



## LEPTOSPIROSIS IS HARD TO DETECT. NOW HELPING PREVENT IT CAN BE EASY.

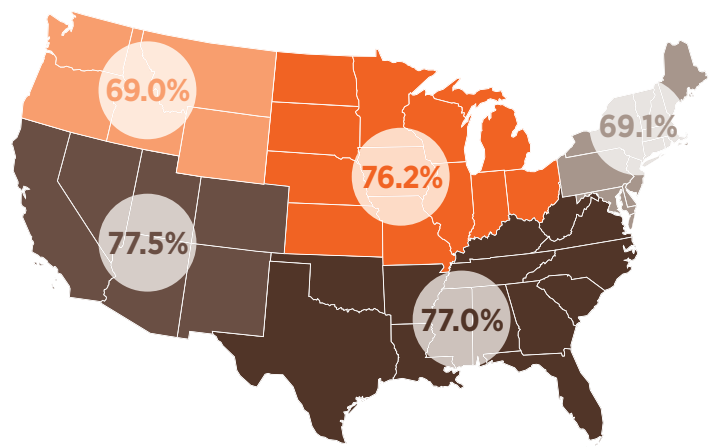
Equine leptospirosis is a bacterial disease caused by spirochetes belonging to the genus *Leptospira*. Because the clinical signs of infection are often nonspecific, disease in horses may be underdiagnosed.

### HORSES ACROSS THE COUNTRY MAY BE AT RISK.

Serologic studies show that exposure to *Leptospira* may be more prevalent than previously understood.<sup>1,2</sup> In a 2014 study of 5,261 healthy horses, 75% of the horses tested positive for at least one leptospiral serovar.<sup>1</sup>

### REGIONAL SEROPREVALENCE

- Northeast — 69.1%
- South — 77.0%
- Midwest — 76.2%
- Pacific Northwest — 69.0%
- Southwest — 77.5%



### HELP PROTECT YOUR PATIENTS WITH LEPTO EQ INNOVATOR®

Developed specifically for horses, LEPTO EQ INNOVATOR is the first and only equine vaccine to help prevent leptospirosis caused by *L. pomona* and can help reduce the spread of leptospirosis. The vaccine targets *Leptospira interrogans* serovar Pomona, which is most frequently associated with disease in horses.<sup>3</sup>

LEPTO EQ INNOVATOR helps prevent leptospiremia caused by *L. pomona*, which could, but has not been demonstrated to, help reduce the potential risk of equine recurrent uveitis, abortion or acute renal failure caused by *L. pomona*.\*

