provided in aggregate in Table 2.

Most of the time the party affiliation of the governor aligned with the political complexion of the state (i.e. a Republican governor in a red state). However, there were ten participants with a Republican governor in a blue state, and two participants with a Democrat governor in a purple state. Most of the participants were in states with Republican governors, so the results shed more light on policymaking processes in those states. However, the political complexion of states was much more balanced, with an almost even split between red and blue states.

Recruiting participants was challenging; most of the prospective participants that were contacted did not respond to our invitation. Following the interviews, some of the participants also did not want us to use some specific statements that they had made due to concerns that the information contained in the quote might reveal their identity to their colleagues or to others. These concerns are very understandable; significant numbers of public health officials have faced pandemic-related harassment, and some were removed from their positions due to public outcry about restrictions during the pandemic (Ward et al., 2022). Additionally, in some instances the participants criticized people with whom they had worked or were continuing to work, and they did not wish these assessments to become public. Some of the participants were continuing to serve in the same role in state government, while others had left that role or that role had been discontinued.

Our ability to maintain confidentiality was important for participant recruitment and retention, as well as ethically important given the possibility for harassment or reprisal from their employers should content from their interviews come to be associated with them. To this end, to maintain confidentiality we will not identify the state in which each participant was working, and throughout the manuscript we will be using the non-gendered pronoun "they" to describe participants and the governors of the states in which they worked. For the first set of interviews, at the end of each interview participants were asked how they would like for us to refer to their professional role in project outputs, given that for many of them they could be identifiable if their job title was given. For these interviews we use the descriptor agreed to by these participants; in many instances, a general descriptor is used such as "state health official", "advisor to governor," or "task force member." Other interviewees who were less concerned about being identified gave specific job titles. When permitted by the participants, we indicate whether a participant was a government official or external to government. For the second set of interviews, those who were state epidemiologists are referred to as state epidemiologists.

An interview guide was used covering a range of topics, including policy decision-making processes and participants; how policymakers managed multiple policy objectives and trade-offs between them; and whether ethics guidance was used in the policy response. Since the participants frequently had different insights into different policy decisions (due to serving in their role at different times throughout the pandemic, or being in different states with varying policies), some questions were altered to ask about the policy decisions to which they would have had access. Examples of such policies include policies restricting or permitting in-person religious worship, COVID-19-specific unemployment insurance policies, limitations on gatherings, mask and vaccine mandates, and prohibitions on vaccine mandates. There were many policies that are morally relevant, as well as relevant to public health (such as school closures or eviction moratoria—see Leifheit et al., 2021). While there were places in the interviews where the participants brought up school closures and economic policies on their own, and in recognition that policies in all sectors can influence health (Kickbusch et al., 2008), there was not enough time in the interviews to bring up all the policies that were of interest to the research team. The interview guide was developed with feedback from experts on both semi-structured interviews and state government/pandemic policy.

Interviews were conducted over Zoom or a similar platform and were recorded and transcribed verbatim using transcription software or a transcription company (except for interview 201 where notes were taken instead of a recording at the request of the interviewee). Interviews ranged in length from 36 min to 1 h and 34 min, with most interviews being approximately 60 min. Interviews were conducted by multiple members of the research team. All procedures were approved by the Johns Hopkins Bloomberg School of Public Health Institutional Review Board.

We invited participants to consider a range of objectives in pandemic policymaking, with specific prompting to consider the following four objectives: public health, the economy, individual freedoms, and equity. These objectives were selected by the research team. In the interview guide,[3] participants were also invited to offer additional policy objectives that they did not feel were encompassed by the four stated objectives. Few added additional objectives in response to this prompting, suggesting that the four objectives were a good basis for the discussion.

[2] The colour of the states was determined by the Cook Political Report 2020 Electoral College Ratings (2020), where any state that was "leaning" or a "toss-up" was designated a purple state, while "solid" and "likely" states were designated red or blue.

[3] The interview guide included the following questions: "With COVID policies, there are multiple objectives that come into play. Controlling the coronavirus and doing so effectively is one major objective. Managing the economy and preventing economic harm is another objective. Another objective is having an equitable or fair COVID response – a response in which the burdens of the pandemic and the burdens of policies are as fairly distributed as possible. Another objective is to respect freedom. At some points these various objectives may be aligned with each other, and at other points they come into conflict. We're interested in how these different objectives were dealt with in the COVID-19 policymaking process.We've just suggested four key objectives for COVID-19 policymaking: controlling the coronavirus; managing the economy; having an equitable response; respecting freedom. Are there any additional objectives that were important, from your experience?How did these different objectives come into play with COVID policymaking?Did you feel that some objectives were more important than others? If so, which ones?Did you feel like any objectives came into conflict with one another? Perhaps that in prioritizing one objective, it set back other objectives?.

