COVID and CAFOs: How a Federal Livestock Welfare Statute May Prevent the Next Pandemic

As the COVID-19 pandemic continues to threaten lives across most of the globe, experts and the public at large are looking ahead for ways to prevent another deadly disease outbreak from wreaking further havoc on the world. While much of the criticism regarding the risk of disease outbreaks has been reserved for Chinese wet markets, many do not realize that the United States' own intensive farming practices are also a pandemic risk. The majority of American meat is raised on factory farms, which house livestock in tightly packed and unsanitary conditions. These conditions cripple animal immune systems, which increases the risk that the farmed animals will contract diseases that can spread to humans. Despite this risk, living conditions on factory farms in the United States are entirely unregulated by the federal government.

This Comment argues that the United States must enact comprehensive livestock welfare legislation to prevent the next pandemic from emerging in our own backyard. This Comment also explains how factory farm conditions exacerbate the likelihood of emerging disease outbreaks and illustrates the failures of the current legal framework in the United States in preventing new outbreaks. Despite the failed attempts and current barriers to passing livestock welfare legislation, this Comment proposes a federal livestock welfare statute based on foreign law and Ohio's innovative Livestock Care Standards Board.

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INTRODUCTION

"The new normal"—this is the reality we face after the COVID-19 pandemic ravaged the globe. Mask mandates, working from home, and social distancing, once foreign concepts to most, are now familiar customs throughout the world. In the United States alone, over half-a-million people have died of COVID-19, and the disease will likely have lasting effects for years to come. But COVID-19, while unprecedented for our current era, is hardly the first disease of its kind. Diseases like Ebola, swine and avian flus, and SARS (severe acute respiratory syndrome) all have one thing in common with COVID-19: they originated in nonhuman animals.² In fact, diseases transmitted from animals to humans, termed zoonotic diseases, account for three out of every four new or emerging infectious diseases that affect humans.³

While zoonotic diseases most often originate in wild animals, the human population boom of the last 100 years has subsequently led to a parallel increase in livestock populations, which serve as bridged "hosts" between humans and wildlife.⁴ As the global human population continues to rise, people develop more and more wild lands, which further decreases the distance between these

^{1.} See COVID Data Tracker: United States COVID-19 Cases, Deaths, and Laboratory Testing (NAATs) by State, Territory, and Jurisdiction, CTRS. FOR DISEASE CONTROL & PREVENTION, https://covid.cdc.gov/covid-data-tracker/#cases_casesper100klast7days [https://perma.cc/Y9WR-CRTC] (detailing that the cumulative number of U.S. deaths attributable to COVID-19 was 618,591 as of August 15, 2021).

^{2.} See Delia Grace Randolph, Johannes Refisch, Susan MacMillan, Caradee Yael Wright, Bernard Bett, Doreen Robinson, Bianca Wernecke, Hu Suk Lee, William B. Karesh, Catherine Machalaba, Amy Fraenkel, Marco Barbieri & Maarten Kappelle, United Nations Env't Programme & Int'l Livestock Rsch. Inst., Preventing the Next Pandemic: Zoonotic Diseases and How To Break the Chain of Transmission 11, 13, 15 (2020), https://wedocs.unep.org/bitstream/handle/20.500.11822/32316/ZP.pdf?sequence=1& isAllowed=y [https://perma.cc/HN2N-TFYZ].

^{3.} Zoonotic Diseases, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html [https://perma.cc/56FQ-6FSF] (July 1, 2021).

^{4.} RANDOLPH ET AL., supra note 2, at 13.

emerging diseases and the domestic animals that are the basis of our food supply.⁵

While COVID-19 likely emerged in humans from a Chinese wet market, the recent rise of industrialized agriculture has been the cause of more than fifty percent of zoonotic diseases that have jumped to humans in the last century. Smaller-scale farms were once much more prevalent across the globe, but the consolidation of the agricultural industry over the last several decades has led large-scale, industrialized farms, often called factory farms, to dominate the industry, especially in the United States. Most livestock, once housed and fed in comfortable conditions, are now confined to small, unsanitary housing with little opportunity to move around or even be outside. Further, while farms were once largely localized, livestock are now much more likely to travel thousands of miles in tight, contaminated vehicles with little or no rest. Because of these degrading conditions, factory farms are increasingly tied to disease outbreaks. The 2009 outbreak of H1N1, commonly known as "swine flu," for example, has genetic links to a North Carolina hog farm.

In the United States, the legal name for a factory farm is a concentrated animal feeding operation, or CAFO, which is defined by the Environmental Protection Agency ("EPA") as a facility housing more than 1,000 animal units¹³ and confining these animals for more than forty-five days a year. ¹⁴ Although the EPA regulates pollution originating from CAFOs through the Clean Water Act ("CWA"), ¹⁵ the environmental and human health hazards stemming from CAFO living conditions are almost entirely unregulated by the federal

- 5. See id.
- 6. Kenji Mizumoto, Katsushi Kagaya & Gerardo Chowell, Effect of a Wet Market on Coronavirus Disease (COVID-19) Transmission Dynamics in China, 2019–2020, 97 INT'L J. INFECTIOUS DISEASES 96, 96 (2020).
 - 7. RANDOLPH ET AL., supra note 2, at 15.
- 8. See David N. Cassuto, Meat Animals, Humane Standards and Other Legal Fictions, 10 LAW CULTURE & HUMANS. 225, 232–35 (2014).
- 9. See Joachim Otte, David Roland-Holst, Dirk Pfeiffer, Ricardo Soares-Magalhaes, Jonathan Rushton, Jay Graham & Ellen Silbergeld, Pro-Poor Livestock Pol'y Initiative, Industrial Livestock Production and Global Health Risks 3 (2007), http://www.fao.org/3/a-bp285e.pdf [https://perma.cc/Q7YE-CEFA].
 - 10. See id
- 11. See Michael Greger, The Long Haul: Risks Associated with Livestock Transport, 5 BIOSECURITY & BIOTERRORISM 301, 301 (2007) [hereinafter Greger, The Long Haul].
 - 12. Id. at 302-03.
- 13. "[A]n animal unit is defined as an animal equivalent of 1000 pounds live weight and equates to 1000 head of beef cattle, 700 dairy cows, 2500 swine weighing more than 55 lbs, 125 thousand broiler chickens, or 82 thousand laying hens or pullets" *Animal Feeding Operations*, U.S. DEP'T AGRIC. NAT. RES. CONSERVATION SERV., https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/plantsanimals/livestock/afo/ [https://perma.cc/T9KM-EJD4].
 - 14. *Id*
- 15. Clean Water Act of 1977, Pub. L. No. 95-217, 91 Stat. 1566 (codified as amended at 33 U.S.C. §§ 1251-1388); see also Animal Feeding Operations, supra note 13.

government.¹⁶ In fact, only two federal animal welfare statutes include farmed animals at all: the Humane Methods of Slaughter Act,¹⁷ which regulates how livestock can be slaughtered,¹⁸ and the Twenty-Eight Hour Law,¹⁹ which regulates the transport of livestock.²⁰ Neither of these statutes address CAFO living conditions.²¹ And while the Animal Welfare Act ("AWA")²² requires a minimum standard of care for most domesticated animals, farmed animals are entirely excluded from the statute.²³ Other statutes regulating farmed animals largely focus on the safety of food produced by livestock for human consumption rather than the health of livestock before they are sent to slaughter.²⁴ And although environmental laws, like the National Environmental Policy Act,²⁵ offer some semblance of oversight of CAFO conditions, they are effectively procedural and do not provide the means to effectively enforce farmed animal welfare.²⁶

Despite widespread calls for livestock standards of care²⁷ and numerous introductions of congressional bills that address farmed animal welfare,²⁸ the federal government has made little progress in enacting legislation regulating livestock living conditions. But we no longer have the luxury of time. Because

^{16.} See David J. Wolfson & Mariann Sullivan, Foxes in the Hen House: Animals, Agribusiness, and the Law: A Modern American Fable, in ANIMAL RIGHTS: CURRENT DEBATES AND NEW DIRECTIONS 205, 207–08 (Cass R. Sunstein & Martha C. Nussbaum eds., 2004) ("No... federal law applies to the raising of farmed animals, and, consequently, the U.S. Department of Agriculture has no statutory authority to promulgate regulations relating to the welfare of farmed animals on farms.").

^{17.} Humane Methods of Slaughter Act of 1958, Pub. L. No. 85-765, 72 Stat. 862 (codified as amended at 7 U.S.C. §§ 1901–1907).

^{18.} See 7 U.S.C. §§ 1901-1907.

^{19.} Twenty-Eight Hour Law, Pub. L. No. 103-272, 108 Stat. 1356 (1994) (codified as amended at 49 U.S.C. § 80502).

^{20.} See 49 U.S.C. § 80502.

^{21.} See 7 U.S.C. §§ 1901-1907; 49 U.S.C. § 80502.

