

Is New Zealand prepared for Foot and Mouth Disease?

From a communications perspective.

Kellogg Rural Leadership Programme
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Executive summary

A Foot and Mouth Disease (FMD) outbreak would have devastating impacts on the agricultural industry, the New Zealand economy, and have severe implications for farming communities. Communication is a vital part of an emergency response, and its effectiveness has a major impact on the overall success of controlling an outbreak.

The question is, are we prepared for FMD in New Zealand, from a communications perspective? This is a disease that is well known, and we know as a nation we would act to stamp it out. With this knowledge, we can, and we should, be prepared.

This report combines a literature review with semi-structured interviews. Research articles, journals and presentations were analysed. As part of the research, several primary industry representatives from both emergency response and communications backgrounds were interviewed.

Learnings from past emergency responses were investigated, including the 2001 FMD outbreak in the UK, 2017 *Mycoplasma bovis* outbreak in New Zealand, and New Zealand's communications strategy for COVID-19.

The UK FMD outbreak emphasised the value of scenario planning and having an up-to-date crisis plan. Resource requirements also weren't recognised, leaving the communications team lacking skilled staff and being short of money.

The *Mycoplasma bovis* response highlighted the importance of having a well-resourced communications team, particularly at the outset of the response. Politics lead to underutilised channels, including social media.

The COVID-19 response showed the effect that a strong brand can have in banding people together. High empathy and action-based messaging led to a successful elimination strategy.

There is a communications strategy in place for an outbreak of FMD in New Zealand. It is a comprehensive plan, though developed in 2016, it is out of date. The findings of this study show that there are improvements to be made for New Zealand to be ready for a FMD outbreak, from a communications perspective.

I recommend the following actions should take place to help us prepare an effective communications response to an FMD outbreak in New Zealand:

- 1. Update the FMD communications strategy, keep it live and complete regular scenario testing.
- 2. Prepare a national brand and messaging ready for regional implementation.
- 3. Develop a swift sign off procedure so communications can be released quickly.
- 4. Have a well-resourced communications team.
- 5. Work to understand, engage and listen to stakeholders.

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1 Introduction

Is New Zealand prepared for Foot and Mouth Disease (FMD), from a communications perspective? Communications play a key part in response; some say it can make or break the success of a response.

In New Zealand, an outbreak of this infectious disease would have a devastating impact on the agriculture industry and the economy. It is estimated that an outbreak of FMD could cost New Zealand \$16billion (MPI, 2021).

This report analyses the communications strategies used in past emergency responses. This includes the UK FMD outbreak of 2001, the 2017 *Mycoplasma bovis* response in New Zealand, and the COVID-19 response in New Zealand. There are many learnings that can be taken from these responses to help prepare a response to FMD.

Learnings are discussed from each of these responses and recommendations are made for how we can better prepare our communications function in the event of an outbreak of FMD in New Zealand.

1.1 What is Foot and Mouth Disease?

FMD is caused by a virus that infects cloven-hooved animals. In New Zealand this includes cows, pigs, sheep, goats, deer, alpaca and llama. The disease has no significant health impact on humans.

FMD is highly contagious and can be spread:

- through direct contact between infected and susceptible animals
- when infected meat is fed to susceptible animals
- by objects or people that come into contact with infected animals
- by wind or water the wind can carry the virus up to several hundred kilometres.

Infected animals can spread the virus through:

- breath and saliva
- meat and milk
- manure or other waste products
- semen or blood
- contamination of mud or soil by hooves.

The virus can survive several months without a host (for example, in soil) under favourable conditions (MPI, 2021).

1.2 The impact of FMD in New Zealand

An FMD outbreak would have a devastating impact on the agricultural industry and the New Zealand economy. It is estimated that an outbreak of FMD could cost New Zealand \$16billion and have the following effects:

- · agricultural productivity would decrease
- infected animals would be in pain and have to be culled
- all trade of animal products would be stopped
- it would severely impact exports of dairy, red meat and pork products for months or even years after the outbreak, as New Zealand would no longer be regarded as FMD-free by trading countries (MPI, 2020).

