

### OFFICIAL PROTOCOL

#### **SMALL ANIMAL VACCINES AND PREVENTATIVES**

### **Vaccine protocol-Dogs**

- DA2PP (Merial Recombitek C4)
  - Start at 6-8 weeks
  - Booster q 3-4 weeks (can go as early as q 2 weeks if needed)
  - End > 16 weeks of age (18-20 weeks in high-risk situations)
  - Booster 1 year later and then q 3 years
  - Left shoulder
  - This protocol is good for any manufacturer's DA2PP vaccine.
  - Annual titers can be run instead, per client request or our recommendation, to assess need for boosters after the initial series and first year booster have been completed.
  - Dogs > 20 weeks of age
    - Give a series of 2 boosters, 2-4 weeks apart
- Rabies (Boehringer Ingelheim Imrab 3 used for all canine patients)
  - Need to be at least 12 weeks of age
    - Often wait and give with last DA2PP or sometimes 2-3 weeks after DA2PP series in small/toy breed puppies
  - Booster 1 year later and then q 3 years
  - o Right shoulder
  - o If new owner can't provide proof of previous vaccine, then issue 1 year certificate only
  - Need to fill out city license form and have owner complete licensing authorization form for those who have a Manhattan address.
  - o Just need licensing authorization form for those living outside city limits.
  - All rabies vaccinated dogs need to go home with a rabies tag and certificate regardless of where they live.

#### Bordetella

- Intranasal preferred for the majority of patients (Merck Intra Trac 3--Bordetella, CAV-2 and parainfluenza)
  - 3-4 weeks or older
  - Divide contents equally between nostrils
    - Can all be given into one nostril if unable to divide due to patient noncompliance
  - Booster every \*6-12 months
  - DO NOT inject parenterally!

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- Oral (Elanco-- Bronchi Shield; bordetella only)
  - 8 weeks or older
  - Place 1 ml into buccal pouch
  - Booster every \*6-12 months
  - DO NOT inject parenterally!
- Injectable (Zoetis Bronchicine--bordetella only)
  - Need to booster it in 2-4 weeks if have never had any previous bordetella of any type. Can booster with either form.
  - 8 weeks or older
  - Booster every \*6-12 months
  - Make a note where given in chart. No standard site.
- Recommend every 6 months if boarding or otherwise interacting with other dogs on a frequent basis
- Make sure every dog owner gets asked about risk for this disease

### Leptospirosis (Zoetis Vanguard L4)

- 8-9 weeks or older (may want to delay until finish core vax in dogs with adult weight expected to be < 10 kg (22 lb.)</li>
- o Booster in 2-4 weeks, then annually
- Only getting 1 injection of the series is not considered protective. Need to restart series if > 6 weeks after the first vaccine.
- If only had 2 serovar vaccines in the past, need to restart series with 4 serovar as no cross protection
- Need to restart series if > 6 month past annual booster time
- Left hip
- Make sure every dog owner gets asked about risk for this disease

# • Canine Influenza (Merck bivalent H3N8/H3N2)

- o 6 weeks or older
- Booster in 2-4 weeks, then annually. Need to restart series if > 6 weeks after the first vaccine.
- Only getting 1 injection of the series is not considered protective
- Restart series if > 6 mo. since last annual booster
- o Given in right hip if Lyme vaccine not given, otherwise note site where given.
- Some boarding facilities require one or both of these
- No known cross protection between strains

# • Lyme (Merial Recombitek Lyme)

- 9 weeks or older
- Booster in 2-4 weeks, then annually. Need to restart series if > 6 weeks after the first vaccine.
- Only getting 1 injection of the series is not considered protective
- o Restart series if > 6 mo. since last annual booster
- Right hip
- We give this fairly frequently due to travel out of state
  - Make sure to inquire if will be traveling out of state to endemic areas
- o Please note that we **ARE NOT** in a Lyme endemic area

