Common Illnesses in the Meat Industry
The following organisations have helped to provide material for use in this publication:

- Department of Labour
- Canterbury District Health Board
- Food Safety Authority
Meat workers can be exposed to the risk of becoming ill or sick from getting diseases or infections from animals. Diseases that are passed from animals to humans are called **zoonoses**.

Meat workers especially need to know about five of these infections:

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**This booklet** tells you a bit more about these five illnesses and gives you some information that should help you to avoid them.

**Below** is a card that you can press out, and keep in your wallet to show a doctor if you become ill.

If you have a bad flu-like illness please go to your doctor and show them this card.

**Your symptoms may include:**
- Headaches
- Muscle aches and pains
- Vomiting
- Feeling hot or cold
- The light hurts your eyes
- Yellowing of the eyes or skin
To the doctor concerned

I work at a meat processing plant and you may wish to consider zoonotic illnesses such as:
- Leptospirosis
- Campylobacter
- Cryptosporidium
- Salmonella
when making a diagnosis.
Leptospirosis

How Leptospirosis affects you

Leptospirosis can be like a very bad case of the flu, with headaches, fever and weakness.

Leptospirosis will make some people seriously ill, needing intensive care at hospital. They may be off work for several months, and have lasting kidney or liver damage. Some people have died from leptospirosis.

How do you catch Leptospirosis?

Many animals can carry the leptospirosis bacteria including: cattle, bobby calves, pigs, sheep, lambs, goats and deer. Rats can also spread it. These animals ‘shed it’ in their urine.

Infected animals may not look sick even while they are shedding the leptospirosis bacteria in their urine.

Humans tend to get leptospirosis when infected animal urine, or water (e.g. puddles) contaminated with urine, gets in their eyes, nose, mouth or through cuts or cracks in their skin.

Just a splash or spray of urine can spread the disease.

Leptospirosis bacteria can survive for days after an animal has been killed, e.g. in chilled kidneys.

What helps the infection to spread?

- Hot, humid weather
- Cuts, cracks or grazes on the skin
- Soggy skin
- Eating or smoking with unwashed hands
- Uncovered moustache or beard/mouth
- Unprotected eyes.

Who is at risk?

Anyone working in and around a meat plant, including maintenance workers and other visitors, may be at risk. Meat workers are most at risk of catching leptospirosis when:

- Hosing down yards or other areas
- Tumbling pig carcasses
- Removing hides or pelts
- Taking out the bladder
- Handling gut contents
- Working with kidneys
- Handling offal for pet food
- Working in the rendering area.
What are the symptoms?

If you get leptospirosis, you may not feel ill for a week or two. Go to the doctor if you have any of these symptoms:

- Headaches
- Aching muscles
- Bright light hurts your eyes
- Fever or chills
- Nausea or vomiting.

Tell the doctor that you work in a meat processing plant, and that he/she should test you for leptospirosis. If they won’t do this, get the doctor or occupational health nurse at your plant to call your doctor – or go and see another one.

Protecting yourself

You can do some simple things to help protect you from leptospirosis:

- Always wear your protective clothing, safety glasses or visors, waterproof gloves and boots
- Carefully wash your hands and forearms before eating, drinking, smoking or touching your lips, face or eyes
- Wash your face as well if you have a moustache or beard
- Cover cuts and abrasions with waterproof plasters
- Wash off urine splashes immediately with water or saline (salt water)
- Report any flu-like illness to your doctor and remember to mention that you’re a meat worker.

Make sure that you take the test for leptospirosis before you start any recommended treatment.

For example: Before you swallow any antibiotics your doctor may prescribe.
Stomach Infections

How stomach infections affect you

Campylobacter, salmonella and cryptosporidium infections are often described as food poisoning. The illnesses are much worse than a normal ‘tummy upset’, and, in a very small number of cases, can be fatal.

Campylobacter, salmonella and cryptosporidium are three bugs found in a range of animals and food from animals. These bugs can all be avoided if you have good personal hygiene at work and at home.

<table>
<thead>
<tr>
<th>Infection</th>
<th>How long does it last?</th>
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<tr>
<td>Campylobacter</td>
<td>2 – 5 days, sometimes up to 10 days</td>
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<tr>
<td>Salmonella</td>
<td>5 – 7 days</td>
</tr>
<tr>
<td>Cryptosporidium</td>
<td>2 or more weeks.</td>
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What should you do to get better?

You need to get lots of rest and take lots of fluids (to replace what you’ve lost).

If you get really sick, your doctor might give you medicine to help.

You’ll need to have a clear laboratory test before you can come back to work with any of these infections. If you have cryptosporidium, you’ll need to check with your doctor before you come back to work.
What are the symptoms?

