Animal Biosecurity Investment Showcase

4 November 2020

animalhealth AUSTRALIA

EXECUTIVE SUMMARY

The 2020 Animal Biosecurity Investment Showcase (the Showcase) was the first event of its kind for the **National Animal Biosecurity Research, Development and Extension Strategy** (NABRDES) Implementation Committee.

The 2020 Showcase invited speakers with a background in 3D (destruction, disposal and decontamination) and in social science applications in biosecurity to present on their experiences to over 100 participants in an online event. From these presentations, participants were able to learn about some of the previous work done in these areas, as well as what gaps and opportunities exist for Australian livestock industries.

The presentations noted that there has been plenty of good work undertaken on 3D in the USA that Australia could learn from as well as examples of 3D within Australia that have identified learnings that would benefit other industries. Future research examples that were suggested included looking into new and alternative methods of conducting each of the 3D's, tailored communications about 3D at different levels and scales, training and extension for 3D preparedness and the development of universal tools for 3D.

The presentations from the social science session discussed the role of everyone in the community in undertaking biosecurity. Learnings from human behaviour studies with respect to animal welfare were discussed, noting the similarities with biosecurity and how public attitudes (even from uneducated opinions) can influence animal management practices. Findings from previous cross-sectoral and transdisciplinary research were discussed, highlighting some of the benefits and challenges faced in doing this. The final presentation provided an overview of the research that has been completed in communication of biosecurity messaging, namely within peri-urban areas. This talk highlighted some of the challenges with highly populated areas where biosecurity risks are different and often greater than in more rural locations where livestock are present in large numbers.

The presentations were followed by a breakout room session where participants were divided into 14 virtual breakout rooms to develop project ideas related to a specific issue:

- What would an on-farm 3D plan need to incorporate.
- How do we encourage producers to have a 3D plan.
- What tools are needed to prepare for a 3D event.
- Capability and training gaps in the 3D space for government.
- Capability and training gaps in the 3D space for industry.
- Social science's role in 3D preparedness.
- How can social science be used to benefit during and after a 3D response.
- Using social science to unpack 3D in peri-urban areas.
- Using social science to unpack One Health considerations in a 3D event.
- Difficulties in achieving biosecurity adoption and compliance.
- Implementing a shared responsibility for a stronger biosecurity system (x2 rooms).
- Encouraging behaviour change for better animal biosecurity (x2 rooms).

From the 14 breakout rooms, almost 30 different project ideas were recorded that will be discussed and prioritised by the NABRDES Implementation Committee for progression with Showcase participants.

INTRODUCTION

Dr Jim Rothwell the chair of the Implementation Committee of the NABRDES opened the meeting. The showcase was hosted by NABRDES and Animal Health Australia (AHA).

NABRDES has the following vision: world-leading, cross-sectoral biosecurity RD&E through collaboration and efficient use of resources, further improving Australia's high animal health status, productivity, and ongoing market access.

The NABRDES long-term goals are to ensure that:

- national biosecurity RD&E priorities are addressed and
- there is efficient use of RD&E resources and capabilities.

The short to medium-term goals are to foster:

- greater cooperation
- collaboration
- co-investment
- greater coordination
- reduced duplication
- better informed RD&E decisions and investments.

The Implementation Committee consists of representatives from NSW Department of Primary Industries (DPI), animal-based Research and Development Corporations (RDCs), CSIRO, National Biosecurity Committee, Animal Health Committee, Charles Sturt University representing Universities and AHA. It is supported by a coordinator provided by AHA.

The Showcase themes are built upon from the results of the **2019 Snapshot Report**. This report collated animal biosecurity RD&E efforts from the last five years, and from this two key topics were highlighted and used for discussion at the Showcase: 3D and social science. The aim of the Showcase was to discuss and share information on these topics and to identify useful RD&E projects that are collaborative and cross-sectoral through breakout room discussions

Dr Ashleigh Wildridge presented the key finds from the Snapshot Report including some of the gaps and challenges that are being faced in the animal biosecurity space and how the Showcase aims to address some of these.