Farmers with infected herds and their families would have their worlds turned upside down in a matter of minutes or hours. The impact on the mental health of these people cannot be underestimated. "While the geography of the disease depends on the location and spread of the disease among livestock and feral animals, the geography of the impacts includes the effects on the social and economic fabric of rural society and the nation at large" (Jay, 2003).

1.3 Emergency response in New Zealand

The Coordinated Incident Management System (CIMS) is New Zealand's official framework to achieve effective coordinated incident management across responding agencies. CIMS describes how agencies and organisations coordinate, command, and control incident response of any scale, how the response can be structured, and the relationships between the respective CIMS functions (NEMA, n.d.). It is a model that is understood by those working in emergency response and can be easily implemented as soon as an incident or emergency occurs. The CIMS structure would be adopted in response to an outbreak of FMD in New Zealand.

CIMS functions include:

- Controller
- Intelligence
- Logistics
- Operations
- Public Information Management (PIM)
- Planning
- Safety
- Welfare

1.4 Public Information Management

This report is based on the role of Public Information Management (PIM) within the CIMS structure. The role of PIM is to provide information and safety messages to the public, undertaking media liaison and monitoring, community engagement, stakeholder liaison, giving and receiving information via social media channels and internal communication.

Outputs for PIM across response levels include key messages, plans, collateral for the public, meetings, briefings and events, mainstream and social media content, monitoring and analysis (NEMA, n.d.).

This differs from operational communication between functions and to directly affected parties (for example, directly affected farmers in an FMD response) which is overseen by the liaison function.

2 Aims and objectives

In this research I looked to answer the question: Is New Zealand prepared for a FMD outbreak, from a communications perspective? After working on the 2017 *Mycoplasma bovis* response in New Zealand it got me thinking about FMD, the huge impact it would have on farmers and the whole New Zealand economy. We know what FMD is and the potential impacts it could have, so we must ensure we are prepared to hit the ground running with effective communication if that dark day is to ever arrive.

3 Current state

MPI has a communications strategy for an outbreak of FMD in New Zealand. The plan outlines the communications approach taken during the investigation phase, and for declaration of the disease. Key messages, audiences, and high-level guiding principles for communicating in an FMD outbreak are outlined.

The plan was developed in 2016 and needs to be updated to be relevant in 2021 and beyond. Work is underway to update the strategy, with sector communications leaders meeting to discuss the response to FMD recently, in May 2021.

The strategy was confidentially provided to me from MPI for this study, so is not an appendix to this report.

4 Methodology

This report combines a literature review with semi-structured interviews to investigate whether New Zealand is prepared to respond to a FMD incursion, from a communications perspective. By analysing research articles, journals and presentations, main ideas are compared and contrasted. As part of the research, I interviewed several primary industry representatives from both emergency response and communications backgrounds. Their insights remain confidential so are not referenced throughout the report.

I reviewed the learnings from past emergency responses including the 2001 FMD outbreak in the UK, 2017 *Mycoplasma bovis* outbreak in New Zealand, and New Zealand's communications strategy for COVID-19. This was to see what could be improved, and what learnings could be taken to prepare for an FMD response.

5 2001 Foot and Mouth Disease outbreak in the UK

FMD was first suspected in the UK in 2001 at an abattoir in Essex, on 19 February 2001. By the time the disease had been eradicated at the end of September 2001, over six million animals had been culled as well as an unknown number of young stock (NAO, 2002). The Ministry for Agriculture, Fisheries and Food (MAFF) led the response.

The complexity of the situation, the number of stakeholders involved and the dynamics of the environment, paired with intense media attention meant this is one of the most difficult crisis management cases (Gregory, 2005).

FMD in 2001 had profound impacts, socially, politically, and economically. It had a major impact on the livestock sector and the mental health of those livestock owners and their families. High levels of post-traumatic stress disorder (PTSD) were seen in farmers and perpetration induced traumatic stress (PITS) was used to describe the impact on workers who were involved with the culling process (Sumption, 2020).

