

# Western Equine Encephalitis Virus (WEEV)

**NOTE:** U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) program oversees the development and licensing of Veterinary Biologics such as vaccines. [This development process](#) is vastly different from human biologics development and takes considerably less time to reach the market.

## Development Status

- Discovery, feasibility and proof of efficacy studies complete.
- Production of new Sf9 master cell banks and Pre-GMP HR-WEEV master seed bank in progress

## Technical Summary

WEEV together with WNV and EEEV form a combination vaccine commercially in horses. Current vaccines available to protect against EEEV, WEEV, and WNV are inactivated (killed) virus vaccines that are relatively ineffective and require multiple injections (as many as three per year) to maintain protection.

| Vaccine Name                 | Manufacturer         | Earliest Age | Repeat Dose In | Annual Booster(s) |
|------------------------------|----------------------|--------------|----------------|-------------------|
| Equi-Jec 6                   | Boehringer Ingelheim | 4 months     | 3 to 4 weeks   | yes               |
| Equi-Jec 7                   | Boehringer Ingelheim | 4 months     | 3 to 4 weeks   | yes               |
| Equi-Jec WNV                 | Boehringer Ingelheim | 4 months     | 3 to 4 weeks   | yes               |
| Equi-Jec WNV + EWT           | Boehringer Ingelheim | 4 months     | 3 to 4 weeks   | yes               |
| Prestige 3 + WNV             | Merck                | 6 months     | 3-4 weeks      | yes               |
| Prestige 5 + WNV             | Merck                | 6 months     | 3-4 weeks      | yes               |
| Prestige WNV West Nile Virus | Merck                | 6 months     | 3-4 weeks      | yes               |
| Vetera EWT + WNV             | Boehringer Ingelheim | 4 months     | 3-4 weeks      | yes               |
| Vetera Gold XP               | Boehringer Ingelheim | 4 months     | 3-4 weeks      | yes               |
| Vetera Gold XP + VEE         | Boehringer Ingelheim | 4 months     | 3-4 weeks      | yes               |
| Vetera VEWT + WNV            | Boehringer Ingelheim | 4 months     | 3-4 weeks      | yes               |
| Vetera West Nile             | Boehringer Ingelheim | 4 months     | 3-4 weeks      | yes               |
| West Nile Innovator          | Zoetis Animal Health | 10 months    | 3-4 weeks      | yes               |
| West Nile Innovator + VEWT   | Zoetis Animal Health | 10 months    | 3-4 weeks      | yes               |
| West Nile Innovator EWT      | Zoetis Animal Health | 10 months    | 3-4 weeks      | yes               |

Vacunax is currently generating EEEV/WEEV & WNV HR transmembrane mutants to identify key sequences for virus attenuation.