## **Vaccine protocols-Cats**

- FVRCP (MLV intranasal OR Killed injection OR 1/2 ml Non-adjuvant killed + MLV injection)
  - Start at 6-8 weeks
  - Booster q 3-4 weeks (can go as early as q 2 weeks if needed)
  - End ≥16 weeks of age
  - Booster 1 year later then q 3 years.
  - o Booster 1 year later then q 3 years
  - Heska UltraGard intranasal
    - Split dose between nostrils
    - Don't use if currently sneezing
  - Elanco FVRCP ULTRA hybrid ½ ml dose Nonadjuvant killed(calicivirus) + MLV (Panleukopenia+Herpes)
    - Below right elbow
  - Boehringer Ingelheim Fel-O-Vax PCT killed vaccine
    - Immunocompromised patients
    - Pregnant
      - We do not recommend vaccinating pregnant queens
  - This protocol is good for any manufacturer's FVRCP vaccine.
  - Annual titers can be run to assess the need for boosters, if owner requested or upon our recommendation, after the initial series and first year booster have been completed.
  - Cats > 20 weeks of age
    - Give a series of 2 boosters, 2-4 weeks apart
- Rabies (Boehringer Ingelheim Purevax and Purevax 3)
  - Must be ≥12 weeks of age
  - Low right hind (below stifle)
  - Booster in 1 year and then every 3 years
  - Use 1 yr product if only eligible to have a 1 yr duration vaccine
    - There is a cost difference, 3 yr > 1 yr
  - o If new owner can't provide proof of previous vaccine, then give 1 year vaccine
  - Need to fill out <u>city license form</u> and have client complete <u>licensing authorization form</u> for those within Manhattan city limits.

<sup>\*\*</sup>We don't recommend any of the other noncore vaccines.

- Just need licensing authorization form for those living outside city limits.
- All rabies vaccinated cats need to go home with a rabies tag and certificate regardless of where they live.

### • FeLV (Boehringer Ingelheim Purevax)

- o ≥8 weeks
- Booster in 2-4 weeks and then 1 year later
- Annually for high risk cats
- Every 2 years for low-moderate risk
- Recommended for all kittens
- Low left hind (below stifle)
- Recommend testing prior to starting vaccine
- This is considered a core vaccine for kittens and high risk cats by the AAFP
- Bordetella (Merck Nobivac Feline BB--intranasal)
  - o ≥8 weeks
  - Single dose
  - Not generally recommended, but required for some boarding facilities
- FIV (Boehringer Ingelheim Fel-O-Vax FIV)
  - This vaccine was discontinued by the manufacturer Spring 2016
  - o Can interfere with testing for a minimum of 3 years.

\*No other non-core vaccines are recommended for use in cats. Chlamydophila felis can be considered if the pathogen has been demonstrated as a current problem by laboratory diagnostics.

#### Misc. vaccine information

- Minimum interval between vaccines is 2 weeks to avoid interference.
- Max interval before needing to restart a series of noncore vaccines is 6 weeks.
- Max interval before having to restart annual vaccines (noncore) is 18 months (no more than 6 months after annual booster was due) for Leptospirosis, Lyme and Canine Influenza.
- For immunocompetent dogs and cats (generally 20 weeks of age or older) you can either give
  only one vaccine when using a <u>MLV or recombinant</u>, or recommend a series of 2 for DA2PP or
  FVRCP, as either is considered an acceptable option. We typically recommend a series of 2. They
  do need to have a booster 1 year later with either protocol before going to a 3 year protocol.

#### **Heartworm protocols for Dogs**

### **Adult Dogs/Older Puppies**

- SNAP 4DX (occult HW, Lyme, ehrlichia and anaplasma)
  - Whole blood, plasma or serum
  - $\circ$  Start testing at ≥ 7 mo. if not already started on preventive as a young puppy
  - Young puppies (8-12 weeks or so) receive a dose of preventive at each puppy visit and then sent with more at their last puppy visit (can be up to a total 1 years' worth, including refills). Their first heartworm test is done at their next annual exam in 1 year.
  - Older puppies (3-7 mo.) are started on preventive and sent up to 6 month's worth at their last puppy visit. Their HW test is then done at the time they would run out of preventive.
  - \*\*It will be the clinician's discretion on how much preventive is sent and when to test based on several factors, including time of year it was started, etc.
- Annual HWC (Required even if on preventive year-round!)
  - 6 month recheck is required for those off preventive or inconsistent use (check purchases history to verify)
- <u>Preventive Options</u> (recommend year-round preventive)
  - Interceptor Plus (HW, microfilaricidal, hooks, whips, rounds, tapes)---\*Preferred product
    - 2 lb. and 6 weeks or age
    - 6 pack or single dose (costs more to order single doses over time)
  - Heartgard Plus (HW, hooks, rounds, slow-kill MF)
    - ≥ 6 weeks of age
    - 6 pack or single dose
  - o **Revolution** (HW, fleas, tick, earmites, sarcoptic mange, slow-kill MF)
    - Not usually recommended by the PHNC for HW control
    - Used primarily for sarcoptic mange and earmites
    - ≥ 6 weeks of age
    - 3 pack for most sizes or individual doses
  - \*\*We will authorize online prescriptions for these, or other products, when requested.