PRESENTATION SUMMARY

The Animal Biosecurity Investment Showcase hosted seven experts in the fields of 3D or social science to present on their experience in their chosen field. These presentations provided the background context to the event themes in preparation for breakout room sessions towards the end of the Showcase.

Presentation session 1: Collaborative RD&E mapping of the 3D's

Facilitated by Dr Kylie Hewson, Deputy Executive Director of the Australian Chicken Meat Federation.

The Australian 3D task group – Duncan Worsfold, Chair of the Australian 3D Task Group, Agriculture Victoria

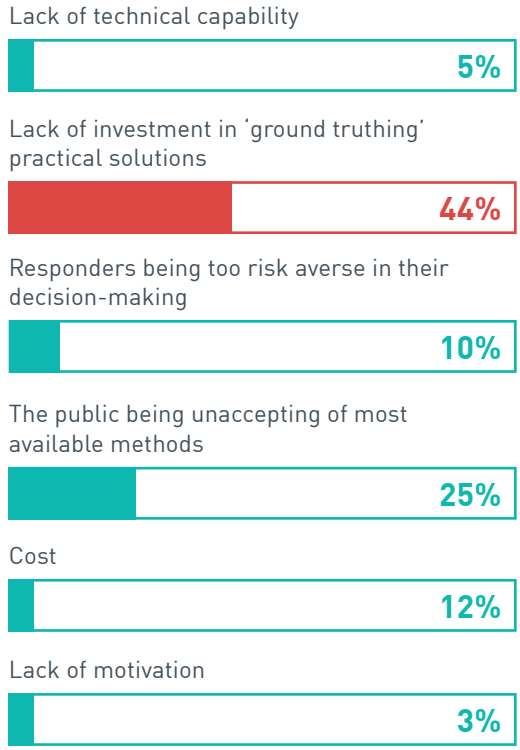
Duncan has been employed with the Victorian State Government Department responsible for Agriculture since 1995 and is gazetted as an Inspector of Livestock. In this time Duncan has been involved in many animal biosecurity and welfare emergency responses including avian influenza, Newcastle Disease, foot-and-mouth disease, anthrax, equine influenza, white spot disease and bushfire/flood recovery. He is also the Chair of the Australian 3D Task Group and is a member of the International QUADS 3D Network.

In his presentation, Duncan discussed the importance of work in the 3D space and how learnings from other countries can benefit Australia's increased engagement in 3D going forward. He noted how the United States Department of Agriculture has had great success in 3D as a result of a good resource bank, good connection between different organisations and more hand-on practice with incursions and high-profile threats.

Duncan also discussed some of the many biosecurity preparedness projects he has been involved in including the introduction of foam depopulation and air curtain incineration technologies to the Australian animal health authorities.

Following his presentation, Showcase attendees were asked to complete a poll related to his talk:

1. What do you see as the biggest barrier in achieving operational efficiencies for 3D activities in Australia?



Preparing for mass destruction – Dr Allison Crook, Chief Veterinary Officer Queensland, Department of Agriculture and Fisheries

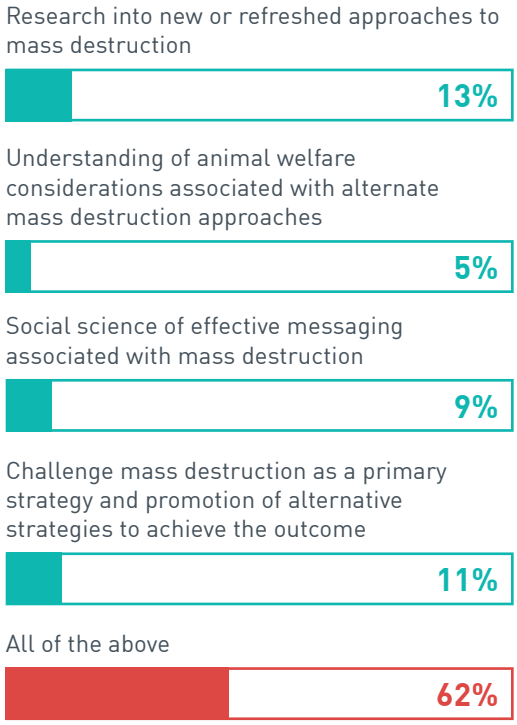
Allison Crook was raised on a beef and grain property near Warwick in Queensland. Allison was appointed to the role of General Manager, Animal Biosecurity and Welfare for Biosecurity Queensland within the Department of Agriculture and Fisheries in 2014. In this role, she holds responsibility as the Chief Veterinary Officer for Queensland.