The FMD disease epidemic was a human tragedy, not just an animal one. For many, life after FMD was accompanied by stress, feelings of bereavement, fear of a new disaster and loss of trust in authority (Mort, 2005).

Communication was a key part of the response. Communicating with farmers had challenges. It was a tight knit and aging community, many without internet connection or VCR video machines. There was heavy reliance on word of mouth, vets, the National Farmers Union, other farmers, and the helpline as the primary source of information.

When the first case of FMD was diagnosed on 20 February 2001, MAFF's press office had a small number of staff and no regional structure (Anderson, 2002).

5.1 Communication channels

5.1.1 Media

The media was a major source of getting information to the public.

Daily media briefings started on 21 February and were led by the Minister of Agriculture and the Chief Veterinary Officer. Journalists welcomed the briefings, and much of the media coverage was factual and positive. However, with briefings taking place twice a day, there was not enough time to gather new information. On March 25 2001, the daily briefings were discontinued. They were thought to be of little use and there was nothing new to say (Anderson, 2002).



At the peak of the epidemic, there were more than 500 calls from media in a day (Gregory, 2005). This created stress on staff. MAFF was slow to strengthen its regional media capacity, initially relying on staff that had no media training or background.

Images of piles of carcasses and burning pyres, mass disposal pits, fields of slaughtered animals and tearful families featured regularly on television and in the press (Gregory, 2005).

The provocation of fear was used frequently by journalists. Articles depicted dread and doom, using fear-inspiring words such as "danger" "horror" "panic" and "dread". They described the outbreak as "nightmarish" (Cannon, 2017).

The use of radio was praised throughout Anderson's (2002) review of the FMD response. It provided the vital service of telling local people what was happening, in a timely manner. At its best it was up to date, accessible and regularly available. In Devon, the BBC radio station recorded twice daily local programmes giving updates on FMD.

Paid advertising in local, trade and specialist media was a significant communication channel for the farming community. Gregory's (2005) internal analysis suggested that 'money needs to be thrown at the problem'. Television and radio advertising should have been considered, along with press advertising to ensure comprehensive coverage.

5.1.2 Mailings

Mailings were sent to different groups of farmers containing information on the disease itself. Later, more targeted mailings were sent to specific regional areas covering biosecurity. A video on biosecurity was also mailed out (Gregory, 2005). By the time some of the mailings were received, the information was out of date (Anderson, 2002).

5.1.3 Website

The MAFF website was opened on day one of the crisis (Anderson, 2002). In the initial stages of the response the website was inadequate (Gregory 2005; Anderson 2002). Journalists often stated the website was out of date.

Myths and rumours were fuelled by pressure group websites and were used as key sources of reference for journalists while the MAFF website content was lacking (Gregory, 2005).

5.1.4 Helplines

Central and local helplines were established to handle farmers and public enquiries. Direct contact was especially important for farmers that were directly affected (Gregory, 2005). However, the helplines were overloaded at times, and unable to always provide detailed information that was requested. The helpline staff used the website for the information, which was not regularly updated which led to a level of confusion (Gregory, 2005).

5.1.5 Communication with stakeholders

Weekly stakeholder meetings were set up every Friday and were very valuable. However, there were inconsistencies of how the information was disseminated. Some stakeholders got

information up on their website quickly, whereas the MAFF website was sometimes not updated quickly which led to confusion (Anderson, 2002).

MAFF regional offices and local government often received information informally via local stakeholders, before they received it officially (Anderson, 2002).

5.1.6 Internal communications

Communications with internal stakeholders in regional areas is vital. Internal communication should disseminate facts rapidly to its local offices, local staff must be able to access information (Anderson, 2002).

Farmers would receive information externally through the media, and directly from the response personnel. There was a lag and at times the media were briefed before staff, resulting in a conflict of message.

5.2 Crisis management and planning

There was an FMD plan updated in 2000. The plan had clear instructions to vets and supporting services on how to deal with the disease from a disease control point of view. However, it was found to be limited in scope and didn't contain information on how to communicate with stakeholders, the public, or the media. It also hadn't been shared widely (Anderson, 2002).