Participants were then asked about times when these objectives aligned, and times when they came into conflict. Many of the quotes in this paper are from those directed conversations with the participants, where they shared their recollection of the process of making these trade-offs at the time and their reflections after the fact. Based on the interviews, we describe the relationship between three of the state objectives in the interview guide (pathogen-focused disease prevention, the economy, and individual freedoms) and an additional policy objective that emerged throughout interviews as a point of conflict (the public's overall health and wellbeing). Given space constraints and this paper's focus on conflict and coherence between policy objectives over time, we will not discuss equity here as it was not described in a conflict/coherence frame by the participants.

3.2. Data analysis

Throughout and following the interviewing process, data analysis proceeded following the approach of Miles et al. (2014). First, an initial code book of 126 codes was developed for first cycle coding. These codes were selected based on the research questions, the interview guide, and a read-through of the transcripts. The code book was validated using intra-rater reliability, whereby a research team member coded 5 interview transcripts and then later recoded these 5 transcripts after at least a week of time had passed. The overall unweighted Cohen's kappa based on character was 0.82 which was in the target range. This process was followed by second cycle coding, focusing on 16 codes related to: internal debates regarding policy; policy objectives related to controlling COVID-19, managing the economy, and preserving and restoring individual freedoms; and balancing multiple policy objectives. The final representation of conflict and coherence in policymaking objectives is reflective of an iterative process of coding, writing, theorizing, and returning to the transcripts to follow up on theories and emerging themes.

3.3. Methodology and representation

Two points of methodological clarification related to research representation are worth noting. First, as researchers we do not view ourselves as neutral observers who can objectively evaluate the participants' accounts in a value-free and detached manner. Researcher reflexivity is "the researcher's scrutiny of the research experience, decisions, and interpretations in ways that bring him or her into the process … includ[ing] examining how the researcher's interests, positions, and assumptions influenced his or her inquiry" (Charmaz, 2014, p. 344). In this paper, to engage in reflexivity, we make explicit the normative assumptions that informed this project. We think that policymakers are obligated to: a) recognize that public health is important, but that it is just one important consideration among others (including people's broader well-being, equity, and personal freedoms), b) acknowledge and consider the negative effects of public health policies under consideration or policies that have been enacted, and c) recognize when there are trade-offs between public health and other policy objectives, and make these trade-offs thoughtfully. Beyond this, evaluating specific policy decisions requires making a substantive normative judgment; making, explaining, and defending that kind of value judgment is beyond the scope of this paper.

Second, we do not view our participants as depicting the 'reality' of policymaking in their interviews. As in literature regarding the sociology of accounts (Orbuch, 1997), we acknowledge that the participants are reflecting on past events—from their perspective—and are telling stories about them. We use careful language throughout this paper to make this clear; for example, we state that the participants "described" a relationship between objectives, rather than that there "was" a relationship between objectives, to illustrate that the paper is based on the accounts of participants rather than a window into the realities of the relationships between objectives. However, the goal of this paper is not to probe why the participants shared the accounts that they did, or to ask why they did not share different accounts. Instead, we view their "accounts" as perspectives on a messy process of policymaking that can suggest how policymakers brought different objectives to bear while making decisions during a public health emergency.

The sociology of accounts has been drawn upon in social deviance literature to analyze how people who engage in stigmatized behaviours may, through their accounts or stories, rationalize or deflect blame from their actions (Orbuch, 1997). It is not our intention to cast the participants of this study in such a light. Of course, the participants may have had multiple motives for telling a particular account, which may include a desire to rationalize decisions that were made in the pandemic that were heavily criticized. Indeed, the decisions that were made were often polarizing and painful, and the stories that are told about those decisions likely reflect that experience. However, given what we have written above regarding the normative scope of this paper, we do not evaluate whether the participants' decisions were right or wrong at the time or in retrospect.

4. Results

This paper explores the participants' characterizations of the ways that pathogen-focused disease prevention was considered in relation to three other objectives: protecting the economy, promoting the public's broader health and wellbeing, and preserving and restoring individual freedoms (see Table 3). To do so, we follow three main threads: first, how the relationships between these objectives were differently understood by participants as being in conflict or in coherence with one another; second, how those relationships of conflict or coherence between objectives were thought by the participants to have changed over time; and third, *why* those relationships between objectives, and policies related to those objectives, were thought by the participants to have changed over time.