^{22.} Animal Welfare Act of 1966, Pub. L. No. 89-544, 80 Stat. 350 (codified as amended at 7 U.S.C. §§ 2131-2159).

^{23.} 7 U.S.C. § 2132(g) (excluding "farm animals, such as, but not limited to livestock or poultry, used or intended for use as food or fiber").

^{24.} See infra Section II.A (describing federal statutes and regulations of farm animals).

^{25.} National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852 (codified as amended at 42 U.S.C. §§ 4321-4347).

^{26.} See Susan A. Schneider, Beyond the Food We Eat: Animal Drugs in Livestock Production, 25 DUKE ENV'T L. & POL'Y F. 227, 268 (2015).

^{27.} See Kelsey Piper, California and Florida Voters Could Change the Lives of Millions of Animals on Election Day, VOX, https://www.vox.com/future-perfect/2018/10/17/17955642/california-florida-voters -animal-welfare-election-day [https://perma.cc/Y232-9GY2] (Nov. 5, 2018, 12:04 PM) ("[A 2017 survey indicated that] 49 percent of Americans support[] a ban on factory farming, nearly 90 percent th[ink] 'farmed animals have roughly the same ability to feel pain and discomfort as humans,' and nearly 70 percent agree[] that 'the factory farming of animals is one of the most important social issues in the world today.'").

^{28.} See infra Section III.A.

"more than five new diseases emerg[e] in people every year,"²⁹ the risk of another pandemic is ever increasing, and CAFOs greatly enhance this risk. Congress must enact a federal livestock welfare statute to prevent future emerging zoonotic diseases with pandemic potential.

Part I of this Comment explains how CAFO conditions exacerbate the likelihood of emerging zoonotic disease outbreaks. Part II examines the failures of our current legal framework in preventing emerging diseases from CAFOs by providing a background of relevant federal and state law. Part III analyzes the failed attempts and current barriers to passing livestock welfare legislation. And Part IV proposes a federal livestock welfare statute based on the analysis of state and foreign laws that regulate livestock living conditions, transportation conditions, and antibiotic use.

I. CAFOS AND THE POTENTIAL FOR OUTBREAKS

CAFOs pose a high likelihood of causing outbreaks of both viral zoonotic diseases, like COVID-19, as well as bacterial diseases, such as salmonella. 30 The physical conditions of CAFO facilities, the genetic similarity of livestock, continual antibiotic use, and the way livestock are transported make CAFOs the "perfect pathogen conveyor belt." 31

A. Physical Conditions of CAFO Facilities

Livestock confined to CAFOs are notoriously known to endure extremely tight living conditions, which place an enormous amount of stress on their bodies and immune systems.³² Egg-laying hens in CAFOs spend their entire lives in a "battery cage"—a twenty-by-nineteen-inch wire cage that holds up to eight hens.³³ Inside a battery cage, hens cannot spread their wings nor effectively turn around.³⁴ These conditions inevitably lead to fighting amongst the hens, which is often mitigated by debeaking, or cutting off their beaks.³⁵ Because hens' evolutionary traits intend them to forage on pastures, losing their beaks causes them excessive stress.³⁶ Much of the time, smaller or less savvy hens get pushed to the back of the cages during feeding time, where they do not

^{29.} Reduce Risk To Avert 'Era of Pandemics', Experts Warn in New Report, UNITED NATIONS (Oct. 29, 2020), https://news.un.org/en/story/2020/10/1076392 [https://perma.cc/US57-2LZZ].

^{30.} See Animal Legal Def. Fund, COVID-19 and Animals: Rethinking Our Relationship with Animals To Reduce the Likelihood of the Next Global Pandemic 11, 15–16 (2020), https://aldf.org/wp-content/uploads/2020/06/White-Paper-COVID-19-and-Animals.pdf [https://perma.cc/4SHM-DGFG].

^{31.} *Id.* at 15.

^{32.} Id. at 22 n.144.

^{33.} Wolfson & Sullivan, supra note 16, at 218.

^{34.} Id.

^{35.} Id.

^{36.} See id.

get enough food.³⁷ These "lowest ranking" hens are much more susceptible to illness and often get sick and die.³⁸ "Broiler" chickens, or chickens raised for meat, live in similarly inhumane conditions, confined with as many as 30,000 other birds in sheds that are cleaned only every two to three weeks.³⁹

Cattle raised in CAFOs also endure small and crowded dwellings. Dairy cattle often live in indoor pens with "only enough room to stand up and lie down." Beef cattle are raised in indoor pens or crowded outdoor feedlots, where they stand on slatted concrete and are primarily fed corn and other types of grain. This often leads to illness and stress, as cattle have naturally evolved to digest grasses rather than grains. 2

Pigs in CAFO facilities live in similarly crowded conditions. ⁴³ Female pigs used for reproduction, or sows, are kept in what are known as "gestation crates." ⁴⁴ These "crates" are metal stalls lined together in buildings with concrete floors and are too small for a pig to stand up and turn around. ⁴⁵ Pregnant sows are briefly moved to "farrowing crates" to give birth, which are equally confining, and, after three weeks, when their piglets are weaned, they are impregnated again and returned to a gestation crate. ⁴⁶ This cycle continues for approximately three years until the sows can no longer reproduce and are sent to slaughter. ⁴⁷ These conditions cause sows to suffer significant health problems including urinary tract infections, respiratory illness, and lameness. ⁴⁸ Pigs raised for slaughter live in conditions that are just as harrowing. At one large hog CAFO owned by Smithfield in North Carolina, 14,000 pigs are kept in just twelve confinement sheds. ⁴⁹ These pigs are held in the same-size pen for

^{37.} Id.

^{38.} *Id*.

^{39.} Felicity Lawrence, If Consumers Knew How Farmed Chickens Were Raised, They Might Never Eat Their Meat Again, GUARDIAN (Apr. 24, 2016, 4:00 PM), https://www.theguardian.com/environment/2016/apr/24/real-cost-of-roast-chicken-animal-welfare-farms [https://perma.cc/TXP3-7NEY].

^{40.} Elizabeth Overcash, Detailed Discussion of Concentrated Animal Feeding Operations: Concerns and Current Legislation Affecting Animal Welfare, ANIMAL LEGAL & HIST. CTR. (2011), https://www.animallaw.info/article/detailed-discussion-concentrated-animal-feeding-operations [https://perma.cc/7L3N-98QX].

^{41.} *Cattle*, ANIMAL WELFARE INST., https://awionline.org/content/cattle [https://perma.cc/PQ2U-RK98].

^{42.} *Id*.

^{43.} See Wolfson & Sullivan, supra note 16, at 218.

^{44.} Id.

^{45.} Id.

^{46.} Id.

^{47.} Id.

^{48.} THE HUMANE SOC'Y OF THE U.S., AN HSUS REPORT: WELFARE ISSUES WITH GESTATION CRATES FOR PREGNANT SOWS 3–4 (2013), https://www.humanesociety.org/sites/default/files/docs/hsus-report-gestation-crates-for-pregnant-sows.pdf [https://perma.cc/MFT5-TVDV].

^{49.} McKiver v. Murphy-Brown, LLC, 980 F.3d 937, 979, 983 (4th Cir. 2020) (Wilkinson, J., concurring). In *McKiver*, several North Carolina citizens filed a tort action against Murphy-Brown, a

their entire lives, despite growing seven times larger than they were at their arrival at the CAFO.⁵⁰ The confinement sheds have slats in the floor for feces to drop through, but the pigs are so confined that they often miss the slats and end up covered in their own feces.⁵¹ Pigs in CAFOs often die simply from the stress of confinement.⁵² In fact, "up to ten percent of pigs die in confinement most likely due to complications from their overcrowded environment and lack of individualized veterinary care."⁵³

Excess stress and the unsanitary living conditions make these hogs much more susceptible to pathogens that can then be passed along to humans.⁵⁴ Further, the intensely crowded conditions in CAFOs produce an often untenable amount of waste.⁵⁵ This, paired with the fact that industrial livestock operations are frequently understaffed,⁵⁶ leads to buildups of excrement that attracts swarms of flies and other insects, which are vectors of disease.⁵⁷ As a result, it is highly likely that if the stress of confinement does not cause an animal to fall ill, the consequences of contaminated living spaces will.⁵⁸ Once one animal is infected, the extremely confining nature of CAFOs further exacerbates the potential for a pathogen to spread throughout the rest of the facility and increases the likelihood that a factory farm worker will come into contact with the disease.

B. Livestock Transport

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While living conditions in CAFOs alone often cause animal health issues, the way livestock are transported can also exacerbate both livestock susceptibility to disease and the rapid spread of an outbreak.⁵⁹ In the United States, more than fifty million livestock animals per year, many born and raised in CAFOs, travel thousands of miles across state lines before they are slaughtered.⁶⁰

subsidiary of Smithfield, Inc., due to the horrific smell, noise, and air particles that came from a large hog CAFO owned by Smithfield in Eastern North Carolina. *Id.* at 946–47 (majority opinion). The plaintiffs lived adjacent to the CAFO and experienced greater numbers of diseases such as asthma due to the constant fumes. *Id.* at 980 (Wilkinson, J., concurring). See Judge Wilkinson's concurrence for further descriptions of the CAFO conditions and his critiques on the increasing threat CAFOs pose to public health. *Id.* at 977–1015.

