

COVID-19, animals, and enlightened self-interest

When accidents happen it is human nature to question: Why did this happen? Could it have been prevented?

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The COVID-19 pandemic was probably caused by our use of animals. Although the precise origins are unclear, the evidence we have to date indicates that the virus likely originated in wild animals that were brought to a market to be sold and used as meat or traditional medicine.¹ The risks of this happening again have been widely recognized, and there has been public outcry against live animal markets in China. The Chinese government has responded and cracked down on these markets and passed legislation prohibiting some aspects of the wild animal industry.²

Although many Canadians have been quick to call attention to live animal markets in China, we have not paid enough attention to what is happening in Canada. For example, behind closed doors, away from public and government scrutiny, millions of mink are raised in miserable conditions.³ In a society that values compassion and recognizes the need to avoid unnecessary suffering, keeping intelligent and sensitive animals in small wire-bottom cages to be used to make luxury coats has long been an ugly spot—and morally unjustifiable.

Mink and COVID-19

Recent outbreaks of COVID-19 on large mink farms in the Netherlands have called attention to another reason for alarm.⁴ Workers who were

infected with COVID-19 spread the infection to the mink. The virus then spread like wildfire among the mink that, in turn, infected other workers.

COVID-19 spreads readily from person to person, and secluded mink farms are not predicted to be a major source of community spread. But large dense populations of animals on mink farms provide favorable conditions for viruses to evolve toward more virulent forms and present an unnecessary risk. In response, for ethical and public health reasons, the Netherlands parliament voted to permanently shut down all mink fur farms in the country this year and to compensate farmers to help them transition.⁵ Over the last few years, many countries, ranging from the UK to Austria to Japan, have also banned mink farms. Canada has fallen behind.⁶

COVID-19 emerged in China, but other viruses with pandemic potential could emerge on farms here in Canada. To understand the risk, we only have to look back to the 2009 H1N1 influenza pandemic, a disease outbreak that had its origins traced back to pig farms in North America.⁷

Swine and other animal influenza viruses

When viruses replicate, errors or mutations often occur, especially in RNA viruses like influenza. With influenza, as well as small mutations

during replication, on rare occasions larger mutations and adaptations can occur when different strains are mixed together. For example, if a pig with swine flu is infected by a duck with bird flu, or a farmer with human flu, the mixed viruses can combine together (called reassortment). In 2009, a novel strain of swine flu emerged in North America that probably occurred due to spread between pigs and farmers mixing together and creating the new virus that caused the 2009 H1N1 pandemic.⁷

Experts agree it is a question of when, not if, another pandemic influenza virus will emerge, and how severe the next pandemic will be. To mitigate this risk, there are calls for much-needed surveillance of influenza viruses among animals and workers on farms.⁸

Animal agriculture

Over the years, animal agriculture has become increasingly industrialized and intensified. Large factory farms (where most of the meat in Canada comes from) are profit driven, operate on narrow margins, and are almost entirely self-regulated. There are no required third-party or government inspections of animals on factory farms in Canada. Under these conditions, animal welfare issues can be inadvertently sidelined. Costly infection control and public health practices are also vulnerable to cost-cutting measures.

Consider the use of antibiotics on factory farms in Canada. In hopes of maintaining high

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growth rates, animals on factory farms were given antibiotics in their feed. For years, and despite knowledge of risks and protestations from organizations like the Ontario Medical Association, the government of Canada refused to regulate antibiotic use on farms.⁹ To save costs, farmers could buy whatever antibiotic they wanted, from anywhere in the world, and give it to animals to promote their growth on industrialized farms. As a result of widespread antibiotic use, resistant bacteria emerged, entered our food supply, and made people sick.¹⁰ It took years of international and public pressure before the Canadian government introduced regulation to seriously address these risks.

As well as the conditions for animals on farms, a key factor that contributes to our increased risk for pandemic diseases is the sheer number of animals that are now raised for meat. In 2019, there were over 830 million farm animals killed for food in Canada.¹¹ The scale is staggering. To meet the current demands, every year 20 farm animals are killed for each man, woman, and child.

Carefully considering our relationship to animals and the risks of pandemic diseases, one of the most important ways to effectively reduce our risk is to seriously reduce eating animals, and for those who can, to stop eating animals altogether.¹²

Enlightened self interest

Reducing or stopping eating animals has other obvious benefits. We are faced with an existential climate crisis. If we joined others in choosing a plant-based diet, we would dramatically reduce deforestation and greenhouse gas emissions.¹³

Our understanding of an animal's capacity to feel pain and suffering has also changed. In the 1600s, philosopher René Descartes theorized that animals were just like machines, that they did not feel pain, and he proceeded to nail a dog's feet to a board and dissect it

alive while it only appeared to be in pain. We now cringe at the thought of someone being so callous. But while we would now rightfully prosecute someone who mistreated a dog, we have normalized and justified relatively brutal farming practices, which are generally exempt from anti-cruelty laws.^{14,15}

We have an animal use disorder. We have become used to eating animals and socialized to accept or deny some of the avoidable harms

of massive factory farms. Big businesses have promoted a notion that we are part of a food chain in which might makes right, and have worked to equate meat with protein and good health. But this advertising has been misleading. Documentaries like *Earthlings*, which examines the exploitation of animals for economic purposes, paint a much different picture. Thankfully,

public attitudes are increasingly shifting away from the harms and brutal scale of industrial animal farming.

Conclusion

As a society, we need to address the risks that our current levels of animal consumption pose for global health security. We need to provide more support for farmers seeking to transition away from animal agriculture, and promote plant-based foods and cell-cultured meat and dairy products.¹⁶

As physicians, as well as ordering the right blood test and choosing the right antibiotic, we have an obligation to speak up and help address social justice issues, the root causes of diseases, and the underlying causes of poor health outcomes. We need to be clear about the health and societal benefits of reducing meat in our diets.¹⁷

It can be seen as a matter of enlightened self-interest. Our health is dependent on the health of the other animals that share this world with us. Being compassionate and taking animal welfare seriously will ultimately help us as well. ■

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Competing interests

None declared.

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