Tihe mauri ora! E te Atua, nāu te korōria Te whare e tū nei, tēnā koe Te papa i waho nei, tēnā koe Te mana whenua o tēnei rohe, tēnā koutou Te hunga mate ki te hunga mate, haere haere haere Te hunga ora ki a tātou te hunga ora Tēnā koutou, tēnā koutou, tēnā tatou katoa

Let there be life! Glory be to the Lord I greet the house we stand in I greet the land outside I greet the local people I pay tribute to our ancestors/to the dead I give thanks for those of us living Greetings to you all

Ko Angela McLeod taku ingoa,

Kaiwhakahaere Tuhinga, Whakatipu ārahitanga hoki Manager, Policy, Leadership and Development

Nga wahine taiwhenua o Aotearoa Rural Women New Zealand

In preparing for today, I went back to the presentation that I did on Leptospirosis and rural communities. Some of you will know our history with that and really – this – Salmonella bovismorbificans, bovine salmonella - and its effects on rural communities is looking similar, worryingly similar.

I have read some information and pleased I am towards the end of the day so that I could listen and learn from all of the earlier speakers. Here are two quotes that we have from Rural Women New Zealand members when asked to tell their stories about their involvement with leptospirosis – no-one wants to hear or see this

"I would not wish this on my worst enemy- I was so ill that I thought I would die"

"We had to leave the farm, our friends, the kid's schools and their friends. We bought a house in town facing some fields but it was never the same. We never recovered financially."

What is also worrying is that also, in preparing for today, I could swap out leptospirosis for bovine salmonella – such as: Bovine salmonella/Leptospirosis is a disease with widespread consequences. What is astounding is the emotional pain that remains long after the physical illness has passed.

As vets, scientists and academics, you are trying to understand the physiological effects on the animal and there clearly has to be research into the effects on the animals as well as how the animals get it, how it transfers to humans, and how to prevent it in both animals and humans.

What I am hoping to do today, is to put what I have heard and know, into some sort of thought pattern about the possible adverse impact bovine salmonella, and how it affects individuals, families, businesses and whole communities, economically, socially, emotionally and physically. I could be incoherent.

We need to look at the animal-human interface- how the stock having the disease affects people and how humans are affected when they contract bovine salmonella.

Let's look at the flow on effect of the stock getting bovine salmonella. (actually here I have pretty much swapped out lepto for bovine salmonella...

Firstly, it is the lost income from the subclinical cases, as production drops, then the cost of lost income from very sick animals and those who die from the disease. It is the cost of animal health to diagnose and treat animals, and prevention treatments for at risk stock, as well as buying replacement stock. These economic costs on already stretched budgets lead to stress within the affected farming families, with cost cutting and the tightening of belts, so less money is spent elsewhere such as in local businesses. It might get so severe that the farm needs to be sold and the family leave the area, a social & economic loss to the community, school and businesses. Sometimes the stress gets to the point that marriages and families break up under the strain.

And what are the costs if a family member contracts this disease? There is health, emotional, social and economic costs, and each can be devastating no matter which member of the family gets it.

Let's start with our happy rural family-on a single family unit farm, with Dad-Sam*, Mum-Jane*, & Ben* & Sarah*, two school aged children. Sam works the farm fulltime but helps out with a bit of shearing & casual work in the area to make a bit of extra income. Jane works part time in town and on the farm the rest of the time and is particularly busy at calving time. The two kids are at the local school, where Jane is involved on the Board of Trustees as well as other local organisations, such as Rural Women New Zealand.

What happens if Sam contracts bovine salmonella, from working in the cowshed, yards, shearing, doing dog tuckers or muttons, or digging in dirt, or working anywhere that infected animals have urinated, drinking the water... Depending on the severity of the case, it will mean a long illness & recovery and in a severe case, death. Emotionally the stress on the family of having a sick husband & father is incredible, there are hospital & doctor visits, and often a family split as the children end up staying with other family members or friends while Jane works the farm, at home and trying to fit in everything else, it is hugely unsettling for them all, and the children may take a long time to get over the unsettling time and may suffer with long term emotional & learning issues. Or – what if Jane contracts bovine salmonella, and has to watch as the calves she is rearing and become attached to, are dying around her. What does that effect look like, and how does that manifest in the family and therefore community?