We characterize four often overlapping reasons that were described by the participants as having caused a policy change (or for a change in the policies that were recommended), or that caused changes to be perceived in the relationships between four policy objectives (see Table 4). First, we describe instances where there was a change for the decisionmaker(s) regarding the perceived acceptability of the negative effect of a policy on one or more other policy objectives. For example, one might have thought that protecting the public's health with respect to COVID-19 initially had justified the economic harms that resulted from forced business closures, but later decided that those harms could

Table 3
List of policy objectives examined in this paper.

Policy Objective
1. Pathogen-focused disease prevention
2. Protecting the economy
3. Promoting the public's broader health and wellbeing
4. Preserving and restoring individual freedoms

Table 4
List of reasons for policy changes.

Reasons for Policy Changes
1. Change in the perceived acceptability of the negative effect of a policy on one or more policy objectives (i.e. deciding that the negative economic effects of forced business closures had become too great to justify a public health intervention)
2. Change in the epistemic context through a change in policymakers' understandings (i.e. learning that outdoor transmission rates are lower than indoor transmission rates, or learning that a policy was ineffective at achieving its aims)
3. Change in the 'tools in the toolbox' to prevent severe infections or mortality (such as vaccines and therapeutics)
4. Change in the public's attitudes that impacts the feasibility of implementing COVID-19 mitigation measures

not continue indefinitely and thus that policies needed to change accordingly. Second, we explore how a change in the epistemic context, or the understandings of policymakers, was described as having led to changes in policies. This could be in the form of an understanding of the virus itself, for example, through increased knowledge of how the virus is likely to be spread. Third, we analyze the described impact of a change in the 'tools in the toolbox' to combat COVID-19, such as the widespread availability of COVID-19 vaccines and therapeutics. Fourth, we discuss policymakers' assessments of public attitudes as an influencing factor for the apparent feasibility of implementing COVID-19 mitigation measures. For example, the public accepting a mask mandate can make the perceived relationship between pathogen-focused disease prevention more coherent with protecting the economy, while the public rejecting a mask mandate could heighten the perceived conflict between those objectives. In general, there was strong bipartisan support for many government-imposed shutdown measures in the early weeks of the pandemic (Pew Research Center, 2021), while over two thirds of those in the US supported all levels of government lifting all restrictions by the end of 2022 (Jackson et al., 2022). Furthermore, support for governors' management of COVID-19 has trended downward across US states, regardless of the political affiliation of the governor or of the state resident (Quintana et al., 2022).

In what follows, we examine the accounts of the participants regarding how these four reasons for policy changes shaped the policies that were put in place throughout the COVID-19 pandemic, and the relationships of conflict and coherence between the four objectives in pandemic policymaking. First, we focus on how the participants articulated a prioritization of pathogen control in the earlier days of the pandemic. We then discuss instances of perceived conflict and coherence between pathogen-focused disease prevention and 1) the economy, 2) the public's broader health and wellbeing, and 3) individual freedoms.

4.1. *In the early days of the pandemic, the objectives of limiting the spread of COVID-19 and protecting hospital capacity were prioritized over other objectives*

Interviewees usually stated that the objective that mattered most in the spring of 2020 was limiting the spread of COVID-19 to reduce COVID-19-related morbidity and mortality. Sixteen of the interviewees talked about the significance of protecting hospital capacity when discussing the relationship between the four objectives early in the pandemic (104-2; 105; 108; 110; 112; 113; 118; 121; 122; 123; 200; 201; 206; 207; 208; 209). One participant, a state public health official, described the weight of this consideration:

> Imagine if you had all the morbidity and mortality of the past two and a half years condensed into about six or eight months there, beginning in 2020. … You would not have had hospital capacity. So, women couldn't deliver in hospitals. Families in car wrecks wouldn't have trauma services. Five-year-olds who needed their appendix out wouldn't have that. People who need stents and ICU care and all that sort of thing, [couldn't get it]. When the first person died because they couldn't get into the hospital, that would be news. When the hundredth person died because they couldn't get into the hospital, that would result in what I like to call social dehiscence. It's a medical term. Sometimes you'll do a surgery, and you'll sew somebody back together, and then they will come apart. We call that dehiscence. That was what I cautioned the governor about. I said, if you run out of hospital capacity, people will panic. [The governor] took that very seriously. (112)

Protecting the hospital system during heightened periods of new variants, such as the Delta and Omicron waves, was also mentioned by interviewees. Of additional importance during this early period was protecting those most vulnerable from the effects of the virus (103; 107; 121; 122; 207). Multiple vulnerable groups were identified: the elderly, those who are immunocompromised or who have comorbidities, and members of racial minority groups, were mentioned.

