Aservo[®] EquiHaler[®]

Before we go any further, let's first learn the important terms:

The **breathing zone** is a

space in proximity to a horse's nostrils. Measurements of dust in the air samples directly from the breathing zone most accurately represents the actual level of airborne dust exposure of a horse. i.e. close to the ground eating hay, dust from sweeping or cleaning stalls.¹¹



Before we go any further, let's first learn the important terms:

Inhalableparticles

Particles >10 µm deposit in the upper respiratory tract and larger airways

> Particles 10-6 µm deposit in the larynx, trachea, bronchi, and large bronchioles

Inhalable particles refer to all airborne particulate matter inhaled through the horse's nose. Although natural defenses clear out much of the dust inhaled throughout the day, smaller particles ($\leq 5 \mu m$) can reach deeper into the respiratory tract especially if the horse's defense mechanism is compromised —as in the case of equine asthma.¹

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Before we go any further, let's first learn the important terms:

Inhalable **Respirable** particles are a fraction of particles inhalable particles and are characterized by their smallsize ($\leq 5 \mu m$) allowing them to reach the lower airway-including potential to reach the gas-exchanging surface in the alveoli. Respirable dust exposure is associated with airway Particles smaller than inflammation in horses. 0.5 µm are likely exhaled back to the environment. Particles 5-1 µm deposit in the small bronchioles and alveoli



Before we go any further, let's first learn the important terms:



WHAT are the environmental factors associated with the development of equine asthma syndrome?





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