Central States Center for Agricultural Safety and Health

Dander & Particles in the Air Information Sheet



Hazards to Confinement Animal Workers

Dander & Particles in the Air

Dander is the dead skin cells of animals which contain microscopic proteins.

Dander is extremely light and can remain airborne for extended periods of time, causing extended respiratory exposure.

Dander also has the ability to easily stick to clothing and other fabric materials.^{1,2}

Animal waste, bedding dust, grain dust, fungal spores from moldy grain, and ammonia from poultry can also lead to respiratory problems.³

Risks from Exposure to Confinement Animals



Short-term: coughing, wheezing, other breathing problems



Long-term: allergies, occupational asthma ⁴



Farmer's Fever also known as Organic Toxic Dust Syndrome

Check out the back of the flyer for more resources!





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SAFETY CHECKLIST:

In facilities:



Maintain or upgrade ventilation in the confinement housing.



Wear appropriate PPE.

- NIOSH approved respirator
 - Requires fit test, must be clean shaven
- Power air-purifying respirators (PAPRs)
 - No fit test required, do not need to be clean shaven, may be more comfortable



Control dust with "Wet Methods", including using water or soybean oil on areas within the confinement housing.

At home:



Remove PPE upon completion of work. Do not wear contaminated clothing into the house or find a dedicated space to remove work clothing and take it directly to the washer. Do not leave clothing in the clothes hamper.



Shower when arriving home from working in the confinement areas.

References: (1) American Lung Association (ALA). 2022. Pet dander. https://www.lung.org/clean-air/at-home/indoor-air-pollutants/pet-dander [Accessed 7/22/22]. (2) National Institute for Occupational Safety and Health (NIOSH). April 1994. Request for assistance in preventing organic dust toxic syndrome. https://www.cdc.gov/niosh/docs/94-102/pdfs/94-102.pdf [Accessed 7/22/22]. (3) Olson D, Bark S. 1996. Health hazards affecting the confinement farm worker. AAOHN Journal 44(4):198-204. (4) Sethi P, Muduli S, Mishra A, Roul AK, Mishra A. 2019. Poultry dust and risks associated with public health. The Pharma Innovation Journal 8(4):1188-1192