- 50. Id. at 979.
- 51. *Id*.
- 52. ANIMAL LEGAL DEF. FUND, supra note 30, at 13.
- 53. McKiver, 980 F.3d at 980 (Wilkinson, J., concurring).
- 54. *Id*.
- 55. Id. at 979.
- 56. See id. at 983 (explaining that a single employee working at a Smithfield-owned CAFO managed "all twelve hog sheds—over 14,000 hogs—largely by himself").
 - 57. Id.
 - 58. See id.
 - 59. Greger, The Long Haul, supra note 11, at 301.
 - 60. Id.

As discussed above, CAFO conditions cause numerous stressors for the livestock they house, but long, crowded truck rides across the country offer even more health hazards. Similar to CAFO living conditions, livestock are transported in small, poorly ventilated vehicles with few chances to move around or drink water before they arrive at their destination. But unlike CAFOs, livestock transport involves a moving vehicle and exposure to the elements, putting animals at risk of injuries and bruising from being thrown around, as well as sunburn, heatstroke, and exhaustion. Further, while cleaning animal transport vehicles with disinfectants is effective in preventing the spread of disease, few livestock haulers report actually using disinfectants. This leads to otherwise healthy animals declining into respiratory and gastrointestinal distress, creating a greater risk of infection, even from pathogens that usually do not negatively affect livestock. Thus, even if there is only one sick animal in a herd before transport, these added stressors create the potential for every animal to become ill before reaching their destination.

Current animal transport practices also increase the potential rate of disease exposure throughout areas that livestock are transported to and through. 66 This is ultimately because instead of raising livestock where they are born and transporting them to local slaughterhouses, industrialized agriculture has normalized trekking livestock across the country to centralize production and cheapen the process. 67 While a pathogen may originate in a CAFO, transporting an infected animal across thousands of miles potentially exposes the pathogen to large amounts of both animals and people who could have stayed clear of the virus had the animal been slaughtered locally. 68 A clear example of this is a 1998 outbreak of the swine flu, a pathogen that has mutated several times over the last century to more readily infect humans. 69 This particular outbreak originated on a North Carolina hog farm but quickly spread across the entire country. 70 The spread was attributed to the intense transport of pigs across the United States—pigs are often bred in North Carolina, sent to

^{61.} See id.

^{62.} During Transport, ANIMAL WELFARE INST., https://awionline.org/content/during-transport [https://perma.cc/JRC7-DZSL].

^{63.} See PHILIP G. CHAMBERS & TEMPLE GRANDIN, FOOD & AGRIC. ORG. OF THE UNITED NATIONS, GUIDELINES FOR HUMANE HANDLING, TRANSPORT AND SLAUGHTER OF LIVESTOCK 33–34 (Gunter Heinz & Thinnarat Srisuvan eds., 2001), http://www.fao.org/3/x6909e/x6909e.pdf [https://perma.cc/PF5G-FBC9].

^{64.} Greger, The Long Haul, supra note 11, at 301.

^{65.} See id.

^{66.} See id. at 302.

^{67.} See id. at 303.

^{68.} Id.

^{69.} Id. at 302-03.

^{70.} Id.

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Iowa for fattening, and then slaughtered in California.⁷¹ While this widespread method of livestock production can cut costs,⁷² the potential for a pathogen to touch many parts of the country substantially increases the number of both livestock and people susceptible to infection.⁷³

C. Genetic Similarities of Livestock in CAFOs

Modern CAFOs have also fostered a loss of genetic diversity in livestock, making most species almost genetically identical and therefore more susceptible to disease. Over 1,000 farm animal breeds have gone extinct in the last century, with just as many currently at risk due to industrialized agriculture's overall goal of faster production. But when species are adapted to be genetically identical and produced in mass, this can feed a pathogen's ability to quickly spread and hinder any chance that the species can fight the disease. A clear example of this phenomenon occurred in 1970 when the U.S. corn industry created a profitable strain of corn that was quickly embraced by a majority of corn farmers. While this corn strain initially streamlined production, farmers soon realized that it was extremely susceptible to a deadly fungus, which, due to the corn's genetic similarity, quickly spread throughout much of the United States' Corn Belt.

Coupled with the close, unhygienic living conditions of CAFOs, genetically similar livestock have the potential for a similar fate. Under normal circumstances, pathogens usually linger in a host because there are no genetically similar hosts nearby.⁷⁹ They must mutate and wait for another host to come into contact with the first host.⁸⁰ But because of the genetic similarities and the extremely dense living conditions in CAFOs, once a pathogen emerges in one animal, it can quickly burn through an entire CAFO; there is no need for it to mutate or wait for another host.⁸¹ This greatly increases the likelihood that factory farm workers will encounter a pathogen, contract it, and then infect their community.⁸² A 2007 study analyzing CAFOs as amplifiers for influenza

^{71.} *Id*.

^{72.} Id. at 303.

^{73.} Id.

^{74.} Michael Greger, The Human/Animal Interface: Emergence and Resurgence of Zoonotic Infectious Diseases, 33 CRITICAL REVS. MICROBIOLOGY 243, 253 (2007).

^{75.} Id.

^{76.} Id.

^{77.} Id. at 254.

^{78.} *Id*.

^{79.} Sigal Samuel, *The Meat We Eat Is a Pandemic Risk, Too*, VOX, https://www.vox.com/future-perfect/2020/4/22/21228158/coronavirus-pandemic-risk-factory-farming-meat [https://perma.cc/8EQF-EZXG] (Aug. 20, 2020, 11:50 AM).

^{80.} Id.

^{81.} Id.

^{82.} Id.

suggested that if CAFO workers made up fifteen to forty-five percent of a given community—which is often the case in some rural areas where local factory farms are a major source of employment—human influenza cases in that community could increase by forty-two to eighty-six percent. The study concluded that the mere presence of a CAFO in a community increases the potential for a human influenza epidemic due to a new virus in that community and beyond. Once an outbreak occurs, as we have seen with COVID-19, it can be impossible to contain—the best way to prevent such an occurrence is to stop it at the source.

D. Antibiotic Use

Because the excess stress and genetic similarities of livestock housed in CAFOs make them much more susceptible to disease outbreaks, livestock are frequently administered different antibiotics for disease prevention. In fact, approximately eighty percent of the antibiotics sold in the United States are used on animals raised for consumption. But, while prevention is a significant driver in issuing antibiotics, the majority of antibiotics are used to enhance growth and reduce the amount of feed needed for weight gain rather than for medicinal reasons. The medicinal reasons.

This practice has led to an explosion of antibiotic-resistant bacteria. 88 When the bacteria present in and around livestock are constantly exposed to antibiotics, these bacteria mutate into forms that antibiotics can no longer treat. 89 This phenomenon poses a huge risk to human health—contact with these animals as well as the food they produce can expose humans to dangerous bacteria that are now immune to antibiotics. 90 According to the Centers for Disease Control ("CDC"), antibiotic-resistant bacteria and fungi currently cause more than 2.8 million infections and 35,000 deaths in the United States each year. 91

^{83.} Roberto A. Saenz, Herbert W. Hethcote & Gregory C. Gray, Confined Animal Feeding Operations as Amplifiers of Influenza, 6 VECTOR-BORNE & ZOONOTIC DISEASES 338, 344 (2006).

^{84.} See id.

^{85.} See Michael J. Martin, Sapna E. Thottathil & Thomas B. Newman, Antibiotics Overuse in Animal Agriculture: A Call to Action for Health Care Providers, 105 Am. J. Pub. Health 2409, 2409 (2006).

^{86.} Id.

^{87.} Schneider, supra note 26, 241-42.

^{88.} See Martin et al., supra note 85, at 2409.

^{89.} *Id*

^{90.} Food and Food Animals, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/drugresistance/food.html [https://perma.cc/U2RV-ABED] (June 14, 2021).

^{91.} CTRS. FOR DISEASE CONTROL & PREVENTION, ANTIBIOTIC RESISTANCE THREATS IN THE UNITED STATES 3 (2019), https://www.cdc.gov/drugresistance/pdf/threats-report/2019-arthreats-report-508.pdf [https://perma.cc/NV25-JDFF].

II. REGULATION OF FARMED ANIMALS

A. Federal Statutes and Regulations

Because no federal statutes specifically regulate the living conditions of farmed animals, few options currently exist to remedy the risk that CAFOs present to public health. Unfortunately, the few options that do exist often focus on food safety measures and are either inapplicable to CAFO living conditions or are procedural, underenforced, and inadequate.