The pressure shifts on to Sam, while Jane is in hospital or at home recuperating. Her part time job, which often finances the groceries or extras for the family, is gone, extra help is needed for the farm, which Sam is trying to do as well as look after the children, who may need to stay away, or have someone come in to help, which again is very unsettling.

What happens if one of the children get sick, infected while swimming in the river, the cowshed, the yards, the woolshed or even in a puddle where infected animals have been? What then? The economic pressure may not be there, but the emotional costs will be huge for the whole family, with the guilt felt that their child caught bovine salmonella and we didn't protect him/her. And, the child will be affected physically and emotionally from being sick, as well as socially by missing out on school and getting behind, and missing the social contact with friends.

Either way, economically it is a strain. Some things to consider...a worker might need to be found & paid for. Child care. Loss of productivity. It doesn't even bear thinking about if both parents are ill, and the children, or even not. How does it look? Can we discuss this? Further loss of stock due to the negligence of a "trusted farm worker" employed through an agency to milk while they were ill- a financial & emotional stress to an already sick couple-who pays for this? Then if it comes to it, the farm may need to be leased or sold if things get too tough, often leading to the family moving away, leaving a hole in the community- one less family at the school, spending money at local businesses, or taking part in community events . Once a hole like this appears, it is often very hard to fill.

How tough are scenarios like this on families- what ongoing effects are felt by all? Who picks up the pieces and who holds the family and the community together. Women.

I mentioned before about Jane being attached to the calves she is feeding. Has there been any research on the bond, for want of a better word, farmers have with their animals? Because watching them die or sending them off to die has a profound effect. The stories in the early part of the Mycoplasma bovis outbreak about the emotional toll of culling, should be listened to. The effects of this are far reaching. Us rural folk, women, bear the brunt of this in so many ways. What of us, if this bovine salmonella takes a hold? What of rural communities?

All these scenarios lead to economic, social, health and emotional costs, affecting the individual, the family unit, the extended family, & friends, and the whole social & business community.

We have to 'nip it in the bud' From our lepto example "So *much grief for lost opportunities, the job, the lifestyle, when will it end?*"

Will victims and families be traumatised by the impacts? What can we do to reduce these costs? How can we prevent the drain on our rural communities? How do we stop things like: "*After I contracted bovine salmonella, my husband was so terrified of the disease he sold the farm*"?

Maybe we need another synergistic research-community interface.

We start today – bovine salmonella – research - what it is, what it does, how it is contracted and how we can prevent other stock contracting it, the number of infected stock will drop and processes can be put into place to prevent further stock & human infections either by vaccination or sanitary practices.

We certainly need to raise awareness of the disease, and where further work can be done- how to prevent stock getting infected, and importantly what practices rural workers can put into place to lower the risk of them contacting bovine salmonella. This is something that we can all work together on to raise further awareness to all groups such as rural workers, employers and health professionals. Ensuring doctors know the symptoms, and will treat concerns from patients and their families seriously.

Organisations such as ours, Rural Support Trust, Schools, local groups need to know because we all go some way to ensuring rural communities are resilient - helping the individuals & families sometimes with food, sometimes with financial support, always with moral support by someone helping out or just someone to listen & help sort issues out. In some areas there are health services which can help with nursing, or house work and so forth, and so is a help to families. Will there need to be financial relief to families? Or do we need organisations such as ours, with your support, to use our collective power to make a difference, such as fundraisers, or to put pressure on decision makers for funding or policy changes.

The opportunities for greater interagency collaboration at a community level is here today – starts today so let's investigate it, let's look at initiatives that could be put into place to get this up & going.

At the very least we need to recognise the impacts on families & communities of bovine salmonella, give the specific support, and join together for research beyond just the disease, and do research specific to the social impacts.

Or – do we put all our efforts into stopping bovine salmonella in its tracks. I guess we are all here in this room today – let's see, how much time left in my slot. Is there a need for funding for research and awareness? Shall we have some korero about how working together could look? Or shall we draft an outcome statement, that we can all use in our endeavours around bovine salmonella?

Whatever the outcome of today is – it needs to lead to less of our stock being infected, meaning better returns for our farmers and less of our rural workers and families being violently ill, leading to more healthy happy families staying on in empowered rural communities.

Kia ora