Chickens can be a great asset to any small landholding. They provide eggs, control insects and weeds, fertilise orchards, eat kitchen scraps and loosen soil while scratching.

But there are a few things you need to know when keeping chickens, and eating and selling the eggs they produce.

When first obtaining chickens, it is best to purchase vaccinated birds from a reliable commercial source. Do not get birds from a variety of sources as this can increase the risk of introducing pests and diseases.

A good starter flock to provide eggs for a household would consist of four or five 16-24 week old birds (described as point-of-lay pullets).

Avoid buying roosters if living in a suburban area, as many local government authorities (LGA) prohibit them because of their crowing.

Laws regarding keeping poultry are determined by each state or territory.

In some cases, LGAs have created bylaws that amend the state laws.

Contact your LGA for the most accurate and up-to-date regulations.

Housing
Before constructing any form of housing for your chickens, be sure to get approval from your LGA which may regulate the building position and the number of birds you keep.

Existing housing
Thoroughly clean old housing as it could contain mites, fleas or ticks. Wooden structures may need to be removed and the soil surrounding old housing should be tested to ensure it is free from chemicals.

Chicken coop
It is important to have a fox-proof coop which is still easily accessible and adequately ventilated. The coop should be fully enclosed and the chickens locked away every night.

Locate the chicken house facing east so that the back is towards the strong westerly, rain-bearing winter winds.

A belt of vegetation to the east will provide protection against the wind but ensure it still lets in the morning sun.

Cover the floor with sawdust (at least 8cm) so that it mixes with the poultry droppings to form ‘deep litter’. After nine months, the litter can be removed, composted and used in the garden.

Check with your LGA as many have banned the use and storage of chicken litter unless composted, as it provides a breeding medium for stable flies.
The coop should contain a perch (no more than 60cm high) for roosting and nesting boxes which can be accessed from the outside. Nesting boxes provide a safe comfortable area for hens to lay their eggs and allow ease of collection.

**Chicken run**

The chicken run should be bordered by 1.8m high chicken mesh and enclosed to discourage foxes from killing the chickens and wild birds from eating the chicken food and possibly introducing diseases.

To deter foxes from digging under the fence, dig the netting into the soil to a depth of 50cm or continue the netting outwards at the base of the fence.

**Feeding**

By law chickens must be provided with appropriate food, water and protection.

The quality of food and water is also important as the wrong balance of nutrients and quantities of feed can lead to poor egg production and bird health.

Commercial layer pellets provide the best, balanced source of nutrients for chickens.

**Common problems**

A healthy bird should be alert, active, eat often, have clean eyes and nostrils and its breathing should be silent and unnoticeable.

Sick birds may have drooping wings and tail, discharge from the nostrils and eyes, weakness or paralysis of one or both legs or wings, be lethargic or experience a loss of appetite. Observing the flock every day, and learning what is normal for your birds, can help you identify when a bird is sick.

Some birds are just found dead.

Egg-bound hens – caused when an egg matures inside the bird, but is not laid. Euthanasia is the most appropriate action.

Egg peritonitis – this is when an egg ruptures inside the bird. Affected birds become depressed, cease eating and usually die. The most common cause of egg peritonitis is perches set too high.

Lice – these are small parasites which can cause severe irritation and stress. Birds often stop laying. Treat with a registered poultry dust.

Stick fast fleas – these appear as small, shiny black dots; on the combs, wattles and around the eyes. Larvae need deep soil to complete their development so an impervious floor under the roosting area can assist control. Treat individual birds with a registered treatment. Cats and dogs can also be affected.

Mites and ticks – blood-sucking parasites which can cause severe irritation, loss of blood and body weight. These pests also lead to a decrease in egg production and then death.

Mites and ticks can spend considerable time off the host, therefore it is essential to remove and destroy rubbish in the coop so that it can be properly cleaned and sprayed with an insecticide registered for the purpose. The most common mites in Western Australia (WA) poultry are the scaly leg mite and the red mite.

**Viral and bacterial diseases**

**Viral**

There is no adequate treatment for viral diseases in chickens, which is why it’s important to buy fully vaccinated birds.

Vaccination of chickens is a specialised task and should be discussed with your hatchery, pullet supplier or veterinarian.

The two exotic poultry diseases most feared in Australia are avian influenza and Newcastle disease.

- Avian influenza - widespread in wild water birds throughout the world but not present in Australia. Is it contagious and causes decreased egg
production, depression, diarrhoea and blue combs.