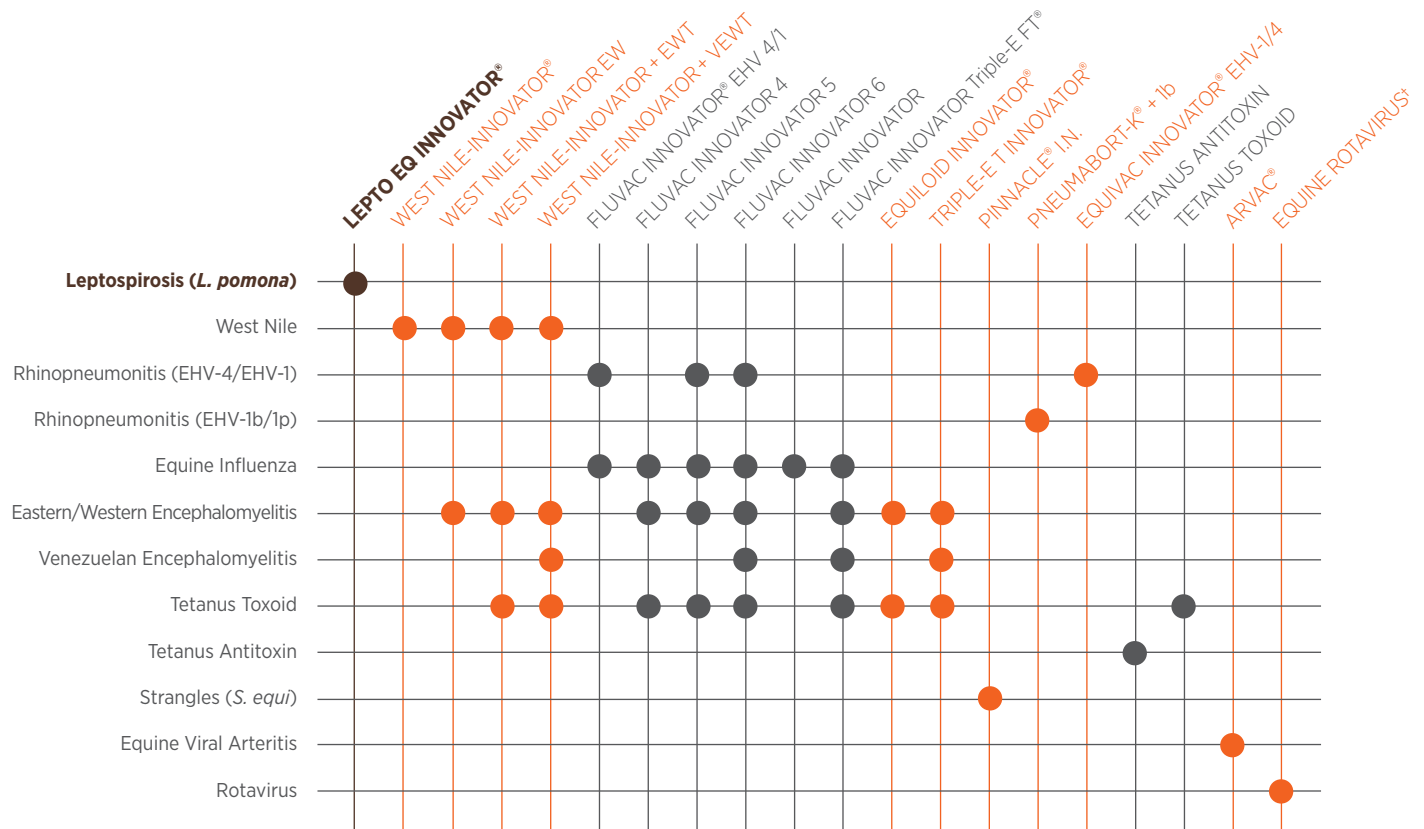
### DEMONSTRATED TO BE SAFE AND EFFECTIVE

In safety and efficacy trials, LEPTO EQ INNOVATOR was shown to provide a safe immune response. An efficacy study demonstrated that horses vaccinated with LEPTO EQ INNOVATOR and challenged with *L. pomona* showed 0% bacterial shedding in the urine.<sup>4</sup>

- The estimated losses from *Leptospira*-associated abortions in Thoroughbred horses alone during a season with heavy rainfall was \$4.2 million.<sup>2,5</sup>
- The estimated economic impact of *Leptospira*-associated equine recurrent uveitis (ERU) in the U.S., including the cost of diagnosis, treatment and loss in horse value due to visual impairment or blindness was \$2.1 billion.<sup>6-12</sup>

SHOWN TO BE **99.8% REACTION-FREE** IN RECENT FIELD STUDIES<sup>13,14</sup>

# LEPTO EQ INNOVATOR® IS PART OF A BROAD RANGE OF TRUSTED VACCINES FROM ZOETIS.



TO TAKE THE LEPTOSPIROSIS RISK ASSESSMENT AND LEARN MORE ABOUT LEPTO EQ INNOVATOR®, VISIT **LEPTOEQINNOVATOR.COM** OR CONTACT YOUR ZOETIS REPRESENTATIVE.

\*Currently, there are no vaccines available with USDA-licensed label claims against equine abortions, uveitis or acute renal failure due to *L. pomona*.

†This product license is conditional. Efficacy and potency test studies are in progress. Please consult your veterinarian.

#### References:

- <sup>1</sup> Data on file, Study Report No. Restricted Grant-FTLEPT013 (v1.0) TI-01366, Zoetis Inc.
- <sup>2</sup> Carter CN, Cohen N, Steinman MN, Smith JL, Erol E, Brown S. Seroepidemiology of equine leptospirosis utilizing diagnostic laboratory specimens from 29 states (US) and one Canadian province, in *Proceedings*. 55th Annu AAVLD Meet 2012;51.
- <sup>3</sup> Divers TJ, Chang Y-F. Leptospirosis. In: Robinson NE, Sprayberry KA, eds. *Current Therapy in Equine Medicine*. Vol 6. 6th ed. St. Louis, MO: Saunders Elsevier;2009:145-147.
- <sup>4</sup> Data on file, Study Report No. B850R-US-12-011, Zoetis Inc.
- <sup>5</sup> Erol E, Jackson CB, Steinman M, et al. A diagnostic evaluation of real-time PCR, fluorescent agglutination tests in cases of equine leptospiral abortion. *Equine Vet J*. 2015;47(2):171-174.
- <sup>6</sup> Polle F, Storey E, Eades S, et al. Role of intraocular *Leptospira* infections in the pathogenesis of equine recurrent uveitis in the southern United States. *J Equine Vet Sci*. 2014;34:1300-1306.
- <sup>7</sup> Borstel MV, Oey L, Strutzberg-Minder K, Boeve MH, Ohnesorge B. Direkter und indirekter Nachweis von Leptospiren aus Glaskörperproben von Pferden mit ERU. *Pferdeheilkunde*. 2010;2(März/April):219-225.
- <sup>8</sup> Gerding JC, Gilger BC. Prognosis and impact of equine recurrent uveitis. *Equine Vet J*. In press. doi: 10.1111/evj.12451.
- <sup>9</sup> Faber NA, Crawford M, LeFebvre RB, Buyukmihci NC, Madigan JE, Willis NH. Detection of *Leptospira* spp. In the aqueous humor of horses with naturally acquired recurrent uveitis. *J Clin Microbiol*. 2000;38(7):2731-2733.
- <sup>10</sup> Dwyer AE, Kalsow CM. Visual prognosis in horses with uveitis, in *Proceedings*. Amer Soc Vet Ophthalmol Annu Meet 1998;1-8.
- <sup>11</sup> GAO. Horse Welfare: Action Needed to Address Unintended Consequences from Cessation of Domestic Slaughter. Available at: <http://www.gao.gov/products/GAO-11-228>. Published June 22, 2011. Accessed September 28, 2015.
- <sup>12</sup> Pick M, von Salis B, Schuele E, Schön P. *Der Verkehrswert des Pferdes und seine Minderungen* ("Value of horses and its depreciations"). 3rd ed. Berlin, Germany: Veterinärspiegel Verlag GmbH; 2012.
- <sup>13</sup> Data on file, Study Report No. B951R-US-13-043, Zoetis Inc.
- <sup>14</sup> Data on file, Study Report No. B951R-US-13-046, Zoetis Inc.