1. Statutes Specifically Addressing Farmed Animals

As previously discussed, only two federal statutes address farmed animal welfare: the Twenty-Eight Hour Law and the Humane Methods of Slaughter Act ("HMSA"). The Twenty-Eight Hour Law regulates the transport of livestock across state lines. Under this law, livestock haulers "may not confine animals in a vehicle or vessel for more than [twenty-eight] consecutive hours without unloading the animals for feeding, water, and rest. Anyone who "knowingly and willfully" violates this standard is liable for a civil penalty of no more than 500 dollars for each violation. The U.S. Department of Agriculture ("USDA") promulgated regulations authorized by the Twenty-Eight Hour Law's Statement of Policy, which was codified in 1963. The Statement of Policy requires animals to be given a certain amount of feed based on their species, an "ample supply of potable water," and enough space for all animals to lie down simultaneously.

While the USDA has the authority to investigate and report violations of the Twenty-Eight Hour Law to the U.S. Department of Justice ("DOJ"), recent documents produced as a result of Freedom of Information Act⁹⁸ requests by the Animal Welfare Institute revealed that the USDA completed only eleven investigations over a twelve-year period.⁹⁹ And while six of these investigations found sufficient evidence of a violation, only one was reported to the DOJ for prosecution.¹⁰⁰

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^{92.} See supra notes 17-20 and accompanying text.

^{93.} See 49 U.S.C. § 80502.

^{94.} Id. § 80502(a)(1).

^{95.} Id. § 80502(d).

^{96.} ANIMAL WELFARE INST., A REVIEW: THE TWENTY-EIGHT HOUR LAW AND ITS ENFORCEMENT 1–2 (2020) [hereinafter ANIMAL WELFARE INST., TWENTY-EIGHT HOUR LAW], https://awionline.org/sites/default/files/uploads/documents/20TwentyEightHourLawReport.pdf [https://perma.cc/KTP6-HT7H].

^{97.} See 9 C.F.R. § 89 (2021).

^{98.} Freedom of Information Act, Pub. L. No. 89-487, 80 Stat. 250 (1966) (codified as amended at 5 U.S.C. § 552).

^{99.} ANIMAL WELFARE INST., TWENTY-EIGHT HOUR LAW, supra note 96, at 3.

^{100.} Id.

Even if the USDA were to ramp up its enforcement of the Twenty-Eight Hour Law, the law itself does not adequately address animal welfare in a way that can meaningfully reduce the risk of disease outbreak. Though significant research has been conducted on livestock health and welfare since codifying the Statement of Policy, the USDA has not amended nor created new regulations under the law since 1963. ¹⁰¹ Further, the law and its subsequent regulations do not mention poultry, leading most people to interpret the statute to exclude chickens and other birds outright. ¹⁰²

The other relevant statute, the HMSA, was enacted to prevent "needless suffering" of livestock by creating minimum standards for slaughter practices. The HMSA requires animals to be "rendered insensible" to pain in a way that is "rapid and effective" when they are slaughtered. Hut, as evidenced by the HMSA's title, the statute only applies when handling livestock in connection with their slaughter; thus, the statute does nothing to prevent the threat of disease outbreak posed by inhumane livestock living conditions. Going a step further than the Twenty-Eight Hour Law, regulations promulgated pursuant to the HMSA actively exempt poultry. This exclusion in federal regulations is particularly concerning, as poultry accounts for ninety-eight percent of farmed animals across the United States.

While no other federal statute focuses on farmed animal welfare generally, two more statutes, in addition to the HMSA, regulate livestock slaughter: the Federal Meat Inspection Act ("FMIA")¹⁰⁸ and the Poultry Products Inspection Act ("PPIA").¹⁰⁹ These statutes require USDA agents to "inspect[] all meat and poultry animals to look for signs of disease, contamination, and other abnormal conditions, both before and after slaughter."¹¹⁰ Inspectors are also required to check sanitary conditions and conduct testing of products for pathogens and residues during their inspections.¹¹¹ However, similar to the HMSA, these statutes and their regulations only require inspections immediately before and

^{101.} Id. at 2.

^{102.} See 49 U.S.C. § 80502 (failing to define "animal" to include poultry); 9 C.F.R. § 89.1(a) (2021) (specifying feed amounts for different types of animals pursuant to the Twenty-Eight Hour Law with no mention of poultry); see also Rachel Wechsler, Blood on the Hands of the Federal Government: Affirmative Steps that Promote Animal Cruelty, 4 J. ANIMAL L. & ETH. 183, 199 (2011).

^{103. 7} U.S.C. § 1901.

^{104.} Id. § 1902(a).

^{105.} See id. § 1902.

^{106.} See Treatment of Live Poultry Before Slaughter, 70 Fed. Reg. 56,624 (Sept. 28, 2005).

^{107.} Wechsler, supra note 102, at 199.

^{108.} Federal Meat Inspection Act, Pub. L. No. 90-201, 81 Stat. 584 (1967) (codified as amended at 21 U.S.C. §§ 601-683).

^{109.} Poultry Products Inspection Act, Pub. L. No. 85-172, 71 Stat. 441 (1957) (codified as amended at 21 U.S.C. §§ 451–472).

^{110.} RENÉE JOHNSON, THE FEDERAL FOOD SYSTEM: A PRIMER 6 (2016), https://fas.org/sgp/crs/misc/RS22600.pdf [https://perma.cc/68YM-MNB3].

^{111.} Id.

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after slaughter, which occurs in facilities completely separate from the CAFOs where livestock spend most of their lives. The FMIA and the PPIA are also, first and foremost, food safety statutes—their purpose is to assure the meat produced from livestock is not contaminated rather than to assess the overall health of farmed animals. Though the FMIA and the PPIA protect the public from contaminated meat, they do not protect against potential disease outbreaks originating from live animals.

A single statute, the Animal Health Protection Act ("AHPA"), 114 specifically addresses livestock health before livestock enter a slaughter facility. 115 The AHPA authorizes the USDA to prohibit or restrict the entry of animals into interstate commerce if it determines such action is necessary to prevent the introduction of any pest or disease of livestock. 116 The AHPA also authorizes the USDA to "hold, seize, quarantine, treat, destroy, dispose of, or take other remedial action with respect" to any animal that is in interstate commerce and is believed to be carrying or has been exposed to any pest or disease of livestock.¹¹⁷ However, the AHPA only authorizes the USDA to take these protective actions outside of interstate commerce if "an extraordinary emergency exists" regarding a disease detected in livestock. 118 An emergency exists when a disease threatens livestock and protective action is necessary to prevent the spread of the threat. 119 Further, AHPA requires the creation of a National Animal Disease Preparedness and Response Program, but this program only authorizes the expansion of disease surveillance and testing, and does not address the conditions that may lead to disease outbreak in the first place. 120 Though these statutes are important tools in protecting people from foodborne illnesses, they are not sufficient to prevent viral transmissions from live animals to humans.

Environmental Statutes

While federal environmental statutes generally do not address farmed animal welfare, the National Environmental Policy Act ("NEPA") does offer an opportunity for oversight of CAFOs. The NEPA requires federal agencies to analyze environmental impacts of proposed actions and come up with

^{112.} See 9 C.F.R. § 302.3 (2021).

^{113.} See JOHNSON, supra note 110, at 6.

^{114.} Animal Health Protection Act, Pub. L. No. 107-171, 116 Stat. 494 (2002) (codified as amended at 7 U.S.C. §§ 8301-8317).

^{115. 7} U.S.C. §§ 8303–8304.

^{116.} Id.

^{117.} Id. § 8306(a).

^{118.} *Id.* § 8306(b)(1).

^{119.} See id.

^{120.} Id. § 8308a.

reasonable alternatives to those actions depending on the impact. ¹²¹ NEPA regulations provide several levels of analysis, including a categorical exclusion determination, the preparation of an Environmental Assessment ("EA"), and the preparation of an Environmental Impact Statement ("EIS"). ¹²² A categorical exclusion determination allows an agency action to bypass an environmental review, while an EA requires only a brief review of environmental impacts of a project. ¹²³ An EA can result in a Finding of No Significant Impact ("FONSI") by the agency, or it can lead to the requirement of an EIS, which involves a comprehensive review of the proposed action that takes a "hard look" at the cumulative and reasonably foreseeable impacts on the human environment. ¹²⁴ NEPA regulations define "human environment" to include the "relationship of people" to the environment, allowing the impact on public health to be a factor considered in environmental analyses. ¹²⁵

Two agencies may be subject to a NEPA analysis in relation to the dangers of CAFO living conditions: the Federal Food and Drug Administration ("FDA") and the USDA. When pharmaceutical companies want to place a new animal drug¹²⁶ on the market, they must first receive FDA approval. ¹²⁷ This approval process requires several steps, most of which involve the Federal Food, Drug, and Cosmetic Act ("FDCA"). ¹²⁸ The FDCA primarily governs the effect the introduction of an animal drug would have on animal products cultivated for human consumption. ¹²⁹ The FDCA does not require the FDA to assess the effects a new antibiotic might have on animal health or what it might mean for the broader human environment. ¹³⁰ This is where the NEPA applies.