She has extensive experience in management of emergency animal diseases (EADs), including the foot-and-mouth disease (FMD) outbreak in the United Kingdom in 2001, the successful equine influenza response in 2007 –2008, multiple Hendra virus incidents and the white spot disease in Queensland.

Allison presented on the considerations and opportunities in preparing for mass destruction. She outlined some of the policies and guides on destruction that are available, such as those through the OIE and AUSVETPLAN. She also highlighted some of the important things to consider in preparation for destruction such as capability, equipment, urgency, animal welfare and community impact. Allison's presentation finished by pointing to some opportunities in the destruction space including investigating new methods of destruction with further consideration given to animal welfare, developing effective community messaging and supporting those impacted by a destruction event.

Following her presentation, participants were asked to complete the following poll:

1. Of the options below, what area requires priority effort and focus to improve preparedness for mass destruction?



Preparing for a mass disposal event – Dr Rod Jenner, poultry veterinarian

Rod Jenner is a poultry vet consulting to producers in both the chicken meat and egg industries, as well as numerous project consultancies with Agrifutures, Australian Eggs Ltd and various private and government agencies.

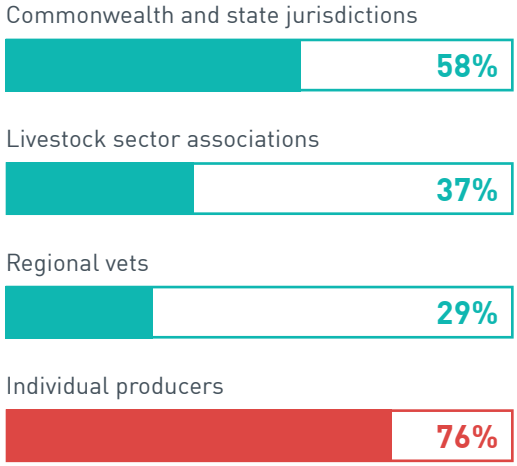
He has served in various positions on a number of industry-based committees over the years and has progressed into teaching veterinary students in the area of commercial poultry medicine at University of Queensland and James Cook University.

Rod presented on his experience as a poultry vet, describing examples of when he has been involved in mass poultry disposal events. He highlighted some of the factors that impact the types of disposal methods that can be used for a specific event including cost, environment, transport and legislation. He then covered off some of the disposal methods that can be used on and off farm and some of the rules and legislation around these methods.

His presentation finished with a series of recommendations for future work to consolidate information for easy access when needed, standardise criteria nationally and to develop tools and extension resources for producers across all livestock species.

Following his presentation, participants were asked to complete the following poll:

1. Who is responsible for developing a farm-specific disposal preparedness plan? (multiple choice)



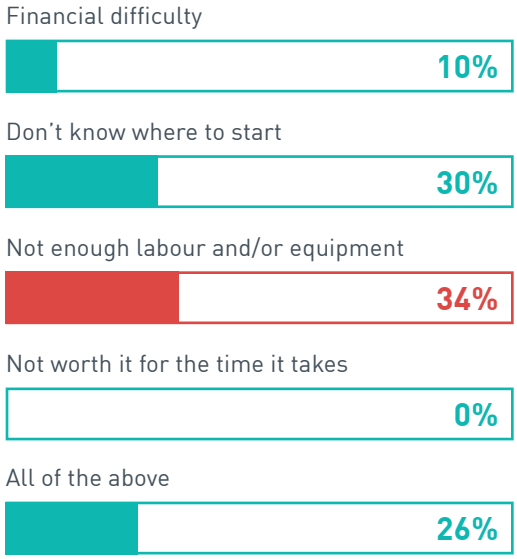
Preparing for decontamination following a *Salmonella Enteritidis* event – Kristy Saul, NSW Department of Primary Industries (DPI), Biosecurity and Food Safety

Kristy Saul works for NSW DPI in Animal Biosecurity and is the *Salmonella Enteritidis* (SE) program coordinator. She works with poultry premises that have become infected with SE and oversees their decontamination process.