Symptoms are similar for all three infections. You could have:
- Diarrhoea (the runs)
- Abdominal cramps
- Fever
- Nausea (feeling sick)
- Vomiting (being sick).

Salmonella will make you feel ill more quickly ($\frac{1}{2} – 3$ days) than cryptosporidium ($2 – 7$ days) and campylobacter ($3 – 5$ days).

There can be some long term effects, too. With campylobacter, the abdominal cramps sometimes continue and relapses can occur.

With salmonella, a small number of people can get sore joints, irritated eyes and suffer painful urination that can last for months or years. It can also lead to chronic arthritis.

You can get infected with these bugs if you don’t wash your hands after going to the toilet, after handling raw poultry or raw milk or after handling pets or farm animals, especially dairy cattle and calves (cryptosporidium).

The bugs can get into your mouth from your fingers, food, smoking or even wiping your face.

Protecting yourself from Stomach Infections

To protect you and your family against campylobacter, salmonella and cryptosporidium:
- Always wash (with soap) and dry your hands after going to the toilet and before handling food
- Don’t eat chicken, pork, mince or sausages unless they’re well cooked and there’s no pink meat
- If you’ve had raw meat, chicken or sausages on a chopping board or bench, make sure it’s washed before any other food goes on it
- Don’t leave uncooked food or leftovers sitting around: cover it up and put it in the fridge.

Remember: Clean, Cook, Cover, Chill
**Orf**

**How do you catch it?**
Meat workers sometimes get orf by touching infected animals. The orf virus enters the body through a break in the skin such as a cut, scratch, blister or burn.

The virus is very hardy and may persist on animal skin or wool. It can also be caught through contamination of knives, shears, stalls, trucks and clothing.

**Orf** is a skin disease that occurs in people and animals. In sheep, orf is usually called “Scabby Mouth”. Orf is caused by a virus.

**Who is at risk?**
Orf is most commonly seen in people who come into contact with infected sheep and lambs, such as farm workers and meat workers. The virus can also be caught from goats and deer.

**How is it treated?**
The infection is viral, so antibiotics will not work. Keep the sore dry as that will speed healing and help prevent a more serious infection.

- If you have a sore, see your doctor or a nurse
- Dress the sore with a waterproof dressing.
- Change the dressing often, to keep the sore dry and clean
- Don’t try to open the sore or probe it with a needle
- Don’t rub the sore on or near your face.

**What are the symptoms?**
A small raised spot (like a pimple) appears around 3 – 6 days after contact with the virus. The spot will grow larger and become surrounded by a pale ring that will turn red. It will feel like a sore and can be as large as a 20 cent piece. If this spot breaks, a few small watery drops emerge.

The red spot will become weepy and develop a crust before it dries and forms a scab, under which the skin starts to heal.

The sore is more irritating than painful and may feel prickly. If it is on the palm of your hand, on a finger or near a joint, it may interfere with your work. Sometimes there is a pain in your armpit.

Complications are rare, but sometimes a rash can occur all over the body. Symptoms may last for 3 - 6 weeks.
Protecting yourself

To protect against orf:

- Wear plastic type over gloves when processing meat
- Cover cuts, scratches, grazes or burns with a waterproof dressing until the wound has healed
- After handling animals, wash your hands thoroughly with soap and water. This helps remove any virus you may have picked up
- Wash clothes that you have worn on the farm or while working with animals
- Wear all protective equipment (PPE gear) supplied by your supervisor.

Washing Hands

Clean hands are hands that are washed with **soap** and dried with a clean towel. It’s important to always wash your hands before handling food, but just as important to wash them after:

- Handling raw meat and poultry
- Going to the toilet
- Changing nappies
- Handling pets
- Gardening.

Wash knives and utensils, and scrub chopping boards between preparation of raw and cooked foods.

How to wash your hands

- Wash your hands for 20 seconds with soap and hot water
- Dry your hands for 20 seconds with a clean dry towel or paper towel.
Remember

The best things that you can do to prevent illness are:

- Always wash your hands before eating or smoking
- Take care with raw chicken, pork and mince
- Always wear the right protective clothing e.g. safety glasses/visor, gumboots, leggings, gloves
- Always cover cuts and scratches
- If your face gets splashed with urine, blood, etc wash your face immediately
- Wear all personal protective equipment (PPE) provided
- If you have flu-like symptoms, tell your doctor that you're a meat worker and that you should be tested for these illnesses.
The MIA would like to acknowledge the support and contribution of ACC and the Meat Industry Health and Safety Forum in the development and production of this booklet. The MIA is committed to promoting safe working practices in the meat processing and export industry and recommends this valuable resource to the industry.