A classic crisis planning model was not followed. A crisis management team with clear roles and responsibilities had not been planned. Nor had they been briefed or rehearsed. Structures were in place, but they were not robust enough for a crisis of this scale (Gregory, 2005).

The lack of scenario planning and up-to-date crisis plan meant that the failings of the communications channels hadn't been identified. Resource requirements also hadn't been recognised, leaving the communications team lacking useable people and being short of money. This lack of preparedness jeopardized effective response and recovery strategies and resulted in reputational damage (Gregory 2005).

The Gregory (2005) review outlined the following communication lessons:

- 1. Scenario planning and regular rehearsal is required.
- 2. Clear protocols, roles and responsibilities.
- 3. Collective wisdom of stakeholders must be harnessed to solve problems.
- 4. Contingency plans must be regularly reviewed.
- 5. The latest technology is utilised to full, with communication channels clearly understood by stakeholders.
- 6. Local channels must be fully utilised.
- 7. Steps must be taken to understand the public mood and reaction.

5.3 Summary

The communications response showed many weaknesses, and some strengths. The ability to inform staff – both on the ground and through the helplines was a key learning to ensure consistency and accuracy of messages. However, radio proved to be a very useful channel for disseminating up to date information. Technology has come a long way in the last twenty years and some of the challenges faced will be different if FMD was to arrive in New Zealand.

5.4 FMD 2007 outbreak in the UK

On Friday 3 August 2007, a FMD outbreak was announced in Surrey, sending shockwaves across the country. The Department of the Environment, Food and Rural Affairs was much better prepared for this FMD outbreak than it was in 2001. The speed of the initial response and the detection of the first infected farm contributed to the success in containing the spread of disease (Cannon, 2017). However, the challenge of the 2007 outbreak was much less than in 2001. The outbreak was much smaller, geographically well contained and better controlled (Anderson, 2008).

6 2017 Mycoplasma bovis outbreak in New Zealand

On 21 July 2017, samples taken from a South Canterbury dairy herd tested positive for *Mycoplasma bovis* (*M. bovis*). This bacterium had not been found previously in New Zealand (MPI, 2020).

An emergency response structure was set up under the CIMS structure, led by the Ministry for Primary Industries. The PIM team (public information management) had one person operating solely for many months. As the days went on there was a lot of media attention and fear in the farming community.

Almost a year later, on 28 May 2018, the government and farming sector groups announced that an attempt will be made to eradicate *M. bovis* from New Zealand (MPI, 2020). The response, now referred to as a 'programme', is now reaching its fourth year.

6.1 Communication channels

6.1.1 Media

The media were the main communication channel used initially in the response. This includes both proactive media such as media releases, and a lot of reactive media, i.e. responding to enquiries from journalists.

The messages used in the initial stages of the response were focussed on MPIs efforts to contain the spread of infection and identify the source of the outbreak. There was also a focus on the fact that it did not pose a risk to food safety or human health and was primarily an animal welfare and production issue.

Initially, media and farmer interest were high, but it was difficult to explain how little MPI knew about the disease and how widespread the outbreak was.

As the response continued, the media coverage increasingly shifted to the impacts of the outbreak. There was emphasis on the livestock under movement restrictions, culling orders, financial and compensation issues, and the emotional trauma associated.

The Response Controller was the spokesperson that fronted the media. This person changed throughout the response, which resulted in multiple spokespeople to the media. This meant that it was difficult to build trust with farmers and the public.

There were occasionally adverts placed in rural newspapers to give an update on the eradication effort.

When the eradication decision was announced in May 2018, the media highlighted the 150,000 expected cattle to be culled. There were mixed farmer opinions at this time and media interest was very high. Industry organisations were partners in the decision and would then become more involved in a joint communications effort.

6.1.2 Social media

MPI has its own Facebook page that covers a wide array of industries including agriculture, forestry and fisheries. Social media was a channel that was barely used to communicate *M. bovis* messages. Management staff at MPI found that the channel carried too much risk. There were some occasions when the *M. bovis* PIM team would advise to post on social media and be declined, even if it was a good news story.

