



The one-of-a-kind protection of Nobivac[®] vaccines against leptospirosis in dogs

NOBIVAC[®] LEPTO₄ AND NOBIVAC EDGE[®] LEPTO₄ VACCINES
HAVE BEEN SHOWN TO BE EFFECTIVE AGAINST DISEASE,
MORTALITY,¹ AND URINARY SHEDDING.²

Merck Animal Health is committed to the science of healthier animals.
Our researchers conducted the studies described here to evaluate the protection
offered by Nobivac[®] vaccines against leptospirosis in dogs.

Nobivac[®] 
Protection unites us.

 **MERCK**
Animal Health

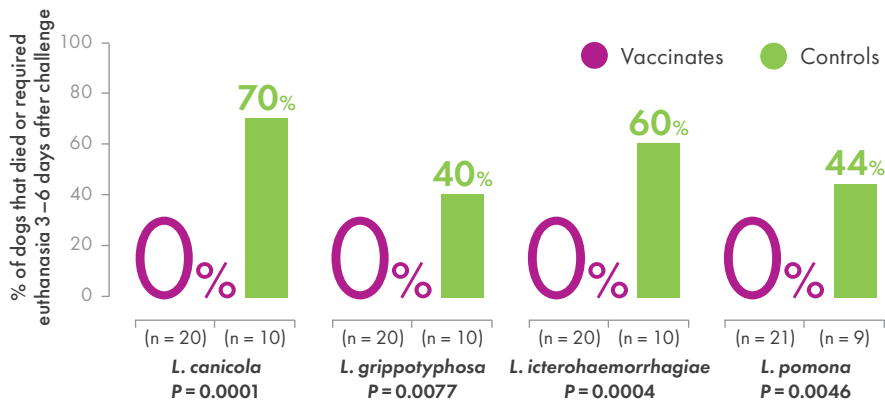
Prevents mortality from this potentially fatal disease.¹

Virtually all dogs are at risk of contracting leptospirosis through urinary shedding from animal carriers. Nobivac[®] Lepto₄, Nobivac[®] Canine 1-DAPPv + L₄, Nobivac EDGE[®] Lepto₄, and Nobivac EDGE[®] DAPPv + L₄ all offer comprehensive and unique solutions for protecting dogs against this serious disease.

STUDY DESIGN 1

Groups of 8-week-old beagles were vaccinated at day 0 and boosted at day 21 with either Nobivac[®] Lepto₄ (≥20 dogs) or placebo (≥9 dogs). In each study, both groups were subsequently challenged with 1 of 4 virulent *Leptospira* serovars.¹

Prevented mortality caused by 4 virulent *Leptospira* serovars



Nobivac[®] Lepto₄ was effective in preventing mortality in 100% of dogs exposed to severe challenge with 4 *Leptospira* serovars while 40%–70% of the dogs in the control group died or required euthanasia.

Prevents clinical signs while stopping urinary shedding.²

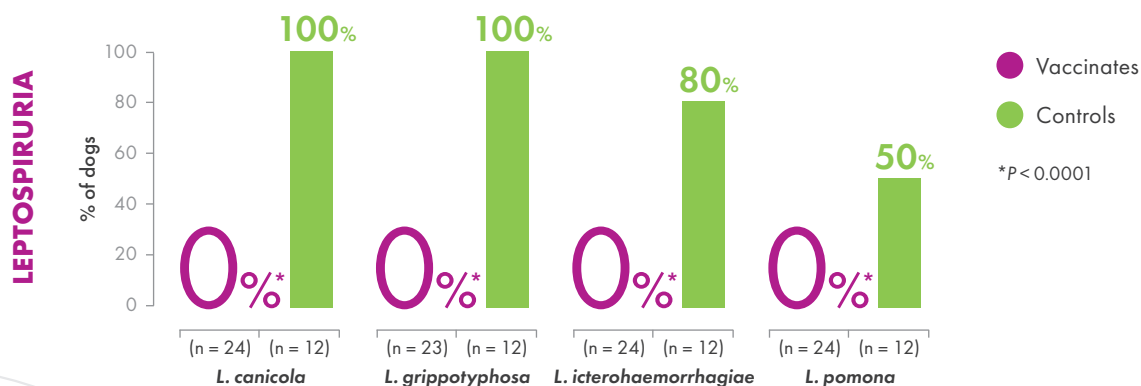
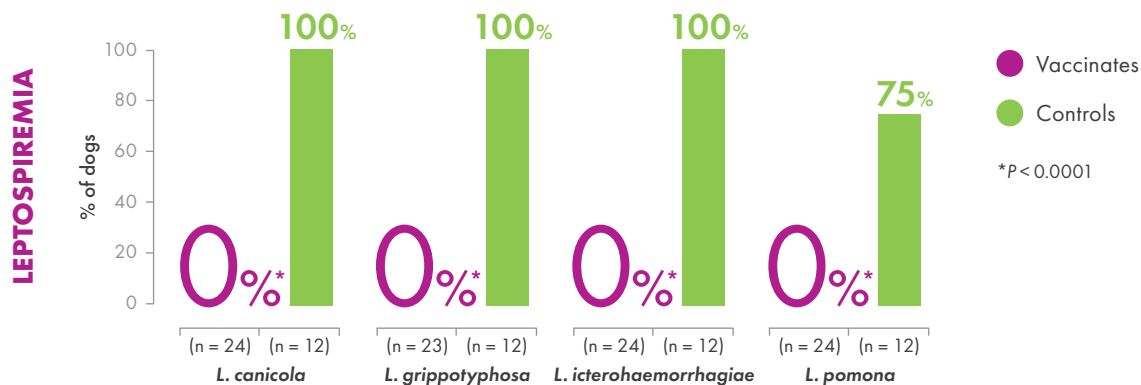
STUDY DESIGN 2