- Newcastle disease – this can cause a range of symptoms from a mild respiratory disease to severe depression, drop in egg production, increased respiration and profuse diarrhoea. In WA vaccination of commercial flocks (over 1,000 birds and not including meat chickens) is compulsory. It is optional for smaller flocks.

If your flock appears to be suffering any signs of these two diseases, contact the Exotic Animal Disease Emergency line on 1800 675 888.

Other diseases include:

Marek’s disease – it causes tumours, paralysis and death in young birds. The vaccine must be administered in the first 24 hours of life to be effective.

Infectious laryngotracheitis and infectious bronchitis – These cause respiratory diseases and are evident by reduced egg production, coughing, mouth breathing and possibly death. A vaccine is available.

Egg drop syndrome and avian encephalomyelitis – both of these diseases can be transmitted through the egg and spread from bird to bird. They cause very little illness, but egg production is severely affected for several weeks. Avian encephalomyelitis may cause a severe brain disease and death in young chickens.

Fowl pox – spread by mosquitoes, it results in birds develop wart-like growths on the face and vent. Some strains of pox are very severe and result in lesions in the oesophagus and often death.

Bacterial diseases

Fowl cholera – this causes reduced egg production and increased mortality. Birds appear depressed and lose appetite for a few days prior to death. Antibiotics can be used to treat this disease.

Mycoplasmosis – a common disease in poultry kept in the metropolitan area, it causes reduced egg production and a mild respiratory disease. It is difficult to control in mixed age flocks.

Restricted animal material

When keeping chickens it is vital you prevent feed and litter being fed to ruminants (e.g. cattle, sheep and goats).

This is to ensure that Australia can continue to demonstrate freedom from Bovine Spongiform Encephalitis (BSE – mad cow disease), and for the protection of crucial export markets.

Producing and selling eggs

If eggs are for personal consumption you do not need to be a registered food business however if you are going to sell eggs you must comply with the Food Act 2008.

Egg labelling

In Western Australia, egg labelling is required for eggs and egg products for retail sale or catering purposes.

The label should include all the relevant information required by the Food Standards Code, such as food name, lot identification, name and business address, date marking, directions for use and storage, etc.

Individual eggs and egg products to be marked with a unique identifier. This unique identifier is designed to enable the source of an individual egg or egg product to be quickly identified and traced back to its producer/processor. This is particularly useful in the event of a food-borne disease outbreak investigation where eggs or egg products have been identified as a possible source.

For more information regarding unique identifiers speak with the Department of Health (Food Unit).

Egg washing

Salmonella is the main microorganism of concern associated with eggs and egg products that can cause harm to humans.

Major factors that impact on the potential transfer of salmonella from feed, water and the laying environment include the presence and amount of faecal matter on the egg surface and the condition of the shell (e.g. cracks) and cuticle.

Therefore it is vital that the egg remain clean where possible.

Clean by scraping off dirt/faecal matter and washing in warm water and detergent.

It is important that the water temperature is higher than the egg temperature (around 15°C higher but not greater than 50°C).

Organochlorines in eggs

Chicken houses and other old structures built before 1984 could have been treated with organochlorines (e.g. dieldrin and DDT) to control termites.
These chemicals can be harmful to humans if ingested in high concentrations.

As birds eat soil to help digest their food, any organochlorines still left in the soil can contaminate their meat and eggs.

If you are unsure about the condition of your soil, before selling your eggs or passing them on to friends or family, it is best to get the soil tested. This can be done at private analytical laboratories.

The FSANZ egg standard
The Food Standards Australia and New Zealand (FSANZ) Primary Production and Processing (PPP) Standard for Eggs and Egg Products (Standard 4.2.5) is part of a series of national food safety standards and was gazetted in May 2011. PPP Standards (which only apply in Australia) aim to strengthen food safety and traceability from paddock to plate.

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FSANZ developed the new standard as a result of the increase in the number of food-borne illnesses suspected of being linked to eggs or egg products, particularly cracked and dirty eggs which have been a key cause of contamination.

The new standard:
- requires egg producers and processors to identify and control safety hazards
- prohibits the sale of cracked and dirty eggs unless sold to a processor for pasteurisation
- requires individual eggs to be stamped with the producers’ unique identification.

An implementation package for this standard has been developed by the Implementation Sub Committee and can be found at the Australian Department of Health. All eggs must be date marked.

Quality assurance programs
The Egg Corp Assured (ECA) program has been developed by the Australian Egg Corporation Limited, to cover business practices including pullet rearing, egg production and egg grading/packing.

The program addresses food safety, biosecurity, animal welfare and egg labelling and reassures customers and the public that your eggs are safe for human consumption.

Chickens allowed to wander the property during the day should still be locked away every night.