FACT SHEET:

Porcine Epidemic Diarrhea

BACKGROUND

WHAT IS PORCINE EPIDEMIC DIARRHEA?

- Porcine epidemic diarrhea (PED) is a viral disease of pigs that causes diarrhea and vomiting. It can be very serious and can kill younger pigs in herds that have not previously been exposed to the virus (Government of Canada, 2017).
- PED does not pose a risk to human health or food safety. PED only affects pigs and does not pose a risk to other animals (Government of Canada, 2017).
- PED is spread by moving infected pigs or their feces; trucks contaminated by pig manure are believed to be the most common way the virus spreads, but it can also be spread through clothing, boots, equipment, and other farm items (Alberta, n.d.).

This fact sheet has been designed to complement the Canadian Centre for Agricultural Wellbeing's (CCAW) Response Toolkit for Agricultural Crises. Find the Toolkit and other crisis-specific fact sheets on the CCAW website.

CANADIAN CENTRE FOR AGRICULTURAL WELLBEING

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PED IMPACTS ON FARMS AND FARMERS

PED outbreaks can have wide-ranging impacts on farms across Canada. PED has been reported in Ontario, Manitoba, Quebec, and Prince Edward Island. It is provincially regulated in Alberta, Saskatchewan, Manitoba, Quebec, and Ontario (Government of Canada, 2017).

Depending on the farm, PED has the potential to be devastating; while it is survivable for sows and growing pigs, it can have to a mortality rate of 100% in nursing pigs (Saskatchewan, n.d.).

Specific impacts of PED as they relate to farmer wellbeing and livelihoods are described below.

Euthanasia and Loss of Animals

There is no treatment available for PED. Vaccination is only one measure to help protect against PED (Government of Canada, 2017).

PED is highly infectious and can be easily spread to herds. While older pigs can recover from PED, the virus is fatal for nursing piglets (Ontario, 2022).

High levels of mortality will very likely take a heavy toll of the mental health of farmers and their staff, particularly around disposing of deadstock. Farmers aim to raise healthy animals and will go to great lengths to protect them.

Financial Impacts

Farms that have sows and piglets can be severely affected by PED as up to 100% of the nursing piglets may die over a 3 to 5-week period, until the herd develops immunity (Alberta, n.d.).

Farms growing only market hogs are less affected; PED causes mild diarrhea that resolves within a few days. These pigs rarely die from the disease, but they can take longer to reach market rate (Alberta, 2024).

In 2019, the cost of a PED outbreak was calculated to be $468/sow. This includes change in revenue, vet, and clean up/mitigation costs (Manitoba Pork, 2019).

Financial resources for farmers experiencing a PED outbreak are limited. They may hold business interruption insurance or qualify for other aid, but a PED outbreak is likely to have noticeable financial consequences.

Heightened Biosecurity Measures

This high mortality rate means that euthanasia or culling of the herd is not required in the case of PED outbreaks. The virus can only be eliminated from the farm through a comprehensive program based on strict biosecurity (Alberta, n.d.).

These measures can be quite onerous and stress-inducing for farmers experiencing an outbreak; they include but are not limited to extensive cleaning of barns and trucks, changing clothing, boots and PPE, washing exposed skin, and washing personal vehicles when returning from locations where hog manure may be present (Alberta, 2019).

In the interviews conducted by CCAW with farmers and individuals working in various aspects of the agricultural industry, interviewees described how heightened biosecurity measures often lead to stress and additional work for farmers.

Concerns Around Disease Spread

Although it is unlikely that PED would be spread through producers having contact with one another or visiting the same public places due to basic biosecurity measures, some farmers may still have concerns around spreading PED (Alberta, 2019).

In the interviews conducted by CCAW, interviewees described fears about having brought PED to their own farms and/or having spread the disease to other locations. They also described instances where they were ostracised by community members as a result of having an active PED outbreak.

PED IMPACTS ON INDUSTRY

Spread of PED could have a severe impact on the pork industry.

The virus is shed in the feces of infected pigs and may remain viable in the environment for up to 28 days. With the movement of pigs and transport trailers across the country, there are many opportunities for PED to spread widely and rapidly (Saskatchewan, n.d.)

Affected farms must halt all pig movements on/off their site, and delay all farm visits from service providers until strict biosecurity measures have been put in place (Manitoba Pork, n.d.)

Previous PED outbreaks have led to reduced volumes of available pigs and hogs, which likely also reduced annual returns for packers, processors, distributors and retailers and increased prices for consumers (Shulz & Tonsor, 2015).

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