#### **Heartworm Protocols for Cats**

- Annual HW testing not required to purchase preventive
- SNAP Ag test
  - Typically only run when trying to prove a case of HW disease or when combined with FeLV/FIV test (triple test)
- **Revolution** (HW, hooks, rounds, earmites, fleas)
  - o Topical q 30 days
  - o 8 weeks, 2 lb
  - 6 pack or single dose
- Revolution plus (HW, hooks, rounds, earmites, fleas, ticks)
  - o Topical q 30 days
  - o 8 weeks and 2.8 lb.
  - 6 pack or single dose

## Flea/tick control

### **Dogs**

- Frontline Gold (\*still most popular, 3 pack only), fleas/ticks
  - o Topical q 30 days
  - o 8 weeks of age and 5 lb.
- Nexgard, fleas/ticks (3 pack only) Recommended product for most dogs
  - o Oral q 30 days
  - Caution in seizure dogs
  - o 8 weeks of age and 4 lb
- Scalibor collar, fleas/ticks
  - o 6 month duration
  - o 12 weeks of age
- Revolution
  - o Topical q 30 days
  - o ≥6 weeks of age
  - Not the best for fleas in some dogs and <u>very poor</u> for ticks
  - o 3 pack for most sizes or single dose

## **Cats**

- Revolution (HW, hooks, rounds, earmites, fleas) \*Most popular
  - Topical q 30 days
  - No tick control
  - o 8 weeks of age and 2 lb
  - 6 pack or single dose
- Revolution plus (HW, hooks, rounds, earmites, fleas, ticks) \*Recommend if going outdoors

<sup>\*</sup>Either product can be used, but recommend Revolution plus if possible tick exposure or regular Revolution is not working as well for fleas.

<sup>\*\*</sup>We will authorize online prescriptions when requested

<sup>\*\*</sup>Will authorize online prescriptions for the above, or other products, when requested

- Topical q 30 days
- o 8 weeks and 2.8 lb
- o 6 pack or single dose
- Frontline Gold (fleas/ticks) 3 pack
  - o Topical q 30 days
  - o 8 weeks of age
- Seresto collar (fleas and ticks)
  - o 8 month duration (recommend to replace q 6 mo.)
  - o 10 weeks of age
- Topical Bravecto for cats (fleas and ticks)
  - o Topical q 8-12 weeks
  - o 6 mo. of age
  - o Single dose

- \*\*Capstar available for both cats and dogs (Adult fleas only)
  - Oral q 24 hours
  - 4 weeks and 2 lb.

### **Fecal samples**

- Recommend a minimum of 2 for puppies/kittens during vaccine series, 4 within the first year of life. May need more based on parasite load.
- Semi-annual is recommended. Minimum annual for adult dogs/cats.
- Send cup with every annual and puppy/kitten exam
- Save back some feces in a small red top tube for additional testing (cytology, etc.) if stool looks abnormal before sending it to diagnostic lab
- Please place a fecal instruction label, patient sticker, and the this is not prepaid sticker
  on the cup. Also put a large glove in the cup and write the clinician's name on the cup
  label as well.

## FeLV/FIV testing +/- Heartworm AG (feline triple test)

- Recommended for
  - All new cats to a household
  - Annually for outdoor or indoor/outdoor cats or indoor cats that live with indoor/outdoor cats
  - Chronic illness, regardless of a previous negative test

### **Puppy series visits**

<sup>\*</sup>Will authorize online prescriptions for the above, or other products, when requested.

- First visit
  - Puppy folder to go home
    - Fill out vaccine booklet
  - Free bag of food if owner wants it
  - Fecal cup
- Perform at every visit (complimentary and as age and/or last dose dictates)
  - Nail trim
  - Application of Frontline Gold\* or Revolution or give Nexgard
  - Dose of Interceptor Plus
  - Fecal cup as needed
- Last visit (recommend take home)
  - 6-12 months of heartworm prevention, depending upon age of puppy when preventive started
    - Interceptor plus is recommended
    - Do not send more doses than appropriate depending upon the rate of growth/weight
  - Frontline Gold or Nexgard
    - Any combination of amounts up to 1 years' worth if younger puppy
      - Do not send more doses than appropriate depending upon the rate of growth/weight
    - Will also authorize other online products if owner prefers

## Kitten series visits (use kitten template in Vetstar)

- First visit
  - Recommend FeLV/FIV testing
  - Kitten folder to go home
    - Fill out vaccine booklet
  - Free bag of food if owner wants it
  - Fecal cup
- Perform at every visit (complimentary and as age/weight/last dose dictate)
  - Nail trim
  - Revolution application (if > 8 weeks)
  - Milbemite (if indicated)
  - Fecal cup as needed
- Last visit (recommend take home)
  - 6-12 months of Revolution
    - Bravecto, Seresto collar or Revolution plus for tick control if needed
       \*Recommend combination of Bravecto/Revolution plus and Seresto collar if high risk for tick exposure.