In most instances, pathogen-focused disease prevention in the spring (and possibly summer) of early 2020 involved measures such as lockdowns, stay-at-home orders, closing non-essential businesses, mask mandates, and limitations in gatherings—the most restrictive policies implemented during the pandemic. A state government official explained how such policies were initially accepted in their state—or even undertaken voluntarily—while this was less the case later in the pandemic:

> And I do think for the most part that it was uncertain enough and people were scared enough early on that they were willing to accept decisions that limited capacity. For example, [someone I know] in the retail business … voluntarily, even though he wasn't directed to, reduced the number of shoppers that could come in because he wanted to keep his staff safe and his customers safe. I think early on, there was more understanding and willingness. And then as it dragged on, people lost their patience. They started to question more. And it became more difficult. … But early on in the pandemic, I think people knew that it was necessary. (105)

According to this participant, restrictive policies were more feasible early in the pandemic due to a greater level of acceptance by the public. This quotation also suggests that the public's acceptance of these measures may have also been higher because it was thought that the large-scale shutdowns would be short-lived. According to one advisor to a governor, "In the beginning, it was: we just need to slow the spread. From what they were seeing, I think it was a 15-day period of closing and people not being around each other, would help to do that" (103). The policy changes that followed—which are described in subsequent sections—unfolded in what the participants described as a changing epistemic context as well as a changing perception of the acceptability of the negative effects of the COVID-19 mitigation measures, as it became apparent that locking down for a couple of weeks was not going to end the pandemic and that the costs of the lockdown were building up.

4.2. *Conflict and coherence: pathogen-focused disease prevention and the economy*

The interviewees repeatedly stated that they recalled public health and the economy as having conflicted with one another, and that public health was initially prioritized over the economy. A former chief of staff to a governor explained their perspective on how the pandemic response unfolded over time:

> I would say that the goals change over time, and the importance of some goals tends to shift as the circumstances of the pandemic [shift]. I think of it like a fire, right? You're trying to put the fire out, but early on, you also want to make sure you're getting people out of the building. Once everyone's out of the building, your goals start to shift to stopping the fire. Your goal might be to stop the fire from spreading. All the while, you want to make sure no firefighters get hurt. The pandemic was a lot like that. The principal goal was always to save lives, right? … Particularly in that first eight-week period or so, [the question we asked was], is this action to help save lives? If it's not, we're not even going to consider it right now. *But, once we began to understand how the virus was beginning to exist, then you started to think more about some of those economic challenges.* (Emphasis ours; 102)

According to this interviewee, saving lives ("getting people out of the building"), preventing the spread of COVID-19, and protecting health care workers (the "firefighters"), were initially the top priorities. This fire analogy seems to have been borne out by the descriptions of other interviewees. Participants' accounts often sounded like this:

> At first it was, "We don't want people to die. How do we save people from the spread of this virus?" That was the number one, first priority. And as time moved on and that was still a priority, but then it came into play, "How are we going to make sure that our economic system does not crash? We have to weigh this." (103)

Five additional interviewees (111; 118; 120; 200; 210) echoed this sequence of events, stating that in the policy deliberations that they observed and/or participated in (meaning, not necessarily in their own evaluation of priorities) that public health was initially prioritized over the economy, but that this prioritization changed over time.

There were multiple reasons put forward for this shift. First, policymakers considered the impact of long-term economic shutdowns (103; 111; 121; 122), often judging that keeping those measures in place for the long-term would be too harmful. An advisor to a governor described these deliberations:

> You have to weigh the health and then you have to weigh the well-being of people. … You know, it was very clear that [health officials and experts] wanted to do everything they could to be as restrictive as possible, but there were other aspects that played into this. [Other advisors were reminding the governor] that there is a pandemic, but there are also people that will be homeless and won't have an income. And there are repercussions to all of these decisions. To be able to weigh those was difficult at times. (103)

One participant described discussions in their state as having characterized this tension as "lives versus livelihoods" (111). These responses show that the shift towards policies that allowed more businesses to open due to the negative impact of COVID-19 mitigation policies in the spring or summer of 2020 occurred as it became apparent that the pandemic was going to continue for some time and that the policies aimed at pathogen-focused disease prevention were too harmful to continue indefinitely. There may have also been a perception that public attitudes had become more opposed to restrictions on economic activity due to concerns about their livelihoods. While the severe impact of the economic restrictions put in place was clearly emphasized by many of the participants, the participants did not explicitly position poverty as a social determinant of health (aside from its relation to mental health, which is a point elaborated upon in the next section) or espouse a Health In All Policies approach that recognizes the interdependence of different sectors on health (Kickbusch et al., 2008).