Kristy presented on her experience of SE, the impact that it has on health, how an outbreak of SE would spread and how SE decontamination on poultry farms would take place. Kristy pointed to the difficulties of decontaminating against SE as it is a very durable bacterium that can spread through a variety of vehicles, people and dust, and can survive in the environment for a long time. She also highlighted several gaps for SE in Australia such as a lack of training for proper decontamination, lack of understanding of SE in the Australian environment and a poor understanding of available people, technologies and educational materials. It was suggested that further work to improve decontamination should consider training, contamination testing methods and information on the survivability of SE in Australia and which chemicals are most effective for decontamination.

Following her presentation, participants were asked to complete the following poll:

1. What do you consider to be the biggest hurdle when thinking of implementing or planning a decontamination program?



Top-voted result: Not enough labour and/or equipment

Presentation session 2: Social science applications in livestock biosecurity

Facilitated by Dr Marta Hernández-Jover, Associate Professor in Veterinary Epidemiology and Public Health at the School of Animal and Veterinary Science, and Livestock Pathway Leader of the Graham Centre for Agricultural Innovation at Charles Sturt University (CSU) in Wagga Wagga.

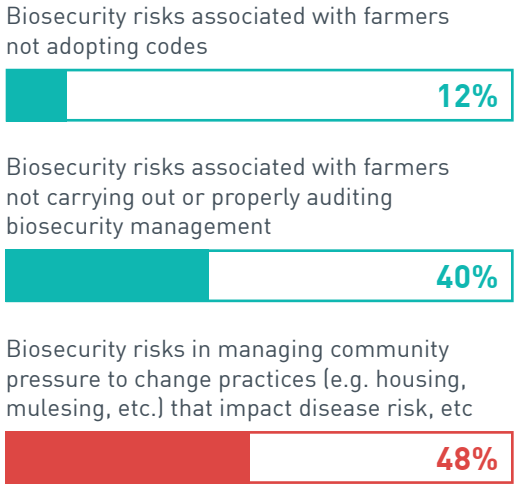
Understanding human behaviour to improve biosecurity – Dr Lauren Hemsworth, The University of Melbourne

Lauren Hemsworth is a Research Fellow (Animal Welfare) at the Animal Welfare Science Centre, Faculty of Veterinary & Agricultural Sciences, The University of Melbourne. Her work in animal welfare involves a substantive research program and undergraduate and post-graduate teaching. Her research interests include the behaviour and welfare of farm, companion, and zoo animals, particularly examining the influence of the environment and human-animal relationship on animal behaviour and welfare.

Lauren's presentations identified some of the risks that human behaviour poses to biosecurity through a lack of adoption and auditing of biosecurity practices and risks from managing community pressure to change practices. She identified some research that has been conducted in the past with regards to the impact that public concern of animal welfare has on the behaviour of consumers towards livestock industries, and how this can have direct impacts on what is considered acceptable farming practices. Knowing how this behaviour changes over time is important to monitor so that we can better understand the impact that it has on farming practices including the implementation of biosecurity practices.

Following her presentation, participants were asked to complete the following poll:

1. With regards to human behaviour, which of the below options do you think possess the greatest risk to biosecurity?



The use of integrated biological and social science methods to understand complex problems – Dr Yiheyis Maru, CSIRO

Yiheyis Maru is a principal research scientist for the CSIRO and has conducted a significant amount of research into the impacts that FMD could have in Australia through his involvement in the FMD Ready Project.

Yiheyis presented on some of the learnings that have come out of the FMD Ready Project, a cross-sectoral and transdisciplinary project. He discussed some of the outcomes of the project including improvements in surveillance and biosecurity practices, improved relationships leading to more reporting, new networks and more collaboration leading to resolution of issues, and improved sustainability of pilot groups.