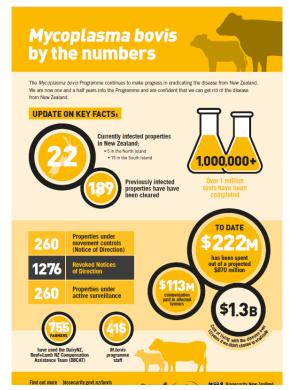


Figure 1: M. bovis newspaper advert, November 2019

6.1.3 Farmer/public meetings

Following the decision to eradicate the disease, and on an ad hoc basis following, there were many farmer and public meetings. The meetings were a successful way to communicate information to farmers who knew little about the disease and dispel any myths. The multi-agency meetings gave people a feeling a comfort that they were informed and had heard from the experts. Some meetings had hundreds, almost a thousand people attend and continued for three hours into the evening. It was an effective platform to get clear messages out. However, the meetings only captured those who were interested, there were still many farmers that weren't reached.

6.1.4 Mailings

Throughout the response there were a small number of mail outs to people at rural addresses. The mailouts were used to inform the farming community of the response progress and communicate messages on how to protect their farm from the disease. This was an expensive form of communication, but it ensured that the messages were in every rural mailbox.

6.1.5 Email

Early in the response, MPI set up a 'stakeholder update' email, and encouraged farmers and the media to sign up to receive the weekly update. It is still a communication channel that is relied upon by the communications team, though only 2,800 recipients have signed up to receive the email over the past four years.

6.1.6 Website

MPI had information on *M. bovis* available on their main mpi.govt.nz website. It was years into the response when they launched mbovis.govt.nz – a website with *M. bovis* information for affected farmers. It is recognised that this came too late in the response when there were less farmers involved and processes had improved.

6.2 Partnered approach

The *M. bovis* programme has benefited from operating as a partnership. Beef and Lamb New Zealand and DairyNZ have provided communications expertise (as well as expertise in other areas) into the response. Utilising industry knowledge means there is a strong understanding of the audiences, and they have the channels available to communicate with farmers effectively.

6.3 Summary

The *M. bovis* response has been long lived, and key stakeholders have had many learnings along the way. The communications approach was heavily influenced by internal politics at MPI, with some channels such as social media being underutilised. The response, however, offers positive learnings for working together with industry partners on joint communications initiatives.

7 COVID-19 outbreak in New Zealand

New Zealand went into COVID-19 alert level four lockdown on 26 March 2020, after a 4-tier alert level system was released on 23 March 2020.

The communications strategy adopted by the all-of-government response to COVID-19 was to bring everyone along for the ride. "We are a team of five million." A familiar term repeated by Prime Minister, Jacinda Arden, during the COVID-19 pandemic.

Prior to the lockdown, the government engaged Clemenger BBDO, a communications agency, to create a communications strategy for New Zealand's COVID-19 response. They had one week to plan (Walsh, 2021).

"One of the keys to our success as a country in the elimination strategy, right up there, and probably our most important public health intervention was our communications" (Bloomfield, 2021).

7.1 Strategy

The strategy was designed to be centred around people, not the virus. The foundations of the campaign were based on the question "what do people need in times of anxiety?" Structure and empathy. Structure was needed so that people had a way to organise themselves and the information they were receiving. Empathy is about helping people know how to approach situations emotionally, and to have their fears heard (Major, 2021).

7.2 Messaging

The style of messaging played a huge role in the success of New Zealand's elimination strategy. The communications team took government papers that outlined the scientific evidence and were translated into actions for people to take (Walsh, 2021).

The campaign focussed on small simple messages, repeated often.

"The role of clear, open, honest and transparent communication cannot be underestimated" (Bloomfield, 2021).

Stay home, save lives.

Other countries used the phrase 'stop the spread' – but what does that mean? This led to confusion in the communities. One critical aspect that hindered the communications response in the early stages of the COVID-19 crisis in Australia was a lack of coordination. There was conflicting information and advice provided by national and state officials, unrealistic requests for immediate changes in behaviours, and multiple releases of communication at unpredictable times contributed to a rise in public confusion and, critically, a reduction in trust in the messengers (Maher, 2020).