Second, some participants saw the objectives of pathogen-focused disease prevention and protecting the economy as having become more coherent with one another due to a change in the epistemic context and more 'tools in the toolbox.' The role that emerging knowledge about the virus played in changing the perceived relationship between public health and the economy was explained by an advisor to a governor:

> Well, of course safety and protecting citizens was primary, but the understanding of the virus evolved. So then, *I think we began to understand that you can do certain things and not be exposed to risk*. And then it became more of a balance. How do we manage the virus and allow our businesses to survive, and be open, and make money? (105)

For example, a less-risky activity cited by this participant was the enjoyment of outdoor trails and outdoor dining. A state epidemiologist described an even greater shift following widespread vaccination and access to therapeutics: "Once the vaccines became available and therapeutics, they allowed us to not be as restrictive and helped the economy gradually open up again. It was like every week, every two weeks, every month, things changed" (209). Where there had previously been more conflict and trade-offs between policy objectives, the participants saw more coherence.

While much of this section describes a sense of conflict between public health and the economy, not every participant assessed the relationships between objectives, or how they were prioritized, in this same way. First, some of the participants (111; 113; 114) argued that protecting public health and protecting the economy were (at least in part) coherent, mutually constituting objectives in the early days of the pandemic. This was exemplified by a person outside of state government involved in the COVID-19 response, who described the positioning of "controlling the disease versus … the economy" as a "false dichotomy" since "the best way to protect your economy is to address [the disease]" (114). Another participant argued that public health measures keeping workers healthy would benefit the economy (111). Interestingly, there were no instances where the participants positioned public health and the economy as mutually constituting in the other causal direction, meaning that supporting people's economic circumstances would simultaneously address public health issues. Second, some participants from a state that did not have a lockdown at any point in the pandemic did not agree that the public's health was initially prioritized over the economy. An advisor to a governor from that state explained: "Our governor tried to be careful, protect citizens, at the same time to not shut down the state, and businesses, and education in a way that was punitive or that had a long-term negative impact" (105). While the previously quoted participant approved of how this balancing occurred, two other interviewees from that same state appraised those decisions—or the deliberations that led to those decisions— more critically. One such interviewee felt that from their vantage point there was never sufficient weight put on public health: "There were not conversations trying to weigh the different trade-offs. It was all assumed that it was the economy first." (106). They added that there were "people … that didn't necessarily believe there was an issue with the pandemic, and that it was overblown" (106). Another participant from that same state felt that public health perspectives were "highly discounted by some parties" (116) in favour of the economy. The relationships between policy objectives were clearly contested, amongst the participants as well as the public.

4.3. Conflict and coherence: pathogen-focused disease prevention and the Public's broader health and wellbeing

As the pandemic continued, the interviewees described an effort on the part of decision makers to assess the effects COVID-19 mitigation measures on the public's broader health and wellbeing. One participant stated that from their perspective "nobody knew … the incredible negative impact of some of those shutdowns and restrictions, and so forth," wondering "is that really a good trade-off in the end" (107) to promote the public's health while bringing about those negative impacts. However, one other participant challenged the assumption that the restrictions put in place in the pandemic were necessarily in conflict with promoting the public's health and wellbeing. This participant, who was a person outside of state government who was involved in the COVID-19 response, argued that the mental health impact of transmitting, contracting, or fearing contracting COVID-19 was also a mental health burden that should have been weighed:

> The big opportunity we missed is there was so much outrage about the mental health effects on kids of having to wear masks and of having them be isolated. Never a discussion about the mental health effects on these children who may be old enough to know they brought COVID home, and their parent or grandparent died. Or the mental health effects of COVID itself on them. There was no balanced discussion to allow us to really make decisions. (114)

Indeed, there is a debate as to whether the dichotomy between protecting the public from COVID-19 and preserving mental health is a false dichotomy, as stringent policies could have promoted mental health by decreasing deaths as well as anxiety about the pandemic (see Taquet and Harrison, 2022).

In general, however, it was thought that the relationship between pathogen-focused disease prevention and the public's broader health and wellbeing was initially one of significant conflict. For example, a

state government official explained the entangled impacts of pandemic policies, and how the considerations that went into making policy decisions changed over time:

> I'll just say our governor, [their] decisions were very much, we need to do what we need to do to protect the most people. *And as the pandemic went on*, considerations like the emotional impact of children not being in school or the economic impact of people not being able to utilize dining facilities, or the hospitality industry, also came into play. And I think it's just natural and understandable that you have to actually take into consideration those elements, especially when you have tools. That's what this policy group was doing: *we had to evolve our guidance as more tools became available to us to be able to manage the impact of the pandemic. We had masks and we had PPE, and then when vaccines became available, we had a tool in our toolbox to be able to restart.* (emphasis ours; 108)

In this quotation, this state official is highlighting how from their vantage point, more "tools in our toolbox" made "protecting the most people" more coherent with other considerations like reopening schools and businesses. They are also suggesting that the perceived acceptability of the negative impacts of COVID-19 restrictions changed over time, as the emotional and economic impacts of those measures "came into play."

