

## CONVERGE COVID-19 Working Groups for Public Health and Social Sciences Research

### Research Agenda-Setting Paper

*This paper was written to help advance convergence-oriented research in the hazards and disaster field. It highlights areas where additional research could contribute new knowledge to the response to and recovery from the pandemic and other disasters yet to come. Questions about the research topics and ethical and methodological issues highlighted here should be directed to the authors who contributed to this paper.*

#### Working Group Name:

Animal Welfare and Human-Animal Interactions During COVID-19

#### Working Group Description:

This Working Group investigated the current global COVID-19 pandemic as a pivotal historical crisis and chance to examine and rethink human interactions with the non-/more-than- human world. The group explored various challenges regarding supporting healthy and sustainable human-animal bonds at individual, family, community, and societal levels. Through group meetings, personal observations, and public media searches, this group has proposed the following priority research topics and potential specific research questions. This group argues that the COVID-19 outbreak opens a window for researchers, practitioners, and policy-/decision-makers at different levels of governmental and non-profit organizations to address both healthy and unhealthy human-animal interactions, with the aim to enhance animal welfare, promote human well-being, and advance their respective resilience for future extreme events.

#### Priority Research Topics and Specific Research Questions:

Priority Research Topics	Potential Research Questions
<p>1. At the policy/decision-making level: The pioneering theory, One Welfare, mediates animal welfare, human well-being, and environmental conservation, advocating a healthy and sustainable human-animal bond (Bourque, 2017). Guided by One Welfare and related theories, researchers have been collectively contributing to a nuanced understanding of different types of human-animal interactions, contributing to optimal human-animal health, well-being and resilience. It is vital and urgent that science-based evidence of the benefits of human-animal interactions guides related practice strategies and informs targeted policy interventions at the governmental and non-profit organizations levels. Furthermore, this evidence should guide the development of public educational instruments to further support healthy and sustainable human-animal bonds in disaster settings and beyond.</p>	<ul style="list-style-type: none"> <li>• <u>Research Question 1</u>: What are the emerging areas mediating animal welfare and human well-being that need to be identified in order to contribute to a nuanced understanding of human-animal benefits and advancement of human-animal bond?</li> <li>• <u>Research Question 2</u>: What are the challenges of integrating human-animal benefits into related practice strategies that inform targeted policy/decision making?</li> <li>• <u>Research Question 3</u>: How can evidence-based strategies be applied to develop educational instruments for general public education?</li> </ul>

