



A report summary from the Economic Research Service

Food-animal Veterinarians and the Persistence of Rural Shortage Areas

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Key Points

- The proportion of veterinary school applicants who are rural residents (14 percent) closely matches the percentage of the U.S. population living in rural areas (13.6 percent). Roughly 45 percent of rural applicants receive at least 1 acceptance into a university veterinary medicine program, compared to 49 percent of urban applicants; however, rural applicants apply to fewer schools.
- From 2021 to 2025, average revenue declined 22 percent to \$1.54 million per practice for rural food-animal and mixed-animal veterinary establishments in 2025, a period that saw herds contract. Rural average food-animal veterinarian real income declined 19 percent from 2017 to 2024 and declined 7 percent for rural mixed-animal veterinarians.
- The structure of veterinary services differs substantially by food-animal species. For example, the focus of veterinary care for poultry and swine is on flock and herd health, aided by remote monitoring, rather than on individual animals. Most veterinary shortages center on medical services for beef cattle—animals that can require more intensive, individualized care and treatment.
- State agricultural health officials nominate shortage areas for the USDA Veterinary Medicine Loan Repayment Program (VMLRP), subject to State allocation caps based on land area and food animal sales. In 2024, 69 percent of shortage areas were unfilled, and most received no applications whatsoever (59 percent of shortage areas). Thirty-one percent of shortage areas were filled (a 61-percent increase from a decade before), meaning that an eligible veterinarian applied and accepted the financial assistance award to serve a specific geographic (shortage) area or practice need during the 2024 application cycle. In this same year, 10 percent of shortage areas received applications that were not awarded or accepted.

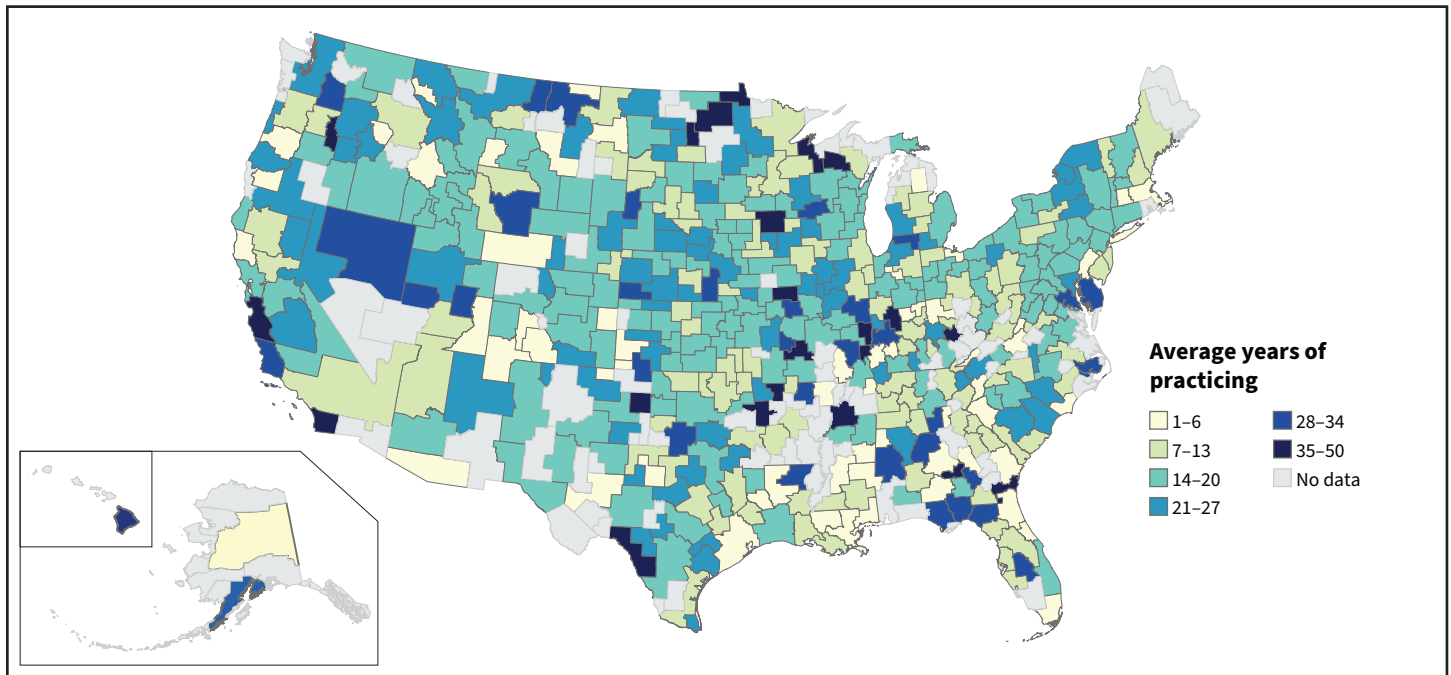
Why Does This Matter?

Veterinarian services are a key input into food-animal production because they ensure animal health, well-being, and, ultimately, food safety for consumers. Food-animal veterinarian shortages can weaken disease prevention, slow emergency response, and heighten risks to both livestock and consumers, creating potential supply chain disruptions. This is largely because veterinarians serve as the frontline defense against diseases and illnesses that can devastate herds. When fewer veterinarians are available, infectious diseases such as

avian flu and bovine tuberculosis can spread more easily and be detected later, increasing the likelihood of major outbreaks. Livestock may also suffer from untreated injuries and diseases such as screwworm, birth complications, delayed emergency care, and higher mortality, which threaten farm profitability. If these challenges become severe, farmers may struggle to meet market and export requirements. Shortages of food-animal veterinarians therefore represent a significant concern for both public health and food security.

A Few More Details

Average years of experience among U.S. bovine veterinarians by commuting zone, 2025



Note: American Association of Bovine Practitioners (AABP) veterinarians include those who self-reported their professional category of employment as related to private practice. Practice years are determined by calculating the difference between 2026 and the individual's graduation year from veterinary medical school. Individuals who graduated more than 50 years ago (approximately 78 years of age and older) are excluded.

Source: USDA, Economic Research Service (ERS) using 2025 American Association of Bovine Practitioners (AABP) membership data and USDA, ERS 2020 Commuting Zone definitions.

Large differences in the professional experience of bovine veterinarians exist across the United States. The map shows the average number of years bovine veterinarians had practiced since veterinary school by USDA, ERS commuting zones, which are collections of counties in a contiguous labor market based on job commuting data and are representative of the distances within veterinarians' practice areas. The median number of bovine veterinarians per commuting zone in 2025 was five (mean was nine). Several commuting zones have no bovine veterinarians (shaded in grey, indicating no data), or if there are bovine veterinarians they are not American Association of Bovine Practitioners (AABP) members and potentially disconnected from the bovine veterinarian practitioner community. These locations are generally commuting zones with fewer cattle producers. The map further indicates that areas with more senior veterinarians (practicing 28 or more years) are geographically dispersed. With few practicing food-animal veterinarians in most labor markets, particularly rural commuting zones, an event such as an individual retirement can have an outsized impact on veterinary service availability. Many veterinarian shortages are localized, and identifying predictors such as veterinarians in the later stages of their professional careers can help stakeholders anticipate expected future shortage areas before they become acute.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.