Two institutions were discussed by interviewees as having a bearing on the public's broader health and wellbeing: houses of worship and schools. The role of houses of worship in promoting mental health and spiritual wellbeing was discussed by three interviewees (103; 110; 118). For example, an advisor to a governor explained their state's decision to allow houses of worship to have in-person services in 2020:

> When you are in the middle of a crisis or you're suffering, what do you do? You turn to [religion]. You could have never been in church for the last ten years, and all of a sudden you have this massive thing that happens in your family, this tragedy, and that's where you run. It becomes that center foundation in which we could rally around. We could debate whether it was the right decision. I think it was the right decision. (118)

This quotation suggests that for some there was a reweighting of objectives at a point in 2020 where the burdens of the pandemic (and perhaps pandemic policies) led some of the participants to believe that institutions like houses of worship should be allowed to open, despite the associated risks to the public's health. This view was not unanimous. While acknowledging that it was "obviously very difficult for people being isolated, not feeling like they're spiritually connected," a task force member explained that their recommendation to their governor in 2020 was, nonetheless, "just don't put people back into church" (111).

School shutdowns were brought up by six interviewees as imposing an intense burden on children (105; 107; 108; 112; 118; 208). One participant, an advisor to a governor, described the importance of considering the long-term impacts of school closures:

> Now we thought at that time, a month [of school closures] was massive. A month! Now when you look at it in hindsight, we're seeing some of the issues, challenges, and damage that it has caused. But you know you obviously had to balance that with the level of spread, and how many of the students are going to go back to households where they have seniors living … That was a huge topic of discussion in almost every single meeting, where we were trying to do the right thing, but realizing that the longer-term impact for our children is going to something that we're going to be seeing now for probably the next decade, maybe two. (118)

This was echoed by another participant, who lamented: "Of course it's always the kids that are most vulnerable that get hit the hardest" (208) when schools are closed. Disruptions to learning were certainly a factor in assessing the appropriateness of school closures, as well as the impact on mental health and socialization (112), on physical activity and sports participation (105), and on providing lunches to children in food-insecure homes (208), illustrating how 'protecting the vulnerable' in the pandemic was not always straightforward.

4.4. Conflict and coherence: pathogen-focused disease prevention and individual freedoms

Finally, in this section we consider how the objective of preserving and restoring individual freedoms was discussed by the interviewees. One of the participants described the balancing of autonomy with other objectives as one of the central issues with which they grappled: "And you think of [when should you have] autonomy, and when should you not have autonomy. That's probably been the biggest public health issue of this pandemic" (104-2). This statement suggests that this participant felt that there was significant conflict between promoting the public's health and preserving and restoring individual freedoms at times throughout the pandemic; indeed, many of the quotes below illustrate a perception of conflict. For example, a government official who was an advisor to a governor described the trade-off between preserving and restoring individual freedoms and pathogen-focused disease prevention in their state's decision to mandate masks in the summer of 2020:

> [Our thinking was that] if we can be open and wear a mask and try to prevent the spread, that is a better option for everyone than the alternative, which would be limiting, shutting down, and not having to wear a mask. I think it was weighed in that way. This is just a small thing that we can do, and if we do it, then we can live our lives as normally as possible and not have the impacts that we had in March. (103)

This quote also illustrates the complexity of conflict and coherence between these two objectives. On the one hand, one might view mandating masks as restricting freedom for the objective of pathogen-focused disease prevention. On the other hand, that participant suggested that a mask mandate was less of a limitation on individual freedoms than "shutting down," thus also creating more coherence between pathogen-focused disease prevention and preserving and restoring individual freedoms. Indeed, this participant was not alone in finding some coherence between those two objectives, as illustrated by another state health official:

> Freedom is interesting. There's freedom to do anything you want as an individual, and then there's freedom not to get infected. Right? Freedom to be able to feel like I can get on a bus and not get infected and die from [COVID-19]. That's also freedom. Freedom is multiple ways. (113)

In this instance, they were highlighting how COVID-19 mitigation measures could be viewed as enabling individual freedoms, rather than only constraining them.

