

One Health Case Study 10

One Health: A Past Priority to Guide the Future







Early Adoption in Québec

While One Health is a newly emerging topic of focus for some industry groups, the Ministry of Agriculture, Fisheries, and Food in Québec (Ministère de l'Agriculture des Pêcheries et de l'Alimentation, or MAPAQ) have had mentions of One Health in their provincial strategy since 2010, along with other notable topics like sustainable development. The Quebec government policy for health prevention incorporates subjects like antimicrobial use and stewardship, as well as mental health, which are both cross-cutting issues that MAPAQ is a large part of. In addition, the Québec Center for Wildlife has also focused on One Health from an environmental and wildlife perspective through areas like carcass disposal. Although more progress is needed, MAPAQ continues to work to incorporate One Health, and more recently One Welfare, into their goals and priorities through collaborative efforts on zoonotic diseases, such as COVID-19 and Salmonella enteritidis. Québec presents an example of a Canadian province that has been, and will continue to, actively work towards improving One Health in various human, animal, and environmental industries.

Recent Priorities and Current Progress

Provincial groups in Prince Edward Island and Ontario have been working through a One Health lens in recent years. The Ontario Ministry of Agriculture (**OMAFRA**) has been focusing on fostering relationships with the Ontario Ministry of Health to create a more complete picture of how disease impacts all areas of provincial health. In the past year, OMAFRA has taken a much stronger focus on One Health and has applied it to problem solving with the Ministry and other resource groups. Specific areas of collaboration have included planning for and responding to SARS COV-2 in mink and deer, Chronic Wasting Disease, Rabies in dogs, and Avian Influenza, among other diseases of note.

Shauna Mellish and Dr. Jill Wood from the Government of PEI have described their recent focus on One Health as a lens with which they view emerging issues, rather than a topic of interest. A key example of how One Health has been implemented in the province of PEI is through the mapping of Avian Influenza. Colleagues in the wildlife sector coordinated the development of maps that showed the importance of how management of the plant disease potato wart could impact disease risk in wild bird populations. Maps showed that disposal of affected crops by spreading waste potato crop on fields near commercial livestock operations could actually

cause an issue with wild birds and increase the risk of disease for animal health by potentially increasing the susceptibility and exposure of bird populations to Avian Influenza. This forward-thinking example presents a clear picture of the interconnectedness between humans, animals, plants and the environment, through human food production, environmental waste, and animal disease.

One Health Looking Forward

The Canadian Honey Council (**CHC**) presents an area of opportunity for One Health. The very nature of this commodity and industry group represents the three key areas of One Health - humans, animals, and the environment. Bees are known to be a keystone species in the environment given their role in pollination needed for food production, and public and private interest in this species has made bees the face of environmental sustainability and global pollination. Bees and related species exist in an intersection of human, animal, and environmental health, making this species a unique representative of the potential for One Health in the agricultural industry. However, bee health is affected by

pesticide and fungicide use; therefore, environmental health and sustainability are an important factor to their survival. While One Health has not historically been a called-out priority for the CHC, this lens is now applied to past and future priorities through the nature of the industry. The CHC represents an area of current and future opportunities for One Health and would like to be included as part of the progress in this area moving forward.