While the FDA, like other agencies, is subject to the NEPA, its regulations state that "[t]here are no categories of agency actions that routinely significantly affect the quality of the human environment and that therefore would ordinarily require the preparation of an EIS." Thus, most pharmaceutical companies either qualify for a categorical exclusion or are only required to submit an EA. 132

^{121.} See 42 U.S.C. § 4332(C).

^{122. 40} C.F.R. § 1501.4 (2021); 21 C.F.R. § 25.15 (2021).

^{123. 40} C.F.R. § 1501.4; 21 C.F.R. § 25.15.

^{124.} See 40 C.F.R. § 1501.4; 21 C.F.R. § 25.15.

^{125. 40} C.F.R. § 1508.14; see also NEPA Frequently Asked Questions, CTRS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/healthyplaces/NEPAfaq.htm [https://perma.cc/QWR4-H3SK] (Dec. 14, 2009).

^{126.} A "new animal drug" refers to "any drug intended for use for animals other than man." 21 U.S.C. § 321(v).

^{127.} See 21 U.S.C. § 360b.

^{128.} Federal Food, Drug, and Cosmetic Act, Pub. L. No. 75-717, 52 Stat. 1040 (1938) (codified as amended at 21 U.S.C. §§ 301–399f).

^{129.} See Schneider, supra note 26, at 254-55.

^{130.} See id. at 258.

^{131. 21} C.F.R. § 25.22(a) (2021).

^{132.} Schneider, supra note 26, at 269.

Companies applying for drug approval conduct their own EAs, and while public input is taken into account, the FDA only adds new information to the EA when "warranted." If the FDA finds that the proposed action will have no significant impact on the environment, it will issue a FONSI, which means no further environmental analysis is needed. 134

Because of their stake in the process, companies unsurprisingly almost always find no environmental impact in their EAs. And, because the FDA has limited resources to conduct its own environmental analysis, it depends primarily on company research to support its NEPA processes. This ultimately leads to a large majority of drug applications resulting in a FONSI without an adequate assessment of the impact of animal drugs on the larger public-health sphere.

USDA actions are also subject to NEPA review.¹³⁸ However, CAFOs do not have the same approval process that new animal drugs do with the FDA. While CAFOs need EPA permits to comply with the CWA, the USDA does not have a required approval process for construction or expansion of CAFOs.¹³⁹ CAFOs are only subject to NEPA review when a USDA action involves *funding* the construction or expansion of a CAFO.¹⁴⁰ The Farm Service Agency ("FSA"), a part of the USDA, either helps obtain lenders from a USDA-approved organization or directly lends to farmers to build CAFOs.¹⁴¹ Once established, CAFOs that accept this funding must first go through the NEPA process in accordance with FSA regulations.¹⁴²

However, the Trump administration decreased even this minimal amount of environmental review required to build federally funded CAFOs. 143 Under direction from the White House, the Council on Environmental Quality ("CEQ"), which implements NEPA regulations, issued a rule that completely exempts CAFOs receiving FSA loan guarantees from NEPA review. 144 This

^{133. 21} C.F.R. § 25.40(b).

^{134.} Id. § 25.41.

^{135.} Schneider, *supra* note 26, at 269 ("If the drug sponsor were to find an adverse environmental impact, the sponsor would be expected to propose an alternative. That alternative, whether a denial of approval or a restricted approval, would clearly work against the sponsor's financial interests.").

^{136.} *Id*.

^{137.} Id. ("By all appearances, the system is designed to result in EAs that routinely support a FONSI.").

^{138.} See 42 U.S.C. § 4332(C).

^{139.} See 7 C.F.R. § 799.41(a)(9) (2021).

^{140.} Id

^{141.} David N. Cassuto & Tala DiBenedetto, Suffering Matters: NEPA, Animals, and the Duty To Disclose, 42 U. HAW. L. REV. 41, 59-60 (2020).

^{142. 7} C.F.R. § 799.1.

^{143.} See Challenging CEQ's CAFO Exemptions Under NEPA, ANIMAL LEGAL DEF. FUND, https://aldf.org/case/challenging-ceqs-cafo-exemptions-under-nepa/ [https://perma.cc/KM9U-4P76] (Sept. 23, 2020).

^{144.} Id.

leaves CAFOs that cannot receive financing elsewhere with the ability to receive FSA-backed funding without conducting any environmental review. ¹⁴⁵ While many environmental organizations have pushed back against this new rule by filing lawsuits, the rule stands until cases are resolved, and publicly funded CAFOs can continue to escape NEPA review. ¹⁴⁶

B. State Statutes

Because livestock welfare measures enjoy broad approval, it is not surprising that many states have enacted their own livestock welfare statutes to compensate for the lack of federal regulation. In recent years, nine states have passed legislation banning gestation crates used for pregnant pigs. California, Colorado, Massachusetts, Michigan, Nevada, Oregon, Rhode Island, Utah, and Washington have passed legislation outlawing battery cages for egg-laying hens. California and New York have outlawed the sale of foie gras, a dish prepared using poultry that were force-fed to enlarge their livers. And California has gone so far as to ban not only the practice of using small crates to house livestock but also the sale of any meat or eggs from caged animals.

While livestock welfare efforts have gained public approval in a growing number of states, many statutes were passed using the ballot initiative process. ¹⁵² Unlike at the federal level, many states allow citizens to vote directly on issues through ballot initiatives in addition to voting elected officials into office. ¹⁵³ For example, California's Proposition 12, which set a minimum space standard for farmed livestock, was added to the ballot for a direct vote after meeting a petition signature threshold set by California law. ¹⁵⁴ Only twenty-four states allow for ballot initiatives, leaving other states to rely on their elected officials to pass welfare legislation. ¹⁵⁵ As most rural states have a strong agricultural

^{145.} Id.

^{146.} Id.

^{147.} See Farm Animal Confinement Bans by State, AM. SOC'Y FOR PREVENTION CRUELTY TO ANIMALS, https://www.aspca.org/animal-protection/public-policy/farm-animal-confinement-bans [https://perma.cc/SME5-N7ER].

^{148.} *Id.* These include Arizona, California, Colorado, Florida, Maine, Massachusetts, Michigan, Ohio, Oregon, and Rhode Island. *Id.*

^{149.} *Id*

^{150.} Jeffery C. Mays & Amelia Nierenberg, Foie Gras, Served in 1,000 Restaurants in New York City, Is Banned, N.Y. TIMES, https://www.nytimes.com/2019/10/30/nyregion/foie-gras-ban-nyc.html [https://perma.cc/9PBA-B62M (dark archive)] (July 17, 2021).

^{151.} Kenny Torrella, *The Fight over Cage-Free Eggs and Bacon in California, Explained*, VOX (Aug. 10, 2021, 8:10 AM), https://www.vox.com/future-perfect/22576044/prop-12-california-eggs-pork-bacon-veal-animal-welfare-law-gestation-crates-battery-cages [https://perma.cc/GUX7-9CVZ].

^{152.} Piper, supra note 27.

^{153.} *Initiative Process 101*, NAT'L CONF. ST. LEGISLATURES, https://www.ncsl.org/research/elections-and-campaigns/initiative-process-101.aspx [https://perma.cc/62AG-ZPBZ].

^{154.} See Torrella, supra note 151.

^{155.} See Initiative Process 101, supra note 153.

lobby, ¹⁵⁶ the likelihood of all states passing livestock welfare laws as strong as California's is slim. This reality highlights the need for a nationwide livestock welfare statute.

III. FAILED ATTEMPTS AT FEDERAL LEGISLATION AND BARRIERS TO REGULATION

Many bills that consider the welfare of animals living in CAFOs have been presented to Congress over the years, but each attempt has failed.¹⁵⁷ This is partly due to significant barriers presented by the agriculture industry's powerful influence in Congress.¹⁵⁸

A. Failed Attempts at Federal Legislation

In 1989, Representative Charles Bennett of Florida introduced the Veal Calf Protection Act, ¹⁵⁹ which attempted to restrict the use of veal crates—tiny crates that severely limit the movement of confined calves. ¹⁶⁰ This bill was referred to the House Subcommittee on Livestock, Dairy, and Poultry, but it never went to the floor for a vote. ¹⁶¹ A bill aiming to "prohibit[] cruelty to farm animals" was also introduced in 2008, but the bill ended up with only six cosponsors and never received a hearing. ¹⁶² In 2010, Representative Diane Watson of California introduced a bill that sought to "prohibit the federal government from procuring food products from animals not given enough room to freely" move around. ¹⁶³ This bill had forty cosponsors but again was not granted a hearing by the Subcommittee. ¹⁶⁴ Other bills addressing livestock welfare have been introduced in recent years to no avail. ¹⁶⁵

In early 2020, Senator Cory Booker of New Jersey introduced the Farm System Reform Act ("Reform Act"), 166 which was supported by more than two

^{156.} See Jen Fifield, Farmers Push Back Against Animal Welfare Laws, PEW CHARITABLE TRS. (Nov. 29, 2016), https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/11/29/farmers-push-back-against-animal-welfare-laws [https://perma.cc/29HP-A5GY].