While there are certainly exceptions, such as when vaccine mandates were instituted, individual freedoms were largely restored over the course of the pandemic. One participant suggested that some decisions to restore freedoms may have been made due to changes in public opinion that affected the feasibility of policies. This participant, who is a former chief of staff to a governor, described their state's decision to allow houses of worship to open:

> If you've got a rule where you're telling people that you can't gather for church and people are breaking that rule, are we going to start sending troopers in to arrest little ladies who are trying to go to Mass? Yeah, no, we're not going to do that. (102)

In more instances, however, the objective of preserving and restoring individual freedoms was described as becoming more coherent with pathogen-focused disease prevention as the 'tools in the toolbox' expanded. A state government official relayed how the need for government-imposed interventions was thought to have lessened after the introduction of vaccines and other forms of protection against the

worst health effects of COVID-19:

> Shift is the wrong [word], but in the initial phases, the risk was very high. We had no treatment. We had no idea how things were being transmitted, or if we had [hospital capacity]. The risk was very high of people getting sick and potentially dying. The safety risk was so high that the state took more chances on limiting certain things. *As that balance started to shift, as we got vaccines, and as we understood how things were transmitted, or how to prevent it, and then later when we started to get treatment options, it shifts even more.* As the risk to safety was lower, [the need for states] to put any kind of limitations in place was also lower. (emphasis ours; 100-1)

This interviewee explained how the lower levels of risk that accompanied an increased understanding of the virus (a change in the epistemological context) and increased access to vaccines (a change in the 'tools in the toolbox') made preserving and restoring individual freedoms more coherent with pathogen-focused disease prevention. According to another state government official, this same context allowed the state to "move … towards a place where we could relax some things and not be so much in people's personal lives" (100-2). This sequence of events was echoed by two additional interviewees (123; 205).

5. Discussion

Throughout the pandemic, policymakers and advisors had to consider multiple important objectives that were often thought to be in conflict. As these interviews illustrate, protecting the public's health was at the forefront of most of their minds: limiting morbidity and mortality from COVID-19, protecting hospital capacity, and protecting the vulnerable were dimensions of this goal that were discussed most often. However, policymakers and advisors were not narrowly concerned with pathogen control to the exclusion of other policy objectives. The public's broader health and wellbeing, in addition to protecting the economy and preserving and restoring individual freedoms, were also elevated as important goals. Additionally, the participants often noted harms that resulted from the policies aimed at pathogen-focused disease prevention, sometimes indicating that recognition of those harms resulted in policy changes.

This paper has also described four interrelated reasons that policies were thought to have changed throughout the pandemic. First, policymakers perceived the acceptability of the negative effects of pathogen-focused disease prevention differently over the course of the pandemic. For example, the decision in some states to re-open houses of worship in the spring of 2020 occurred when many still felt that there was significant conflict between the objective of pathogen-focused disease prevention on the one hand, and the objectives of promoting the public's broader health and wellbeing and preserving and restoring individual freedoms on the other. At that point, the negative effects of closing houses of worship were no longer thought to be acceptable. Second, the participants' epistemic context changed over time, and policymakers' understandings of the virus and how to prevent infections, as well as their knowledge of the effects of restrictive measures, improved. Third, also as time went on, the 'tools in the toolbox' changed with the availability of vaccines and therapeutics, which the interviewees stated had allowed for pathogen-focused disease prevention to continue while also enabling more activities that had previously presented higher risks. Fourth, many people's willingness to follow restrictive policies changed. People's acceptance of risk often changed as well. This made pathogen-focused disease prevention more challenging in many contexts, as policies that promoted the public's health often entailed restrictions that were increasingly not accepted by the public (Pew Research Center, 2021).

Public health ethics frameworks provide guidance on how to balance competing objectives in policy. In examining the accounts of those involved in policy decision making in a public health emergency, this paper contributes to empirical public health ethics literature by suggesting how some public health ethics principles may have been applied in practice. The participants repeatedly stated that they had been considering multiple objectives beyond pathogen-focused disease prevention, which is necessary and appropriate (Childress et al., 2002; Kass, 2001). Ideally, policymakers can find ways to create more coherence and less conflict between policy objectives such as those outlined in this paper, so that challenging trade-offs are either less challenging, or in a best-case scenario, that there are no trade-offs, but only multiple objectives can be promoted and valued simultaneously. The accounts of the participants suggested that for much of the early pandemic, there was significant conflict between the objective of pathogen-focused disease prevention and other important objectives.

As the pandemic continued, however, the participants articulated an ongoing assessment of pandemic policies that illustrated their belief that policies changed as objectives, needs, and the pandemic context changed. For instance, numerous quotations suggested that individual freedoms were at least partially restored after vaccines and therapeutics were widely available. This is consistent with a position advocated by many public health ethicists, namely that the least restrictive measures that will accomplish a public health aim should be adopted (Childress et al., 2002).