"If people understand why, they will do quite extraordinary things" (Bloomfield, 2021).

Language used by leaders plays a critical role in shaping individual behaviour, and the tone of the message can instil confidence and offer reassurance to the wider public. Language helps frame a shared reality (McGuire, 2020). The messages resulted in common goals and united a set of shared values, reassuring people through the crisis. Keeping the public informed of the overall progress was a key measure in ensuring public acceptance of lockdown restrictions and confidence in government actions.

7.3 Brand elements

7.3.1 Font

The font had a human look, bold was used to draw attention, and COVID-19 was in a thin version so not to alarm people (Major, 2021).

7.3.2 Colours and stripes

The psychology of colour was considered carefully. Yellow was chosen as it is a colour that is clear and easy to see. People associate yellow with instruction, for example, in New Zealand, yellow road signs provide advice about what is coming, whereas red signs are for enforcement. The colour couldn't be felt as being frightening.

The yellow stripes move from left to right, to show us moving forward (Major, 2021).

7.3.3 Graphics

The graphics used in the campaign were inspired by 'Isotype' - a language that was developed in the 1940's that consisted only of symbols, see Figure 2 (Major, 2021).

The graphics were created to tell people the right things to do and were instructional. Big red lines highlighting what not to do was not the answer, instead using the desired positive actions for people to take. The graphics had a human touch to them, so they appeared more like a drawing a person has done (Major, 2021).

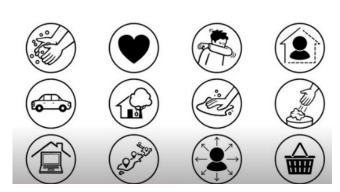


Figure 2: COVID-19 graphics



Figure 3: COVID-19 posters

The branding took off across the country, and even the world, with Scotland taking a very similar approach.



Figure 4: COVID-19 brand uptake across the country

7.4 Channels

7.4.1 Media

During the level 4 lockdown, 1pm press conferences took place daily, broadcasted on television and streamed online, most often with Prime Minister Jacinda Ardern and Dr Ashley Bloomfield as the spokespeople. The media stand ups were an effective way to get the most up to date information to the media and the public, it was the most credible form of

information. There were over 149 media stand ups in 2020. At one point in time there were 590,000 people watching the media stand up online (McElnay, 2021), which doesn't take into consideration the television viewers at home.

Print media also played a significant part in disseminating communications. News agencies would often wait past deadlines to print the newspapers to include the most up to date COVID-19 information (Walsh, 2021).

7.4.2 Website

A 'Unite against COVID-19' website was established. This website was the single source of the truth and helped to lessen the impact on call centres.

Website visitors went from 9,000 to 39,000 in two seconds when referenced by Dr Ashley Bloomfield at a 1pm media stand up (McElnay, 2021).

7.4.3 Social media

A 'Unite against COVID-19' Facebook account was set up. This was another way to have a trusted, single source of truth platform to distribute messages that were easily shared amongst communities.

The use of Facebook helped to not only get information out into the public, but also to monitor and receive information. Questions and topics that people were posting would drive the messaging and content. It helped to have an 'ear to the ground' to learn what were people concerned about (Major, 2021).

7.5 Summary

The COVID-19 response effected every New Zealander in some way. As with any response communications there were strengths and weaknesses. We learnt that having a strong brand, with highly empathetic messaging delivered by the right spokesperson could bring a nation together. The response benefited by having a marketing agency dedicated to the campaign with time (though short) to pull a brand together that we will all remember.

8 Findings and discussion

The time to prepare for an FMD outbreak in New Zealand is now.

When *M. bovis* was confirmed and the response begun, we didn't know what it was, we had to learn about the disease and how to respond. We know what FMD is, we know how we would respond.

The COVID-19 experience has exposed us all to having movement restrictions on people. Kiwis are now familiar with taking a risk-based approach to disease control. This will massively help in the event of an FMD outbreak when livestock and potentially people standstills will be in place.