<p>2. At the non-profit organizational level (animal protection agencies): Shelters must have contingency plans for not only traditional hazards and disasters, but those which limit human contact and potentially result in changes to fostering and adoption. Moreover, animal protection agencies should have rigorous screening processes for new adopters and those who foster. COVID-19 has resulted in a surge of adoptions and fostering; how are agencies adapting to these new demands? Sheltering industry groups have released operating guidance, but little is known about how these recommendations have been implemented; their universality, the challenges, and benefits faced by local shelters during the COVID-19 crisis.</p>	<ul style="list-style-type: none"> <li>• <u>Research Question 1</u>: How do shelters, as social service organizations, align their policies regarding adoption, fostering, and emergency response during times of crisis to support the human-animal bond?</li> <li>• <u>Research Question 2</u>: How are shelters evaluating potential adopters and fosterers to ensure they are suitable guardians, when the realities of the COVID-19 pandemic have drastically changed shelter operations?</li> <li>• <u>Research Question 3</u>: To what extent has organizational guidance been adopted by local shelters, and what are the challenges and benefits of this new operational reality?</li> </ul>
<p>3. At the animal industry level: COVID-19 has highlighted the unsustainable and insecure nature of our existing food systems. Factory farms are challenged with balancing economic profit and avoiding animal welfare violations. Outbreaks in meatpacking plants not only threaten staff's health and well-being, but also affect the food supply chain (Molteni, 2020). Subjecting intensively farmed animals to unsanitary, confined, closed spaces greatly increases the likelihood of a disease outbreak. Habitat and environmental destruction to build more industrialized farming operations leads to novel pathogen transmission and climate change, which both have complex impacts on vector-borne illnesses. Human and animal suffering from zoonotic diseases is amplified in these environments where animal welfare is regularly undermined in favor of food production goals.</p>	<ul style="list-style-type: none"> <li>• <u>Research Question 1</u>: Does factory farming significantly contribute to expediting the spread of animal-human pathogens?</li> <li>• <u>Research Question 2</u>: Can changing current industrialized farming practices to increase animal welfare reduce the risk of future pandemics, both among humans and other animals?</li> <li>• <u>Research Question 3</u>: Are there hidden economic benefits to reducing or eliminating factory farming in order to mitigate future zoonotic disease outbreaks?</li> <li>• <u>Research Question 4</u>: How can we best protect animals and the natural world as a means of protecting human health?</li> </ul>
<p>4. At the individual and family levels: COVID-19 triggered public health protocols and other socioeconomic factors that have negatively influenced pet guardians' ability to access veterinary medical and behavioral services, which may result in unfavorable outcomes for animal welfare, human well-being, and their respective resilience capacity. In addition, as many people are now spending more time in their homes, they may experience unanticipated benefits or challenges to companion animal guardianship. A comprehensive examination of pet guardians' experiences during the pandemic will help veterinary clinics adjust their service delivery model and improve their emergency response plans in order to support healthy human-animal bonds during current and future emergencies.</p>	<ul style="list-style-type: none"> <li>• <u>Research Question 1</u>: What are the challenges pet guardians have been confronting regarding access to veterinary medical and behavioral services during the COVID-19 pandemic?</li> <li>• <u>Research Question 2</u>: How can community-based veterinary clinics adjust their service delivery models to address pet guardians' challenges?</li> <li>• <u>Research Question 3</u>: Are pet guardians expressing new concerns or challenges with their animals during COVID-19? How can veterinarians address these concerns?</li> </ul>

### **Ethical / Methodological Considerations:**

*Ethical Considerations:* Human and non-human communities are seamlessly intertwined. While human health and well-being has long been a cause for advocacy and protection, the non-human inhabitants of our society are often of less concern—although there has been some progress on this latter front. The potential

spread of COVID-19 between humans and non-human animals has ignited public concern about human interactions with animals. We propose that an important role of this work is to advocate for animal welfare and animal rights by reconceptualizing humanity, cultural identity, and difference. Evolving scientific knowledge needs to be translated into societal benefits through practice, policy/decision making, and general public education. A shift towards animal protection and welfare sits alongside increasing attention to the cruelties innate in industrial animal production, propelling an ongoing ethical conversation aimed at supporting healthy and sustainable human-animal bonds within our shared environment.

*Methodological Considerations:* Institutional research review plays an important role in protecting human and animal research subjects. However, the review process may not always fully support the collection of perishable data, especially for the rapid research approach often used in disaster settings. Furthermore, the multidisciplinary and multi-stakeholder nature of human-animal interaction research calls for a collaborative approach to advance the knowledge flow among research, practice, and policy/decision making. Communication among research, practice, and policy/decision-making communities needs to be established to promote this essential mission.

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### **Other Frameworks, Considerations for Collaboration, and/or Resources:**

As presented in the ethical and methodological considerations, this working group will pursue collaboration with community-based service agencies and animal industries to further develop the research priority areas mentioned above. This will help the team to develop solid research proposal(s) by cooperating with different stakeholders at home and abroad, aiming for governmental grant opportunities (e.g., the SSHRC Partnership Grant, Canada; the U.S. National Science Foundation international program; and the National Natural Science Foundation of P. R. China) and non-profit organization funding sources (e.g., the U.K. Wellcome Trust Foundation, U.S Petco Foundation, and Animal Welfare Foundation of Canada).

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