While in principle much of this may be agreed upon, how to apply these public health ethics principles in practice is far from settled. Many of the participants stated that some harms were, at least at one point, acceptable to accomplish public health aims. But, what counts as "accomplishing a public health aim" in an infectious disease pandemic? Is it eradicating the pathogen? Or something else that falls short of that, for example, limiting deaths to an acceptable number? Another issue is how there are tensions within policy objectives. For example, a mask mandate can be said to infringe on individual freedoms by forcing people to wear a mask. But it can also be said to preserve other individual freedoms, by enabling safer gatherings to occur and for more businesses to be open. How to navigate these issues was far from agreed upon during the height of the pandemic, nor has it since been resolved. While this paper contributes to literature on these tensions, additional ethical guidance for policymakers who are navigating these questions about "accomplishing a public health aim," or who are balancing competing interests between and within policy objectives, is needed.

We also highlighted how public attitudes shaped policy decisions. There is significant disagreement in public health ethics regarding the extent that public attitudes should influence policy decisions. There are good ethical reasons why the public's attitudes should be assessed and considered in policymaking decisions. Some are instrumental, such as the prospect of increasing the legitimacy and quality of the decisions and increasing adherence to policies. Others are non-instrumental, such as the argument that people's participation in political life and in decisions that affect them is a democratic ideal, a democratic right, and a recognized human right (Norheim et al., 2021). In practice, however, incorporating public attitudes in pandemic policymaking can be challenging. During COVID-19, the US public was often divided as to what policies should or should not be implemented (Druckman et al., 2021; Pew Research Center, 2021), and there were many critiques of restrictive policies (see Green and Fazi, 2023; Monaghan, 2020). Much of the US opposed many of the COVID-19 mitigation policies that the participants were involved in implementing. If significant swaths of the public are unwilling to go along with a policy, the effectiveness of the measure is compromised. Enforcement strategies may encourage some to follow the policy who would not otherwise, although these can also exacerbate inequalities or even put more people in harm's way (for example, by putting people in jail for not following the policy). Mandating a policy and/or enforcing that policy may also make a policy more unpopular (for example, "sending troopers in to arrest little ladies who are trying to go to Mass") and cause more counterproductive backlash. However, even if many in the public are unwilling to accept pandemic mitigation measures, officials may feel morally obligated to institute them if there

remains a reasonable likelihood that these policies will prevent enough of what would otherwise be unnecessary deaths. Balancing public opinion and the feasibility of public health measures was a challenge for the participants throughout the pandemic. Political polarization contributed to the spread of misinformation and disinformation (Salvi et al., 2021), further hampering COVID-19 mitigation efforts and raising ethical questions about how to consider the public's attitudes in an "infodemic" (Gisondi et al., 2022).

This study has some limitations that should be considered when interpreting the findings. First, given that the response rate for participation was low, potential differences between those who agreed to participate and those who did not may be more pronounced. For example, people who participated may have a more positive outlook on the pandemic response in their state than those who did not, or they may have felt that their perspectives were likely to align with those of researchers from our institution. Second, most interviewees were from states with Republican governors, and the policymaking processes in Republican-led states may have differed from those in Democrat-led states. Third, most participants were current government officials, who may have been hesitant to criticize their employers. Finally, it is important to note that the results of this paper are based on the participants' recollections, and constructions, of how decisions were made regarding COVID-19 policies, and why. People may not have remembered clearly what happened years ago. People may also want to tell a story that is flattering to themselves, which would make them more likely to justify decisions that were made. Despite these limitations, the participants that agreed to be interviewed, and the insights that they shared, do shed light on aspects of a difficult and high-stakes policymaking process.

Throughout the pandemic, policymakers, state government officials, and experts made significant decisions about COVID-19 policies that had wide-ranging implications. This paper sheds light on some of the circumstances that led to changes in policy, suggesting some ethical considerations that should be kept in mind in future public health emergencies. While in many instances these decisions involved trade-offs between promoting the public's health and promoting or preserving other important objectives, the context of the pandemic often changed such that previous conflicts between objectives that led to trade-offs at some point became more coherent and policy decisions that had a more favourable balance between objectives were enabled.

Ethics approval statement

This study was approved by the Johns Hopkins University Institutional Review Board (IRB00017486).

CRediT authorship contribution statement

Katelyn Esmonde: Writing – review & editing, Writing – original draft, Supervision, Methodology, Investigation, Formal analysis, Conceptualization. **Jeff Jones:** Writing – review & editing, Investigation. **Michaela Johns:** Writing – review & editing, Investigation, Formal analysis. **Brian Hutler:** Writing – review & editing, Methodology, Investigation. **Ruth Faden:** Writing – review & editing, Methodology, Investigation. **Anne Barnhill:** Writing – review & editing, Supervision, Project administration, Methodology, Investigation, Funding acquisition, Conceptualization.

Data availability

The data that has been used is confidential.

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