The learnings gained from the FMD Ready Project found that a transdisciplinary approach encouraged more creative thinking, a more cohesive and systemic outcome, quick learning, adaptive management, and better enabled pathways for improving sustainability and scaling of outcomes.

The poll question for this presentation was skipped due to time constraints.

The use of social science to understand and improve biosecurity engagement – Dr Nicole Schembri, NSW DPI

Nicole Schembri is an animal scientist and social epidemiologist from Sydney University with more than 10 years' experience in biosecurity related social research and its application. With a specific focus on peri-urban areas, Nicole has worked the past five years for Local Land Services and NSW DPI, incorporating social research to improve biosecurity engagement and boost biosecurity awareness and implementation, working collaboratively with the Commonwealth, other jurisdictions, industry, community, and landholders.

Nic presented her experiences in establishing better ways to engage with livestock owners with particular reference to owners in peri-urban areas and the work of the National Biosecurity Communication and Engagement Network (NBCEN). She noted how the biosecurity risks for peri-urban livestock owners differs due to their close proximity to larger human populations and the large variation in motivation and drive (time and cost) to protect the biosecurity and health of animals.

Nic also touched on some of the social research that has been undertaken by NSW DPI around gateway pests. This research has included data collation through interviews and monitoring of collection, transport, and transfer locations (such as shipping docks and other transport companies). This research found that the highest risk points for gateway pests are in the unloading of goods from storage containers, rather than the transportation of the goods. Other social research with pig owners has resulted in the collection of information on how to better engage with pig owners in a way that is more meaningful and effective. This was noted as an important aspect of social science, that to be more effective in driving behaviour change, it is important to know what the motivations of the target group are.

The poll question for this presentation was skipped due to time constraints.

BREAKOUT ROOM SUMMARY

The Showcase consisted of one breakout session that included 14 different breakout rooms tasked to create a project idea surrounding the central issue specific to their room. This session ran for approximately 30 minutes, where each room had a designated facilitator and scribe. A strong theme that emerged from several of the breakout rooms was the biosecurity risks of peri-urban areas and of smaller or fragmented industries, particularly horses. Targeting these groups emerged as a high priority from the breakout rooms to drive a greater sense of inclusion and responsibility when it comes to biosecurity. It can also be seen that there are many linkages between project ideas from different breakout rooms that have the potential to be brought together or run in succession together. Such projects could be the development of a 3D template and other online tools, and the extension and training for use of these with targeted livestock owners. A summary of the discussions from each room are included below.

Destruction, disposal and decontamination initiatives - breakout rooms

Issue: What would an on-farm 3D plan/template need to incorporate?

Proposed project: Development of a nationally agreed EAD 3D template

This breakout room discussed the elements that would need to be considered for the development of a 3D preparedness template for use on-farm. It was noted that a generic national template (likely in a digital format) should be produced that individual industries and government stakeholders can add to. Such a template should be updated regularly to incorporate new research, be reviewed by users, be easily accessible and be provided with training and/or a trained extension officer to assist users in completing the template. Careful consideration will need to be given to this to identify what would be in and out of scope for an on-farm 3D plan based on what can be reasonably managed and planned. A national template could be the catalyst for greater jurisdictional consistency regarding criteria for assessing potential disposal sites and how disposal is executed.

Issue: What tools are needed to prepare for a 3D event?

Proposed project: Development of a central repository for 3D preparedness information.

Proposed project: Producer 3D factsheets, how to prepare and act

Proposed project: Producer 3D preparedness planning app

Proposed project: Jurisdictional mapping of potential disposal sites

Proposed project: Design and develop purpose-built mobile 3D equipment resources

Information that was considered important for improved 3D preparedness included an outbreak management plan, mapping of areas suitable for mass disposal, availability and location of purpose-built equipment and the provision of a template to help guide on-farm preparedness. The use of digital technologies is proposed to play a large role in the development of many of these concepts to improve adoption through increased accessibility. It was also noted that the use of practical exercises and examples through either factsheets or a 3D step-by-step app would also be a practical way for farmers to identify biosecurity practices, and that add-ons could be needed for details specific to a particular industry or sector.