Four separate studies were conducted. In each study²:

- **23 to 24 7- to 8-week-old dogs were vaccinated twice, 3 weeks apart, with Nobivac[®] Canine 1-DAPPv + L₄**—a vaccine containing distemper, adenovirus type 2, parainfluenza, parvovirus, *L. canicola*, *L. icterohaemorrhagiae*, *L. pomona*, and *L. grippotyphosa*
- **12 dogs were vaccinated with placebo**

Vaccinates and control dogs were challenged 2 to 3 weeks after the second vaccination with 1 of 4 virulent *Leptospira* serovars. Urine samples were collected over a 35-day period and blood samples were collected over a 10-day period post challenge. All samples were evaluated for the presence of leptospiuria or leptospiremia.

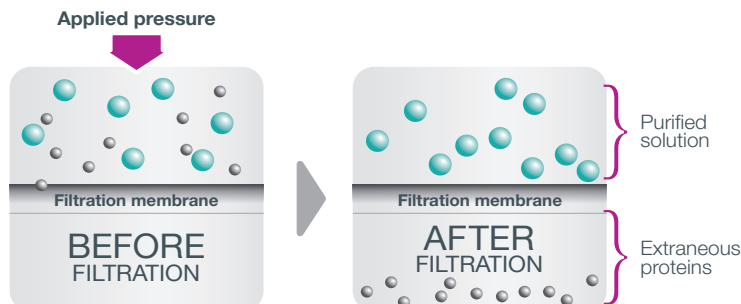
Nobivac[®] Lepto₄ and Nobivac EDGE[®] Lepto₄ vaccines protect against all 4 virulent serovars in accordance with AAHA guidelines.³



Featuring VacciPure™ filtration for a higher level of vaccine quality

VacciPure™ filtration technology

Fewer total proteins means a more purified final product, which may reduce unwanted immune system responses, such as vaccine reactions.⁴



Discover more vaccine options available in 1-mL, 0.5-mL, and combination formulations to fit your vaccination protocols.⁵⁻⁸



Nobivac® Lepto ₄					✓
Nobivac® Canine 1-DAPPv + L ₄	✓	✓	✓	✓	✓
Nobivac EDGE® DAPPv + L ₄	✓	✓	✓	✓	✓
Nobivac EDGE® Lepto ₄					✓

VACCINATE WITH PEACE OF MIND. VACCINATE WITH NOBIVAC® LEPTO₄.

To learn more, contact your Merck Animal Health sales representative or your distributor representative.

Customer Service: 1-800-521-5767
(Monday–Friday, 9:00AM–6:00PM EST)

Technical Services: 1-800-224-5318
(Monday–Friday, 8:30AM–7:00PM EST)

Nobivac®
Protection unites us.

References: 1. LaFleur RL, Dant JC, Wasmoen TL. Prevention of disease and mortality in vaccinated dogs following experimental challenge with virulent leptospira. *J Vet Int Med.* 2011;25:747. 2. LaFleur RL, Dant JC, Wasmoen TL, et al. Prevention of leptospiremia and leptospiruria following vaccination with a DAPPv + 4-way Leptospira combination vaccine. Presented at: Proceedings of the ISCAID Symposium; October 16–19, 2016; Bristol, UK. 3. Ford RB, Larson LJ, McClure KD, Schultz RD, Welborn LV. 2017 AAHA canine vaccination guidelines. AAHA website. Available at: https://www.aaaha.org/globalassets/02-guidelines/canine-vaccination/vaccination_recommendation_for_general_practice_table.pdf. Accessed September 25, 2020. 4. Data on file. Merck Animal Health. 5. Nobivac® Lepto₄ [product label]. Madison, NJ: Merck Animal Health; 2018. 6. Nobivac® Canine 1-DAPPv + L₄ [product label]. Madison, NJ: Merck Animal Health; 2019. 7. Nobivac EDGE® DAPPv + L₄ [product label]. Madison, NJ: Merck Animal Health; 2019. 8. Nobivac EDGE® Lepto₄ [product label]. Madison, NJ: Merck Animal Health; 2019.