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PREVENTIVE MEDICINE

Noncore Vaccines: Tailored Protection for Every Pet

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Abstract

Noncore vaccines, defined as those recommended based on an individual pet's lifestyle, environment, travel patterns, and risk factors, play a crucial role in preventive veterinary medicine. While core vaccines protect all pets against severe and widespread pathogens, noncore vaccines add an essential layer of tailored protection. As vector-borne and regionally specific diseases continue to shift with climate patterns and increased animal movement, veterinary teams must assess each patient's risk with nuance and empathy. Contemporary guidelines emphasize individualized care, evidence-driven recommendations, and client communication as the foundation for safe and effective vaccine decisions.

Take-Home Points

- Noncore vaccines provide targeted protection based on lifestyle, environment, travel history, and exposure risks. They are not required for all pets but are essential for many patients.
- Common canine noncore vaccines include *Bordetella bronchiseptica* (kennel cough), canine influenza, Lyme disease, and rattlesnake toxoid. Each is recommended only when exposure is likely.
- Common feline noncore vaccines include *B bronchiseptica, Chlamydia felis*, feline leukemia virus, and others recommended primarily for multicat or high-risk environments.
- Risk assessment is dynamic. Climate change, pet relocation, wildlife interactions, and shifts in pathogen prevalence continue to increase regional risks such as Lyme disease.
- Noncore does not mean optional. For many pets, noncore vaccines become essential components of individualized preventive care.
- Effective client communication remains key: Empathy, evidence, and collaborative decision-making support trust and improve adherence to recommendations.

Noncore vaccines allow clinicians to design preventive care strategies that reflect the lived realities of pets and the families who love them. Unlike core vaccines, which are universally recommended regardless of geography or lifestyle, noncore vaccines require case-by-case evaluation guided by epidemiology, environmental pressures, and patient behavior. Both the AAHA 2024 canine vaccination update and the WSAVA 2024 global vaccination guidelines emphasize personalized decision-making and lifestyle-based risk assessment.[1,2]

NONCORE VACCINES FOR DOGS

AAHA and WSAVA specify several vaccines as noncore for dogs, intended for patients at increased risk of exposure. Key noncore canine vaccines include:

- ***Bordetella bronchiseptica* and canine parainfluenza virus[3,4]:** Recommended for dogs frequently exposed to other dogs, such as those in boarding, grooming, day care, training, shelter, or community event settings. WSAVA also lists respiratory vaccines as essential for shelter-housed dogs due to high-risk conditions.[2]
- **Canine influenza (H3N8 and H3N2)[5-9]:** Recommended for dogs in boarding facilities, dense urban areas, dog shows, or grooming and kennel settings. Local outbreaks should guide urgency.
- **Lyme disease (*Borrelia burgdorferi*)[4,10]:** Considered noncore for many dogs but recommended in geographically endemic regions. Risk is heightened in areas where *Ixodes* species ticks are established or expanding, especially as climate-driven tick habitat expansion continues to increase risk in regions historically considered to have low prevalence.[2]
- **Rattlesnake toxoid (*Crotalus atrox* toxoid)[11]:** Recommended in specific geographic areas with known rattlesnake exposure risk, primarily in the southwestern United States.

NONCORE VACCINES FOR CATS

Noncore feline vaccines are recommended based on environmental risk, multicat dynamics, and individual patient factors. Key noncore feline vaccines include:

- ***Chlamydia felis*[12]:** Appropriate for multicat households, catteries, shelters, or situations where infection has been confirmed or is endemic.[2]
- ***B bronchiseptica*[13]:** Although this is a rare vaccine due to the infection generally causing only a mild disease, it is recommended for high-density feline populations, such as shelters or large colonies, where respiratory disease spreads quickly.
- **Feline leukemia virus (FeLV)[14-17]:** FeLV is core for all cats under 1 year of age and for adult cats with outdoor access or exposure risk. It remains noncore for strictly indoor single-cat households with no exposure pathways.[2]

Vaccines such as those for feline infectious peritonitis, *Giardia* species, and *Microsporum canis* are not broadly recommended at this time due to insufficient evidence of efficacy.[2,18]

WHY NONCORE VACCINES MATTER

Lifestyle plays a significant role in determining which noncore vaccines a pet may need. A pet that frequently hikes, is boarded, or travels encounters very different risks than a strictly indoor companion. Noncore

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vaccines help protect dogs that are boarded regularly, cats living in multipet households, and pets that travel with their families. Environmental pressures are also evolving, as climate change and habitat shifts have expanded the ranges of vectors such as ticks and wildlife reservoirs, creating new regional risks and necessitating updated and localized vaccine strategies based on current epidemiologic data.

Some pathogens targeted by noncore vaccines carry potential public health connections as well. While not all of these pathogens are zoonotic, certain ones, including *B bronchiseptica* and some leptospirosis serovars, may impact human health, and targeted vaccination supports One Health principles by reducing pathogen spread in shared environments. Noncore vaccines are also essential in reducing disease burden within shelter settings, where high-density housing greatly increases transmission risk. WSAVA emphasizes the need for immediate vaccination of shelter entrants with appropriate core and select noncore vaccines to help minimize outbreaks.[1,2]

CLINICAL APPLICATION: CRAFTING THE RIGHT PLAN

Risk assessment should be a routine part of every preventive care conversation and should consider geography, such as endemic regions for Lyme disease or leptospirosis; lifestyle factors, including outdoor access, travel, boarding, grooming, and wildlife exposure; household composition, including multipet homes or foster environments; shelter or rescue status; and known disease outbreaks within the community. These elements help clinicians determine when noncore vaccines are appropriate.

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A COLLECTIVE RESPONSIBILITY

Vaccination, both core and noncore, is a shared responsibility that links the health of pets with the wellbeing of the people and communities around them. When vaccine choices are tailored thoughtfully—especially noncore vaccines, which depend on lifestyle, geography, and daily routines—that is doing more than checking a box. That is strengthening each pet's individual shield of protection and reducing the chances of spreading disease in the places they live, learn, play, and explore.

Into Practice

- ☑ **Use vaccine conversations to build connection.** This invites clients into the conversation and shows that vaccine recommendations are about their real life, not a generic protocol.
- ☑ **Normalize individualized vaccine plans.** Explain that just like pets have different personalities, they also have different risk profiles.
- ☑ **Highlight the "why," not just the "what."** Clients respond strongly to recommendations that reflect their lived experience.
- ☑ **Turn uncertainty into empowerment. If clients hesitate, reassure them.** This builds trust and frames vaccination as a shared decision grounded in partnership and compassion.
- ☑ **Celebrate the client's role in prevention.** Acknowledging the client's effort strengthens their confidence and deepens the relationship between them and the veterinary team.

Clients rely on the veterinary team because vaccines are complex. Risks change. Guidelines shift. New diseases emerge while old ones reappear in new regions. It is a lot for anyone to track. What clients need from the veterinary team is clarity, not judgment, and the space to ask questions without feeling overwhelmed or dismissed.

When individualized vaccine planning is embraced, we're not only honoring the science behind these recommendations. We're honoring the animals in front of us—their personalities, their habits, their quirks, their families. Every patient has a story, and every vaccination plan should reflect that. Thoughtful, empathetic conversations turn guidelines into something meaningful and personal, something clients can understand and trust.

In the end, vaccines are an extension of the relationship the veterinary team builds with the families who walk through the clinic doors. They're an opportunity to protect, to educate, and to partner with clients in a way that keeps their pets safer and their communities healthier. And to me, that's what veterinary medicine is all about: connection, compassion, and doing the best we can for every life we're entrusted with. **TVN**

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