Issue: How do we encourage producers to have a 3D plan?

Proposed project: Extension program to educate producers about their 3D responsibilities

Proposed project: Production of an online tool to assist producers to develop an on-farm 3D plan

Breakout room 3 discussions focussed on the importance of the 'I don't know where to start' factor for producers when it comes to 3D preparedness. Important points were raised including the need for simple prioritisation of things that will ready a producer for a 3D event, planning support, online tools, financial support and provision of information to educate producers about who has responsibilities and for what in a 3D event. With the current lack of knowledge and support for producers in this area, extension and education resources are a key place to start, noting that identifying and locating stock owners is a challenge.

Issue: Capability and training gaps in the 3D space for government

Proposed project: Determining government 3D capability and capacity as well as developing targeted training programs to grow capability and capcity

Proposed project: Training of highly experienced 3D-focused people

The need for government 3D training was identified as a high priority task. There is training currently available, however, it was noted that it is high level and that more specific and operational details are needed that set out the practical considerations for executing a 3D plan effectively. This breakout room recorded that a stocktake would be needed to know what current resources are available for 3D training and if these resources are sufficient to help build the foundations of a training course. The availability of experienced trainers for 3D was noted as a gap, therefore, training of highly experienced 3D focused people would be necessary. This is particularly important as contractors are often used for 3D, but are less likely to share personal know-how regarding their processes, so having additional trained people in all critical aspects of 3D to assist with training and events would be valuable.

Issue: Capability and training gaps in the 3D space for Industry

Proposed project: National definition or clarification of the roles needed in a 3D peri-urban event

Proposed project: Training of private veterinarians in 3D preparedness: focus on peri-urban animal owners

The livestock owners considered most at risk of being under-prepared for a 3D event were those in peri-urban regions and owners of small numbers of animals from small/disjointed industries (e.g. horses and goats). The breakout room identified that private local vets will often be the first point of contact for livestock owners to go to for trusted advice on their animals, therefore, would play an instrumental role in assisting these owners through a 3D event, particularly destruction. In developing a training program for private veterinarians it would be first necessary to establish what the extent of their role would be in a 3D situation for both regional and peri-urban areas, and how they would link with jurisdictional staff and other groups involved in a response. It would be particularly useful to have communication prepared that can be used to manage peri-urban expectations of what will happen in a 3D event.

Social science research that strengthens biosecurity - breakout rooms

Issue: Difficulties in achieving biosecurity adoption and compliance

Proposed project: Production of a central repository for information on driving adoption and compliance

Proposed Project: Finding the why behind non-compliance

Discussions from this breakout room began looking at how to increase compliance and adoption in different sectors, pointing to the importance of local influencers to deliver trusted messages. It was noted that there is already a large amount of information on driving adoption and compliance, but accessibility to the required information is difficult. The room then considered how you could turn these findings into products or a central repository to make the information more accessible. In discussing this it was asked why compliance and adoption is a problem: is it more than a lack of available information? It was noted that certain industries (namely horses) and 'hobby' type farmers may feel that biosecurity does not apply to them, or perhaps there is concern over cost or simply a lack of understanding. To address this, the room suggested that similar to the work of Nic Schembri with peri-urban pig owners, a greater understanding of what would motivate these groups to put in place biosecurity practices is needed. This understanding would better inform strategies to improve biosecurity risk management and how more complex communities can support one another to achieve risk reductions.

Issue: Implementing a shared responsibility for a stronger biosecurity system

Proposed project: What factors impact the ability to implement a shared responsibility framework

Proposed project: Production of a nationally agreed definition of shared responsibility and supporting communication materials

Proposed project: Communicate a 'top three' shared biosecurity risks and embed mitigation techniques into Australian culture

This breakout room explored the varied perspectives and responsibilities within a shared responsibility framework for livestock biosecurity and the need to inform a wide range of stakeholders on what these are. It was noted that it is a changing environment and the views of what a shared responsibility means across the supply chain vary across sectors, community groups and jurisdictions. Improving the understanding of what a shared responsibility means nationally at all levels of the supply chain and at different scales will enable better identification and mitigation of non-compliance, and help to make biosecurity behaviours a part of Australian culture. Messaging to drive change would need to be very clear and highlight benefits of compliance, with a focus on 'what's in it for me'.