^{157.} See ANIMAL WELFARE INST., LEGAL PROTECTIONS FOR ANIMALS ON FARMS 1 (2018) [hereinafter ANIMAL WELFARE INST., LEGAL PROTECTIONS], https://awionline.org/sites/default/files/uploads/documents/FA-AWI-LegalProtections-AnimalsonFarms-110714.pdf [https://perma.cc/Z 2X4-KVHH].

^{158.} See Marc F. Bellemare & Nicholas Carnes, Why Do Members of Congress Support Agricultural Protection?, 50 FOOD POL'Y 20, 32–33 (2015) (summarizing that agricultural political action committees' contributions are not irrelevant when considering Congress's support for agricultural protection).

^{159.} Veal Calf Protection Act, H.R. 84, 101st Cong. (1989).

^{160.} ANIMAL WELFARE INST., LEGAL PROTECTIONS, supra note 157, at 1.

^{161.} Id.

^{162.} Id.

^{163.} Id.

^{164.} *Id*.

^{165.} See id. at 2.

^{166.} Farm System Reform Act of 2019, S. 3221, 116th Cong. (2020).

hundred environmental and public-health organizations. ¹⁶⁷ The Reform Act would require a moratorium on new construction of large CAFOs and any expansion of those currently operating. ¹⁶⁸ It would also phase out all CAFOs by 2040, providing voluntary buyouts of current CAFOs in operation to help reduce any financial burdens associated with this goal. ¹⁶⁹ Further, the Reform Act addresses the threat that CAFOs pose to public health, though it falls short of addressing how living conditions can increase the likelihood of future disease outbreaks. ¹⁷⁰ Although the Reform Act does require phasing out CAFOs, which would reduce the number of animals allowed to be confined together, it does not explicitly prohibit the battery cages and small confinement pens that livestock are currently forced to endure. ¹⁷¹ While phasing out CAFOs is an important step in preventing disease outbreaks, without eliminating the close confinement of livestock, living conditions that are apt to create a future pandemic will continue to threaten public health.

B. Barriers

The primary barrier to passing federal—and some state—livestock welfare regulations is the ever-increasing power of the agriculture industry. The industry has undergone extreme consolidation in the past few decades, giving meat processors nearly unlimited power over producers, regulators, and public perceptions of the industry.¹⁷² While the federal government succeeded in breaking up the monopolized meat industry of the early 1900s to curb the working condition horrors made famous by Upton Sinclair's *The Jungle*, relaxed antitrust enforcement in the 1980s and 1990s has led to only six companies controlling two-thirds of the United States' meat production.¹⁷³ Production giants like Tyson now own companies throughout the supply chain, which means they often control livestock breeding, meat packaging, and everything in between.¹⁷⁴ Instead of the individualized family farms that are often portrayed in the media,¹⁷⁵ the industry is now almost entirely comprised of giant factory farms. For example, average hog farms have grown by about seventy percent in the last twenty years, but seventy percent of hog farms have also shut down

^{167.} Farm System Reform Act, ANIMAL WELFARE INST., https://awionline.org/legislation/farm-system-reform-act [https://perma.cc/TW4S-JVYN].

^{168.} S. 3221.

^{169.} See id.

^{170.} See id.

^{171.} See id.

^{172.} See Note, Challenging Concentration of Control in the American Meat Industry, 117 HARV. L. REV. 2643. 2643-44 (2004).

^{173.} Claire Kelloway, *How Biden Can Rein In the Big Meat Monopoly*, VOX (Feb. 24, 2021, 5:50 PM), https://www.vox.com/future-perfect/22298043/meat-antitrust-biden-vilsack [https://perma.cc/MG4V-FUGQ (staff-uploaded archive)].

^{174.} *Id*.

^{175.} Id.

during that same time period.¹⁷⁶ This intense consolidation gives farmers little control over how they raise their animals as corporations often favor efficiency over quality of care.¹⁷⁷

This newfound dominance has also given the meat industry control over the public's perception of farming. Over the years, animal rights groups have exposed the horrific conditions in CAFOs, but companies have attempted to blur the public's perception of how their food is produced through "ag-gag" laws, which ban any photos and videos of factory farm activity taken without the owner's permission. Further, while the meat industry often claims that farm and industry reform will cause food prices to spike, many of these companies are already taking part in anticompetitive practices that raise prices at the expense of consumers. In a recent criminal antitrust case, poultry executives were indicted on price-fixing charges when an investigation revealed executives berating a supplier for coming up short on production, stating that "[t]heir customers need to feel the pain."

Dominant companies in the industry have used their status to heavily lobby state and federal legislators to reject any legislative attempts to break up "big meat" or laws that might slow down production. ¹⁸² In 2020 alone, the meat industry spent over four million dollars on lobbying Congress. ¹⁸³ Coupled with constant litigation targeting the constitutionality of state welfare laws, ¹⁸⁴ these

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^{176.} Id.

^{177.} Id.

^{178.} Anti-Whistleblower Ag-Gag Bills Hide Factory Farming Abuses from the Public, HUMANE SOC'Y U.S., https://www.humanesociety.org/resources/anti-whistleblower-ag-gag-bills-hide-factory-farming -abuses-public [https://perma.cc/UDK3-T3PJ]. For example, an Arkansas law allows civil penalties against anyone who exposes animal abuses at Arkansas farms. ARK. CODE ANN. § 16-118-113 (LEXIS through Act 1112 of the 2021 Reg. Sess. and through all acts of the 1st Extraordinary Sess., including corrections and edits by the Ark. Code Revision Commission). Many of these laws, however, have recently been ruled unconstitutional. See Nicole Pallotta, Though Ruled Unconstitutional, Industry Continues Pushing Ag-Gag Laws: Updates in North Carolina, Kansas, Iowa, and Ontario, ANIMAL LEGAL DEF. FUND (Sept. 15, 2020), https://aldf.org/article/though-ruled-unconstitutional-industry-continues-pushing-ag-gag-laws-updates-in-north-carolina-kansas-iowa-ontario/ [https://perma.cc/965W-4LX4].

^{179.} See Andrew Jacobs, Denmark Raises Antibiotic-Free Pigs. Why Can't the U.S.?, N.Y. TIMES (Dec. 6, 2019), https://www.nytimes.com/2019/12/06/health/pigs-antibiotics-denmark.html [https://perma.cc/[X9Y-Y5CS (dark archive)].

^{180.} H. Claire Brown, "We Should Not Help Them One Micron," and Other Dispatches from a Vast Chicken Conspiracy, COUNTER (June 4, 2020, 2:37 PM), https://thecounter.org/pilgrims-pride-poultry-price-fixing-indictment/ [https://perma.cc/B3XS-SSWQ].

^{181.} *Id*.

^{182.} See Kelloway, supra note 173.

^{183.} Industry Profile: Meat Processing & Products, OPENSECRETS, https://www.opensecrets.org/federal-lobbying/industries/summary?cycle=2020&id=G2300&year=2021 [https://perma.cc/UUH3-FOFX].

^{184.} See, e.g., Nat'l Pork Prods. Council v. Ross, 6 F.4th 1021 (9th Cir. 2021) (arguing that California's law banning out-of-state pork producers does not meet state standards and is unconstitutional).

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tactics used by the agriculture industry have prevented concrete livestock welfare legislation from making any meaningful progress in Congress.

IV. THE INTRODUCTION OF A FEDERAL LIVESTOCK WELFARE STATUTE

As current statutes do not adequately address the threat that living conditions in CAFOs pose to public health, this Comment proposes creating a federal livestock welfare statute that does. With rigorous lobbying efforts preventing livestock regulation and creating stark disagreements between different groups and industries, a successful statute must be grounded in research and gain support from a broad range of stakeholders. To understand how such a statute could look, this part will first briefly analyze the Animal Welfare Act ("AWA"), then consider Ohio's innovative Livestock Care Standards Board, as well as science-based livestock welfare regulations in other countries.

A. The Animal Welfare Act

While the majority of farmed animals in the United States live in tumultuous conditions with no federal regulatory consequences, the domestic animals are protected under the AWA. Among other reasons, Congress passed the AWA in 1966 to ensure the "humane care and treatment" of "animals intended for use in research facilities or for exhibition purposes or for use as pets. AWA contains general standards of care for the covered animals and grants the USDA authority to make and enforce regulations under the AWA.

The sheer amount and complexity of USDA regulations under the AWA illuminate the stark contrast in protections for livestock and other animals. For dogs and cats alone, housing facilities must be "kept in good repair" and "protect the animals from injury" by being "structurally sound." Facilities also must be "free of any accumulation of trash, waste material, junk, weeds, and other discarded materials." Any hard surfaces with which a dog or cat may come into contact must be "spot-cleaned daily and sanitized," and cleaning standards involve wiping them down every day to ensure there is no excrement. These

^{185.} See Animal Welfare Inst., Legal Protections, supra note 157, at 1.

