

Calf housing – the success of your herd starts here

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Like all newborns, calves need a special environment to grow and thrive. Different considerations must be taken for newborn calves, but they still need special attention.

Despite the fact that calves are the future of every herd, calf housing is often an overlooked area or a second thought. It is not uncommon to see farms trying to convert a facility that was once used to house the milking herd or a shed into a calf housing facility.

These facilities were designed for another purpose originally and not constructed with calves in mind. Therefore, these types of buildings are typically poorly lit and have poor ventilation. This is a problem seen in almost every country visited. Unfortunately, calf health can take a big hit in these retrofitted facilities.

Some farms compound this problem by keeping all ages of animals under one roof; this is more commonly seen in the European market. This is not a good idea because the



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baby calf has a weak immune system and if it is kept with adult animals its naive immune system is forced to fight off adult diseases. The health and welfare of the calf could be compromised.

There are three main benefits to indoor housing that appeal to a lot of dairy farmers. The calf is protected from the weather and

climate issues. The employee's well being is improved as it is more comfortable to work indoors and last, but not least, the employee is protected from bad weather and can continue chores without the interruption of the weather. As a result, the employee is likely to spend more time feeding and diagnosing the calf in inclement weather.

Every type of calf housing system has its upsides and downsides. But before you decide to either build a new calf facility or retrofit an existing facility there are some questions you need to ask yourself.

● Can I control the environment?

As the manager of the calf you are in complete control of the calf's environment. If the barn or housing is not built correctly, without proper ventilation and sunlight, the calves will not thrive.

Remember when a calf is raised outside in calf hutches it can pick and choose its own environment whether it wants to be inside or outside of the hutch. When calves are moved indoors you decide the environment and the calf no longer has a choice unless we as managers give it to them. Keep in mind you are in 100% control of the calf's environment.

Not providing the calf with natural sunlight is one of the biggest mistakes. It is amazing what sunlight can do for an animal. There

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Protecting the calf from poor weather, improved employee well-being and protecting the employee from inclement weather are three benefits of indoor calf housing.



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should be enough natural sunlight to examine and work on the calves during the day without turning the lights on.

● **Can air quality inside the building be maintained?**

Indoor calf housing should have air exchange rates of four air changes per hour, 15 air changes per hour and 60 air changes per hour in cold, mild and hot weather, respectively. Installing fans in the building does not equal an air exchange; neither does installing exhaust fans if the inlets are not engineered correctly.

Proper ventilation requires an air exchange, not just air movement. Adequate amounts of fresh air need to be delivered uniformly throughout the barn to every calf at a speed that does not get felt as a draught. Calves raised in a facility that is draughty can suffer from pneumonia or other respiratory problems.

Planning a barn with proper air exchange is the most important thing you can do.

● **How will the calves be bedded and kept dry?**

Consider what type of bedding you will use, how it will be handled and managed so the calves are kept dry at all times. It is very important that calves have access to clean and dry bedding with enough pack. Use deep straw bedding to give calves a place to



Newborn calves are the future of the herd and need a special environment to grow and thrive.

'nest' and thus conserve body heat, especially in cold weather. Think through how you will bed calves in both cold and hot weather. Remember, calves that are cold and stressed will not gain weight and are more susceptible to diseases like pneumonia and scours.

The barn should be designed in a fashion that provides for proper drainage and ease of cleaning and disinfecting. Calf housing, no matter what material, should be cleaned and sanitised between each calf.

Depending on your farm's calf weaning

program this could be every six to eight weeks.

● **Can you limit contact between younger and older animals?**

As mentioned earlier, mixing older and younger animals in the same building is inherently a bad idea because the calf's immune system is not ready to combat adult animal diseases. Older and younger animals should be kept in separate facilities.

● **Are your employees trained to recognise when a calf may be ill?**

When calves are raised indoors it is harder to detect when a calf is ill. Employees need to be properly trained to recognise when a calf is ill by learning calf mannerisms, before they get too sick. A calf's mannerisms are harder to detect indoors than out. When a calf is outdoors in a hutch it is easier to recognise mannerisms because if the calf is not outside his or her pen you ask yourself why? Plan to spend extra time training employees to recognise when a calf is ill.

● **Can you avoid overcrowding the calves?**

A key to success is not overcrowding. Overcrowding is a mistake commonly seen on farm. You need to have plenty of area for the calf to grow.

● **How will you ease the transition once calves graduate to group housing?**

Consider how you will transition calves from individual pens into group housing. In the European Union calves can be kept in individual pens until eight weeks of age and then must be transitioned into group housing. Can your facility be designed in a manner that eases this transition?

In addition to asking yourself these questions, it can also be helpful to visit other dairy farmers and discuss their calf raising facilities to learn what has worked for them, what hasn't and what they would do differently. Anyone who has recently built or retrofitted calf housing will have valuable insight to share. ■