## The Science of Exceptional

When equine influenza virus (EIV) is in the air, give horses

# Flu Avert I.N.™

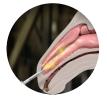
The ONLY modified-live virus (MLV) intranasal equine influenza vaccine on the market

## Intranasal (IN) vaccination offers a range of benefits

- Stimulates both innate<sup>1</sup> and adaptive immune responses<sup>2</sup> for 3 LEVELS OF PROTECTION:
  - 1 Mucosal immunity
    - ... (2) Humoral immunity<sup>2</sup>
      - Cell-mediated immunity<sup>2</sup>
- Rapid onset of immunity 5–7 days in naïve animals<sup>3,4</sup>
- No muscle soreness or injection site reactions

#### Get all this and more with Flu Avert I.N.™

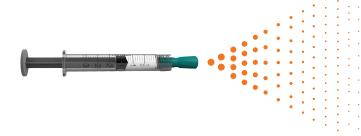
- Very well tolerated<sup>2,5</sup>: **NO ADVERSE REACTIONS** in a study of 90 eleven-month-old foals<sup>5</sup>
- Just ONE DOSE confers a duration of immunity (DOI) of at least 6 months
- Has NO adjuvants or preservatives
- Approved for the vaccination of healthy horses 11 months of age or older
- Effective against disease caused by EIV
- Also effective against virus shedding of EIV





As a MLV replicating vaccine, Flu Avert I.N.™ provides a broader scope of cross-protection to other EIV strains than inactivated vaccines, for coverage that's less susceptible to the consequences of antigenic drift<sup>6</sup>

### Discover the Flu Avert I.N.™ atomizing applicator



Delivers the vaccine in a much smaller particle size than with our previous applicator, which improves the immune response by enhancing distribution and contact with the nasal and pharyngeal mucosa

Is well tolerated by horses, reducing the need for restraint

Attaches to a luer-lock syringe, just 1 inch long x 1/4 inch wide

### Flu Avert I.N.™: One Powerful Dose of Immunity...

- When there's an **EIV OUTBREAK** 
  - The AAEP infectious disease control guidelines state:
    "If animals are unvaccinated prior to an outbreak, the use of a modified live intranasal vaccine may be recommended to achieve protection within 5 days of primary administration"<sup>4</sup>
- For horses that need **STAND-ALONE EIV** protection
- As a BOOSTER



For combination protection against multiple pathogens, ask about our PRESTIGE® line of equine vaccines.

To find out more about Flu Avert I.N.™, or for technical support, please contact your Merck Animal Health representative at 1-866-683-7838, or go to

www.merck-animal-health.ca.

Always read and follow the label instructions to ensure this product is suitable for the animal to be vaccinated.

- 1. Koch DW, et al. Innate Immune responses of primary equine influenza respiratory epithelial cells to infection with a modified-live or wild-type equine influenza virus. Poster presented at: 3<sup>rd</sup> International Symposium on Neglected Influenza Viruses, 15-17 April 2015, Athens, Georgia, USA.
- 2. Paillot, R. A Systematic Review of Recent Advances in Equine Influenza Vaccination. Vaccines (Basel) 2014; 2(4):797-831. doi: 10.3390/vaccines2040797.
- 3. American Association of Equine Practitioners. Vaccination guidelines. Equine Influenza. Available at: https://aaep.org/guidelines/vaccination-guidelines/risk-based-vaccination-guidelines/equine-influenza. Accessed May 6, 2022.
- 4. American Association of Equine Practitioners. AAEP Infectious Disease Control Guidelines on Equine Influenza. Available at: https://aaep.org/sites/default/files/Documents/EQUINE%20INFLUENZA\_Final.pdf. Accessed May 6, 2022.
- 5. Townsend, HG, et al. Efficacy of a cold-adapted, intranasal, equine influenza vaccine: challenge trials. Equine Vet J 2001 Nov; 33(7):637-43.
- 6. Chambers TM, et al. A new modified live equine influenza virus vaccine: phenotypic stability, restricted spread and efficacy against heterologous virus challenge. Equine Vet J 2001; 33(7):630-6.