^{186. 7} U.S.C. § 2131.

^{187.} Id. § 2131(1).

^{188.} Id. §§ 2143-2144.

^{189. 9} C.F.R. § 3.1(a) (2021).

^{190.} Id. § 3.1(b).

^{191.} See id. § 3.1(c)(3).

are only a few of the strict standards set by AWA regulations, many of which provide for criminal penalties if violated. 192

Although the AWA is a helpful tool in assessing the potential components of a federal livestock welfare statute, the vast differences between livestock and other domesticated animal care makes the AWA and its regulations an impractical model for a livestock welfare statute. And with farmers already on the defensive when it comes to any livestock welfare regulations, the likelihood of a bill as strict and comprehensive as the AWA and its regulations receiving congressional approval is low.

A Closer Look: The Ohio Livestock Care Standards Board

While many states have enacted statutes to address farmed animal welfare, most laws involve outright bans of practices without enacting a thorough set of welfare standards. The state of Ohio, however, enacted a statute that uses interdisciplinary expertise to set practical standards of care.

Ohio, in a more comprehensive approach to livestock welfare, created its own Livestock Care Standards Board, 193 which is directed to create standards of care based on regulations for Ohio livestock. 194 The Ohio Livestock Care Standards Board is made up of a myriad of professionals who have experience with livestock care and agriculture, including the Ohio Director of Agriculture, a member representing family farms, a licensed veterinarian, a representative of a county humane society, and several others usually appointed by the state legislature or governor. 195

When considering what to include in the standards of care, the board must consider:

- (1) Best management practices for the care and well-being of livestock;
- (2) Biosecurity;
- (3) The prevention of disease;
- (4) Animal morbidity and mortality data;
- (5) Food safety practices;
- (6) The protection of local, affordable food supplies for consumers;

^{192.} See 7 U.S.C. §§ 2149(d), 2156(i); see also David Favre, Brief Summary of the US Animal Welfare Act, ANIMAL LEGAL & HIST. CTR. (2002), https://www.animallaw.info/intro/animal-welfare-act-awa [https://perma.cc/356Y-YF7D].

^{193.} Ohio Rev. Code § 904.02(A) (2021).

^{194.} See id. § 904.03(A).

^{195.} Id. § 904.02(A).

- (7) Generally accepted veterinary medical practices, livestock practice standards, and ethical standards established by the American veterinary medical association;
- (8) Any other factors that the board considers necessary for the proper care and well-being of livestock in this state. 196

Since the first Livestock Care Standards Board met to discuss standards and the Ohio General Assembly voted to approve the standards as agency rules, which went into effect in 2011, Ohio has had a comprehensive set of livestock care standards covering "dairy, beef, swine, turkeys, broilers, sheep, goats, alpacas, llamas, and equine[s]." These standards include guidelines for each species listed and impose penalties if farmers do not adhere to these standards. The standards require sufficient space for all cattle to lie down and a requirement that all animals have "access [to] feed and water without excessive competition." Furthermore, the standards phase out battery cages and gestation pens, 202 as well as implement new cage standards for birds. The standards require pain management during horn removal and castration procedures as well. Unlike the NEPA and other procedural statutes, the standards give the Ohio Department of Agriculture the ability to impose civil penalties on anyone found in violation of the standards.

Critics of the Ohio Livestock Care Standards Board have pointed out that while the stated purpose of the board's creation was to "govern[] the care and well-being of livestock,"206 a crucial underlying purpose was to "preempt attempts by groups outside the state to impose standards on livestock and poultry production in the state."207 Further, the standards are actually less stringent than many other state livestock welfare laws; while the Ohio standards phase out the use of battery cages, they do not specify an end date.²⁰⁸ Thus,

^{196.} *Id.* § 904.03(A)(1)–(8).

^{197.} Ellen Essman, Comment, *The Ohio Livestock Care Standards as a Blueprint for Livestock Welfare Policy*, 18 DRAKE J. AGRIC. L. 553, 558 (2013) (quoting *Livestock Care Standards*, OHIO DEP'T AGRIC., https://agri.ohio.gov/wps/portal/gov/oda/divisions/animal-health/livestock-care-standards [https://perma.cc/PG8Y-CM95]).

^{198.} See OHIO ADMIN. CODE 901:12-1-05 to -15-04 (2021).

^{199.} *Id.* at 901:12-6-02(D)(2).

^{200.} Id.

^{201.} See id. at 901:12-9-03(F)(6).

^{202.} See id. at 901:12-8-02(G)(4).

^{203.} Id. at 901:12-6-03(E).

^{204.} Id. at 901:12-2-02(A)(1)-(2).

^{205.} Id. at 901:12-2-01(F)-(J).

^{206.} Ohio Const. art. XIV, § 1.

^{207.} Lindsay Vick, Comment, Confined to a Process: The Preemptive Strike of Livestock Care Standards Boards in Farm Animal Welfare Regulation, 18 ANIMAL L. 151, 154 (2011).

^{208.} *Id.* at 163. Vick goes on to argue that the Ohio standards are "not substantial improvements upon the status quo on contemporary factory farms." *Id.* at 162.

many states—that is, those with outright bans on battery cages—have arguably been more effective in their efforts to increase livestock welfare even without such a board. While these are valid criticisms, they do not preclude Ohio's Livestock Care Standards Board from acting as a valuable model for a federal livestock welfare scheme. Further, as discussed in Section III.B, the agricultural industry has a powerful congressional presence, making it much more likely for federal livestock welfare legislation to pass if the agricultural industry was promised a say in creating set standards.²⁰⁹

C. Science-Based Animal Welfare: A Look at Other Countries

While the United States has struggled to pass livestock welfare legislation, several other countries have enacted such legislation largely based on scientific research. For example, the European Union ("EU") uses the Five Freedoms, an animal welfare concept created by the United Kingdom Parliament, as a basis for its welfare laws.²¹⁰ The Five Freedoms were created to prevent unnecessary suffering in animals, including:

- 1. Freedom from Hunger and Thirst—by ready access to fresh water and a diet to maintain full health and vigour.
- 2. Freedom from Discomfort—by providing an appropriate environment including shelter and a comfortable resting area.
- 3. Freedom from Pain, Injury or Disease—by prevention or rapid diagnosis and treatment.
- 4. Freedom to Express Normal Behaviour—by providing sufficient space, proper facilities and company of the animal's own kind.
- 5. Freedom from Fear and Distress—by ensuring conditions and treatment which avoid mental suffering.²¹¹

Some of the EU's laws based on this concept ban battery cages for egg-laying hens and prohibit the use of individual stalls for calves after the age of eight weeks.²¹²

New Zealand has also enacted science-based animal welfare statutes. Its Animal Welfare Act encompasses nearly all domestic animals, including livestock, and requires that animals have

proper and sufficient food... and... water[,] adequate shelter[,] opportunity to display normal patterns of behaviour[,] physical handling in a manner which minimises the likelihood of unreasonable or

^{209.} See supra Section III.B.

^{210.} Kelly Levenda, Science-Based Farmed Animal Welfare Laws for the U.S., 13 J. ANIMAL & NAT. RES. L. 93, 118 (2017).

^{211.} *Id*.

^{212.} Id. at 120.

unnecessary pain or distress[, and] protection from, and rapid diagnosis of, any significant injury or disease . . . which, in each case, is appropriate to the species, environment, and circumstances of the animal. ²¹³

Minimum care standards for animals in New Zealand are informed by university animal welfare research, which explains how better standards of care can improve the overall health of livestock in captivity.²¹⁴

Several countries and jurisdictions, including the EU, also have more stringent and detailed livestock transport laws than the United States. The EU's regulations require lower livestock density in vehicles and a twenty-four hour limit on the transporting of pigs and horses. ²¹⁵ However, animal welfare groups have consistently demanded even more stringent regulations and increased enforcement of current regulations because, similar to the United States, recent investigations show that the EU has only loosely enforced these regulations over the years. ²¹⁶ Unlike the United States, though, the EU recently established an inquiry committee to investigate livestock transport in response to mounted pressure. ²¹⁷

The United Kingdom recently went a step further and issued a ban on all live animal exports in England and Wales, along with a consultation that includes measures to reduce the amount of time livestock spend in trucks within the United Kingdom.²¹⁸ The ban does not include poultry, but animal welfare advocates laud the ban as a significant step in the right direction.²¹⁹

While several countries have enacted general livestock welfare laws, some have also completely banned the use of antibiotics and hormones in livestock raised for food.²²⁰ This includes Denmark, which banned the practice for animal

^{213.} Animal Welfare Act 1999, s 4 (N.Z.).

^{214.} Levenda, supra note 210, at 123-24.

^{215.} Council Regulation (EC) No 1/2005 of 22 December 2004 on the Protection of Animals During Transport and Related Operations and Amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97, 2005 O.J. (L 3) 25, 27–31.