8.1 Communications strategy

MPI has a communications strategy for an outbreak of FMD in New Zealand. It is a comprehensive plan, though developed in 2016, it is out of date. Work is underway to update the strategy, with sector communications leaders meeting to discuss the response to FMD recently, in May 2021.

The FMD communications strategy not only needs to be updated, but it also needs to be tested. A mock response would test the strategy to see if it is effective and identify any missing elements.

8.2 Resourcing

It is apparent that the PIM team must be adequately resourced. While this seems logical, it has been an issue in past responses. The team should include someone with specialist media knowledge who holds relationships with key rural media. Amongst other roles, there must be a team member solely responsible for internal communications – as this is often overlooked and can result in major pitfalls, for example, the media getting information before staff on the ground. The PIM team should work with industry communicators and get them onboard the team as required, this worked well in the *M. bovis* response. For this to work effectively, communications contacts lists need to be updated and checked every six months.

There is a risk that an FMD response would be Wellington-centric. To mitigate this, there should be a national brand and messages that are developed in Wellington and implemented in the regions. Having PIM team members on the ground will help hugely with local knowledge and relationships.

8.3 Brand and voice

A strong brand should be established. We all witnessed the success of the COVID-19 brand elements, that were replicated across the country and will be forever engrained in our minds! A strong brand means that communications will be easily identifiable amongst the noise.

Learning from past responses, it is very apparent that in an emergency response that affects animals, it's people that need looking after too. As we saw in the UK FMD outbreaks when mass animal slaughter occurred there was a real human impact on mental health and wellbeing. If this occurred in New Zealand, messaging needs to be empathetic, emphasising that we are all in this together.

8.4 Channels

An effective approach would be to use all channels at the offset of the response. Taking a blanket approach that can later be more targeted and refined as more is learnt about the situation and audiences.

Social media is a channel that will be hugely important and is not sufficiently covered in the 2016 communications strategy. Social media is an effective way to disseminate information quickly and widely. If the responding agencies don't fill an information void, others will. There are three options for social media channels I have identified:

- 1. Using the current MPI Facebook account.
- 2. Establishing a Biosecurity NZ Facebook account.
- 3. Alternatively, if an outbreak was to occur, a specific FMD Facebook account could be set up.

Using the current MPI Facebook page in an FMD outbreak would not work well. FMD content would completely take over the page that is responsible for the whole primary sector. The benefit of setting up a Biosecurity NZ Facebook page means that there could be more preparedness messaging posted to educate people before an FMD outbreak (though this should be happening through the MPI page already). Following the example of the Unite Against COVID-19 Facebook page, setting up a similar dedicated account for an FMD outbreak would work well. Despite starting with no followers, the COVID-19 page now has almost 200,000 followers. It is noted that other social media platforms should be used, but Facebook is suggested here as it is the most used social media channel by farmers in current times.

The website would play a huge part in providing people with information and actions. It would be the one source of the truth. There should be an unpublished website that is ready to go live in the event of an FMD outbreak. It must then be continually updated as more information becomes available. It is suggested that the website should be updated following internal staff briefings, and before informing the media to prevent the spread of misinformation and communicate timely factual information.

8.5 Stakeholder engagement

Stakeholders will play a big part in helping to disseminate information during an outbreak of FMD. Engagement is needed with these stakeholders before an outbreak is to occur, so that when it happens, they're prepared. When updating the communications strategy, we must understand who the community and sector leaders are. Then work to understand them, engage with them, and listen to them.

9 Conclusions and recommendations

The findings of this study show that there are improvements to be made for New Zealand to be prepared for a FMD outbreak, from a communications perspective.

I recommend the following actions should take place to help us prepare a communications response to an FMD outbreak in New Zealand:

- 1. Update the FMD communications strategy, keep it live and complete regular scenario testing.
- 2. Prepare a national brand and messaging ready for regional implementation.
- 3. Develop a swift sign off procedure so communications can be released quickly.

- 4. Have a well-resourced communications team.
- 5. Work to understand, engage and listen to stakeholders.

These responsibilities sit with the Ministry for Primary Industries as the lead agency in a response to FMD. It is suggested that they continue to work closely with industry communications representatives for a collaborative approach.

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