Issue: Implementing a shared responsibility for a stronger biosecurity system

Proposed project: Development of case study reports identifying how a shared responsibility culture was created and what changes happened following a biosecurity incursion that strengthened local, regional and state wide biosecurity

Shared responsibility is a highly complex topic where there is no clear definition, guideline, or rule about how it must be implemented in different situations. This breakout room highlighted the value of real-life information in the form of case studies for informing on what happens and what is needed during an EAD event. Several studies would need to be developed for different industries and situations to draw focus to what happened, what was successful, how shared responsibility was implemented and what changed or needed to change as a result of the event. These case studies can further be used to make recommendations towards the enhancement of a shared responsibility to protect Australia's livestock industries.

Issue: Encouraging behaviour change for better animal biosecurity

Proposed project: Collaborative approach to identify what is needed for improved biosecurity, learning from other emergency preparedness or public safety campaigns

Proposed project: Making biosecurity practices apart of normal culture for all livestock owners

This breakout room noted how the focus on improved biosecurity typically falls to producers, but it is important for these discussions to happen at all points through the value chain and at all levels, including consumers, government and industry. These discussions also need to consider the different drivers and behaviours of each group, and that change triggers will be different. This group pointed to successful culture change drivers of other sectors such as in bushfire preparedness and seatbelt safety, and how learnings from such campaigns should inform future biosecurity projects. The heightened awareness around biosecurity due to COVID-19 was also noted to provide a great opportunity for enacting culture change in livestock biosecurity. This room proposed a multi-step approach to encouraging behaviour change by first having all affected parties identify their top gaps and motivators, then collaboratively identify how to have these gaps become part of normal culture at different levels (local, regional and state).

Issue: Encouraging behaviour change for better animal biosecurity

Proposed project: Identifying drivers for biosecurity uptake and risk management of Australians

Proposed project: Communication of key positive messages through existing trusted networks

Breakout room 11 identified international work that has been completed around drivers for change and suspected that these drivers would be different for Australians. Identifying drivers for Australian behaviour change will enable biosecurity education to be more targeted and effective, particularly if messaging is shared utilising existing connections. An example of this could be utilising trusted farmer groups for driving specific positive messaging, although additional resources would be needed to communicate information beyond producers. It was also suggested that communication around why certain commonly adopted practices are done and the benefits they are delivering on farm, such as the use of quarantine paddocks. A potential add-on to this RD&E would be to identify what behaviours need to be changed in the context of animal biosecurity, as it was noted that it is not a simple question to answer. Australian's 'she'll be right' attitude really does work against us when we want to drive prevention of harm/damage campaigns. Turning this on its head needs to be explored further.

Social science research that enhances 3Ds - breakout rooms

Issue: How can social science be used to benefit during and after a 3D response.

Proposed project: Understanding community attitude and awareness of 3D

Proposed project: Develop education tools/campaign on how 3D works,the impacts it could have and how government staff approach mitigating those impacts

The group noted several gaps in the broad understanding of what is required during a 3D event both for the general community, as well as for producers where insufficient attention is given to mental health. Although producers may be aware of what has to happen during an EAD event, they need to be better prepared of the impacts on them mentally, physically, financially and otherwise during an event. This extends to the general community, where it is unknown how the community will respond to a mass 3D event, and it is largely unknown how to best educate on this. Messaging needs to include why 3D is required to take place and the consequences if it doesn't occur, what impacts could there be on food safety, what impacts there will be on farm-business and impacts on wild/pest animals and the environment.

Issue: Using social science to unpack 3D in peri-urban areas

Proposed project: Interview of peri-urban areas to understand attitudes towards 3D

Proposed project: Use previous research and interviews to develop targeted 3D communication materials in peri-urban areas

Breakout room 6 discussed some of the work previously conducted with livestock owners in peri-urban areas, and the additional challenges posed from these areas. Attitudes of larger producers to 3D has previously been investigated, however, attitudes towards 3D at the community level is largely unknown. A stocktake on previous research in this area would be valuable to inform on the design of a survey to better understand community attitudes towards 3D. Previous research and survey findings will then be useful for the development and extension of communication materials to targeted areas in the first instance. This breakout room also pointed to a number of gaps which may require RD&E including the identification of suitable locations, equipment and expertise for a 3D event in peri-urban areas.