^{216.} See Holly Young & Sophie Kevany, Campaigners Welcome 'Historic' EU Inquiry into Live Animal Transport, GUARDIAN (June 22, 2020, 10:00 AM), https://www.theguardian.com/environment/2020/jun/22/campaigners-welcome-historic-eu-inquiry-into-live-animal-transport [https://perma.cc/UUZ7-4CT8].

^{217.} See id.

^{218.} Helen Catt, Live Animal Exports To Be Banned in England and Wales, BBC (Dec. 3, 2020), https://www.bbc.com/news/uk-politics-55167473 [https://perma.cc/43V6-5U3C].

^{219.} Sophie Kevany, England and Wales To Ban Live Animal Exports in European First, GUARDIAN, https://www.theguardian.com/environment/2020/dec/03/uk-to-become-first-country-in-europe-to-ban-live-animal-exports [https://perma.cc/H8R6-YFBC] (Dec. 7, 2020).

^{220.} THE HUMANE SOC'Y OF THE U.S., AN HSUS REPORT: WELFARE ISSUES WITH THE USE OF HORMONES AND ANTIBIOTICS IN ANIMAL AGRICULTURE 2, 5 (2016) [hereinafter HUMANE SOC'Y, HORMONES AND ANTIBIOTICS], https://www.humanesociety.org/sites/default/files/docs/hsus-report-issues-with-hormones-welfare.pdf [https://perma.cc/47TU-92QD].

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growth promotion in 2000.²²¹ Today, farmers in Denmark must have a veterinary prescription for all antibiotics used in livestock raised for consumption, "and veterinarians cannot profit from the sale of antibiotics."²²² Further, all antibiotic prescriptions and use must be reported, and farm inspections are regularly conducted throughout the country to ensure compliance.²²³ This data is aggregated and studied by the Danish Antimicrobial Resistance Monitoring and Research Program ("DANMAP"), which releases yearly reports on both animal and human antibiotic consumption and resistance.²²⁴

Using DANMAP data, the World Health Organization determined that from 1992 to 2008, antibiotic and hormone usage in pigs was reduced by fifty percent in Denmark.²²⁵ Only a few years after the ban, Denmark saw a reduction in antimicrobial resistance in both animals and humans.²²⁶ Data showed that the ban drastically reduced in livestock the rate of antibiotic-resistant *enterococci*, a strain of bacteria that can lead to several different human illnesses, such as surgical wound infections and urinary tract infections.²²⁷

While opponents of banning widespread antibiotic use in livestock argue that it will lead to higher mortality rates and loss of production, this has not been the case in Denmark.²²⁸ Initially after the ban, Danish farmers did report higher pig mortality rates because they had trouble weaning baby pigs from their mothers and saw increased rates of infection.²²⁹ But as farmers began to combat these issues with better livestock management practices, hog farmers saw mortality rates level off to pre-ban rates.²³⁰ These methods included basic welfare practices, like waiting to wean pigs at a later age, improving nutrition, and increasing the amount of space animals have to roam.²³¹

D. Mechanics of a Federal Statute

By looking to other countries' reliance on research-based animal welfare laws and using a model similar to the Ohio Livestock Care Standards Board, the United States can enact its own comprehensive livestock welfare statutory

^{221.} Id. at 5-6.

^{222.} PEW CHARITABLE TRS., AVOIDING ANTIBIOTIC RESISTANCE: DENMARK'S BAN ON GROWTH PROMOTING ANTIBIOTICS IN FOOD ANIMALS, https://www.pewtrusts.org/-/media/legacy/uploadedfiles/phg/content_level_pages/issue_briefs/denmarkexperiencepdf.pdf [https://perma.cc/Z4DJ-93R9].

^{223.} Id.

^{224.} See id.

^{225.} Id.

^{226.} See id.

^{227.} Id.

^{228.} See id.

^{229.} HUMANE SOC'Y, HORMONES AND ANTIBIOTICS, supra note 220, at 6.

^{230.} Id.

^{231.} Id.

scheme. The federal government has ample authority to create a similar system to the Ohio Livestock Care Standards Board. Congress can enact legislation creating a federal version of the Ohio system while giving the president the authority to appoint board members and instructing the USDA to enforce the board's standards. Similar to Ohio's, the board can be comprised of stakeholders from across the agricultural industry spectrum to ensure fairness and accuracy.

In order to avoid criticisms similar to those of the Ohio standards, however, Congress should require federal standards to be based in research and centered on the "Five Freedoms." Further, while the occupational makeup of the Ohio Livestock Care Standards Board is a good way to diversify represented interests, to prevent the current disproportional influence of the agricultural lobby from infringing on the board's processes, Congress should go one step further and prohibit members of a federal care standards board from having any financial interest in companies that are subject to regulations stemming from these standards.

Although such goals for a care standards board may seem elusive, Congress has often put statutory limits on the financial interests of agency employees with the purpose of "eliminat[ing] financial interests that could possibly tempt an executive branch official into subordinating the public interest to his or her own self-interest." The Federal Communications Commission ("FCC"), for example, is made up of five commissioners who cannot be "financially interested in any company" that is regulated by the FCC. While the FCC's mission appears far removed from the mission of a livestock care standards board, the agriculture industry, similar to the telecommunications industry, is heavily consolidated into very few corporations that have a lot of power. With statutory limits on the financial interests of care standards board members, the

^{232.} The Commerce Clause of the U.S. Constitution would give Congress authority to enact such a law. The AWA and subsequent animal cruelty statutes have been upheld partly because those statutes regulate "animals and activities" that are "either in interstate or foreign commerce or substantially affect such commerce or the free flow thereof." *See* United States v. Gibert, 677 F.3d 613, 625 (4th Cir. 2012) (quoting 7 U.S.C. § 2131).

^{233.} Donna M. Nagy, Owning Stock While Making Law: An Agency Problem and a Fiduciary Solution, 48 WAKE FOREST L. REV. 567, 584 (2013).

^{234. 47} U.S.C. § 154(b)(2)(A)(i).

^{235.} The FCC was created "for the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available... to all the people of the United States... a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges." § 151.

^{236.} Emily Stewart, *America's Monopoly Problem, Explained By Your Internet Bill*, VOX (Feb. 18, 2020, 7:00 AM), https://www.vox.com/the-goods/2020/2/18/21126347/antitrust-monopolies-internet-telecommunications-cheerleading [https://perma.cc/9W28-FANT] ("In the US... just a few big companies, often without overlap, control much of the telecom industry....").

^{237.} See supra Section III.B.

board has a better chance of escaping the monetary influence that agriculture companies currently have over Congress.

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With Congress's years-long struggle to enact legislation to address CAFO living conditions, the creation of a bipartisan care standards board is Congress's best chance of enacting livestock welfare legislation.

CONCLUSION

As the world continues to become more industrialized, so too does the way we raise and consume our food. But as the COVID-19 pandemic has shown us, these new methods come with consequences. While agricultural lobbyists in the United States have argued that incorporating humane husbandry practices will lead to production loss²³⁸ and higher food prices,²³⁹ other countries have demonstrated that this simply is not true.²⁴⁰ Production costs associated with farm-animal welfare improvements can be offset by increased prices to consumers. In the United States, ethically raised meat and eggs are often sold for two to three times more than conventional cage eggs.²⁴¹ But in Europe, markets for ethically raised meat have existed long enough that they are now well developed with significant competition.²⁴² Because of this, prices there are not as high.²⁴³ With basic nationwide welfare methods and strict regulations, the United States can improve livestock health and reduce the risk of unleashing the next pandemic.

But perhaps there is more to this issue than human safety. The conditions of CAFOs can only be properly conveyed with gruesome images; the descriptions in this paper do not do justice to the horrors endured by living beings in these spaces. Our society often turns a blind eye to animal welfare, associating the animal rights movement with images of activists throwing blood on people wearing fur coats. But we can no longer afford this view. Human and animal welfare are intimately connected, and the longer we ignore animal suffering, the closer we are to endangering the fate of our own species. Judge Wilkinson of the Fourth Circuit said it best in his concurrence in *McKiver v. Murphy-Brown*, *LLC*²⁴⁴: "[I]t is fitting that the creatures who gave their very

^{238.} See Laura Rogers, What Can Danish Hogs Teach Us About Antibiotics?, HUFFPOST, https://www.huffpost.com/entry/what-can-danish-hogs-teac_b_318478 [https://perma.cc/T95Z-W9Z R] (Nov. 17, 2011).

^{239.} See Jacobs, supra note 179.

^{240.} See id

^{241.} Gaverick Matheny & Cheryl Leahy, Farm-Animal Welfare, Legislation, and Trade, 70 LAW & CONTEMP. PROBS. 325, 346 (2007).

^{242.} Id.

^{243.} Id.

^{244. 980} F.3d 937 (4th Cir. 2020).

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lives for us, receive in return our efforts to make their brief stay on earth less intolerable. For their sake and for ours."²⁴⁵

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245. Id. at 984 (Wilkinson, J., concurring).

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