## **LKL Safety Note**

## **Protecting your Lungs** (and how to fit disposable masks correctly)

By Michelle Jeal - LKL 's Health & Safety Advisor

When working in agriculture, you can breathe in a range of dusts, vapours, fumes, mould spores or germs that can cause serious lung diseases, such as occupational asthma, farmers' lung and chronic bronchitis. Severe cases may mean that you have to give up work and face the economic and social consequences.



Farmer's Lung is often a disease of dairy farmers that

handle <u>contaminated hay</u>, <u>haylage</u>, <u>straw or grain</u> during the winter months. When a farmer breaks open a bale, the mould is released as a <u>fine dust</u>. A farmer who is working indoors can inhale a large amount of this dust in a very short time. Working outdoors with hay and straw bales poses less danger, because the mouldy dust is quickly dispersed.

Not everybody is allergic to the moulds - it's around 5-10% and there is no way of knowing whether you will be susceptible. An allergic reaction is often an acute short attack especially after heavy exposure and can develop a few hours later and resembles flu like symptoms, which can last a few weeks. If an allergic farmer is then continuously exposed to the mould then irreversible damage and scarring to the lungs may develop. The damage may be more difficult to diagnose at first and it may appear to be like a persistent chest cold, but with time working will become more and more difficult due to shortness of breath.

The best way to protect yourself is to try and eliminate or minimise exposure to the dust and you can use a combination of different methods: -

- Make sure that crops are adequately dried prior to store.
- If possible, wet hay should be ensiled.
- <u>Provide as much ventilation as possible</u> when working in dusty areas. Make sure doors and windows are open. If practical, construct new openings.
- Move the work outdoors whenever possible. While this is usually not practical in the case of feeding operations, be sure to open bales that you know are mouldy outdoors.
- When you have to work with mouldy material, try to <u>keep your distance</u>. If you
  have to break open a mouldy bale of straw or hay, do so with a fork, instead of
  bending over and using your hands.
- Wear an approved dust mask. Masks should be CE marked and look for the standard for disposable respirators - EN 149: 2001. Additional markings, such as FFP1, FFP2 or FFP3, indicate the protection level that you can get if the respirator is a good fit and you use it correctly.
- For very dusty conditions it's best to use a higher level of protection such as FFP2 or FFP3. (LKL provide these as part of their starter PPE kit) Nuisance dust masks are not suitable. (NB: These masks do not protect against toxic gases)



The fit of disposable dust masks is very important. Copy this link below into your web browser to watch a 3M video that shows you the correct way of fitting disposable masks which are similar to the type provided in the PPE packs. The principles are the same for all disposable mask fitting.

https://www.youtube.com/watch?v=o6EZDwWMpxE&list=PLb-TP2uLs5EpE6IJ8egUciwpFWGFga9nX&index=10