Issue: Social science's role in 3D preparedness

Proposed project: Using social science to identify how we can better engage with smaller/ fragmented industries regarding their involvement within a 3D event

This group discussed the difficulties in engaging smaller or more fragmented industries that might not think that the 3D will apply to them. Although it is typically easier to focus on the main industries, leaving out those that can also be impacted by an EAD because the processes might be different is risky. This project would seek to identify how to engage with these industries on their 3D responsibilities, noting how the responsibilities of all livestock owners is the same, regardless of size, type and location. This may enable messaging in the future to be more generic and recognised by a wider audience. It was noted that in the event of an EAD, the 3D's would have to be applied, regardless of the owners' consent, and this will need to be managed and communicated carefully.

Issue: Using social science to unpack One Health considerations in a 3D event

Proposed project: Identifying barriers to cross-sectoral collaboration and cultural changes for a 3D event

This breakout room identified that there are some aspects of 3D (notably disposal and zoonotics) that may have impacts on several sectors (animal, plant, human and environment). Encouraging collaboration is a notable challenge, however, with an improved understanding of the different barriers to collaborate, this is expected to become less of a challenge. The group also noted the opportunity to relate animal biosecurity messaging to messaging that the general community is now familiar with and has implemented into their culture as a result of COVID-19 for improved One Health. The results from a project such as this would be useful in informing further research into the development of communication materials and tools to assist with preparedness adoption.

WRAP UP

At the completion of the Showcase breakout rooms, Dr Simon Humphrys provided a summary of the event, highlighting some of the key points from the presentations, and from a number of breakout rooms. Simon pointed to the need for Australia to recognise that the great strength of Australians' 'she'll be right' attitude runs the risk of letting us down in preparation for an emergency response. Simon also discussed the path forward after the completion of the Showcase, whereby, the project ideas identified in the breakout rooms will be prioritised for development into full project proposals, which will be used within research and development corporation/jurisdictional open calls/requests for tenders over the coming months.

To conclude, Showcase participants were asked to provide feedback on their level of interest in the Showcase, where 95% of participants found the event to have a moderate to high level of interest for them. This was also reflected by 97% of participants who expressed their interest to become involved in the development of prioritised projects into full project proposals. When asked to provide more specific feedback about the Showcase structure, the majority of participants (58%) were satisfied with the structure that was utilised, and most remaining participants indicated that they would like to see the event have more time and more breakout rooms.

APPENDIX 1:

AGENDA

TIME	DESCRIPTION	SPEAKER
10am	**Welcome**	**Jim Rothwell**
10:15am	**Overview of the NABRDES** National Animal Biosecurity Research, Development and Extension Strategy	**Ashleigh Wildridge**
10:35am	**Break**	
10:40am	**Collaborative RD&E mapping of 3D's**	**Kylie Hewson**
	The 3D group	**Duncan Worsfold**
	Preparing for mass destruction	**Allison Crook**
	Preparing for mass disposal	**Rod Jenner**
	Preparing for decontamination following a Salmonella Enteritidis event	**Kristy Saul**
11:40am	**Break**	
11:55am	**Social science applications in livestock biosecurity**	**Marta Hernandez-Jover**
	Understanding human behaviour to improve biosecurity	**Lauren Hemsworth**
	Using social science to understand complex problems - learnings from cross-sectoral research	**Yiheyis Maru**
	Using social science to improve engagement with landholders - update from the NBCEN group	**Nicole Schembri**
12:40pm	**Break**	
12:45pm	**Breakout room discussions** Participants will be divided into separate breakout rooms to discuss and develop cross-sectoral project ideas in the 3D and social science space that can be developed into full proposals and co-funded.	**Jim Rothwell**
1:25pm	**Wrap up and next steps**	**Simon Humphrys**
1:35pm	**Close**	