### **CANINE AND FELINE ANNUAL WELLNESS EXAMS**

- Check to see if all previous history (not just vaccines) is in the files. Have somebody else obtain the necessary information for you if patient came with no prior veterinary history.
- Obtain history and relevant concerns (have a peer in typing for you while you ask questions)
  - o This includes:
    - Previous and current health conditions and treatments, if applicable
      - Determine if CBC, chemistry, UA etc. are needed and obtain permission
      - Ask when last ate and urinated in case lab work is needed
    - Previous vaccines and determine which boosters are needed.
    - Discuss all noncore vaccines and determine if at risk
    - If Manhattan address, have client complete rabies licensing authorization form if rabies vaccine is due. Have this form with you already if you know your patient needs a rabies vaccine.
    - Obtain parasite preventive history and verify if accurate
      - Find out how much of various preventives an owner would like. \*Can only give 6 months of HWP for dogs if there is a lapse in preventive history.
      - Obtain permission for HW testing for dogs if due
    - Discuss FeLV/FIV testing in cats, if appropriate for visit
    - Inquire about other pets in the house
    - Gather nutrition history including: How much and what brand of pet food, treats and human foods. Any other sources of foods.
    - Inquire about any behavioral issues of concern
    - Ask if any other concerns
- Perform complete physical exam and be ready to discuss findings. Only do one exam with clinician if noted in the file or the animal is very nervous/fractious.
- Scan for microchip and record in discharge instructions and file if working. If no chip, ask owner if they would like their pet microchipped (there is a fee for this)
- Develop a plan for your patient and have somebody else administer necessary vaccines, acquire samples if necessary.
- Work on delegating appropriate tasks if additional help is available
  - Ask somebody else to get a fecal cup and appropriate handouts ready to go for you
  - Ask somebody else to help get the necessary prescriptions entered and obtained after you have written the script.
  - Ask somebody else to make a rabies certificate and fill out City of Manhattan form, if applicable.
- Complete calorie calculation and diet plan if weight loss needed and owner would like this done.
- Discuss major issues, review vaccine reactions, etc. before client leaves if discharge instructions not yet completed.
- See if client has any additional concerns
- Have clinician come in to speak with client before they leave
- Complete your discharge instructions
  - Confirm/Obtain email address if emailing to owner
- Follow-up with clinician and then client on any lab work that may be pending
  - o Document client discussion and recommendations in Vetstar

# **Additional information**

- Always get a <u>copy of vaccines</u>, etc. made for our records for new patients. Ask somebody else to do this for you so you can continue with history and exam.
- When calling another vet for info., not only get the dates of the last vaccines, but any previous
  ones so we know when to booster correctly. Ask for verbal confirmation and then have them fax
  or email the info. to us, otherwise it can take a long time to receive the information and the
  appointment time may already be finished by the time it arrives. Fax number: 785-532-4900,
  email: phnc@vet.k-state.edu
  - Make sure to ask if the Lepto vaccine a dog received was 2 or 4 serovar, and if they
    received the 2 vaccine series at the start.
  - Ask when last HW test was and the result; what type, strength, when and how much HWP was sent.
- Prescription authorizations should be faxed to: 785.532.4045
- Pet Health does have an email from which we can email clients. You will have to have a clinician or nurse login to it in order to use it. The email is: phnc@vet.k-state.edu
- We have annual <u>vaccine templates</u> for dogs and cats, puppy/kitten visits, and senior care package. The senior template is for a specific program only, so you won't likely be using it. You should tailor and make changes to a template so it is appropriate for each individual patient. If you enter the new weight into Vetstar first, then the weight on the discharge instructions will be the correct, current weight. If the weight is put in after bringing up the discharge instructions first, the weight listed in the discharge instructions will be the last recorded weight that had been entered into Vetstar in the past. It will not automatically update to the most current weight in the discharge instructions.
- Please <u>record the weight in **POUNDS** in the discharge instructions</u> as these are going home for the owner, not a referring vet.
- On most days there are 5 appointments per clinician. On busy days we tend to overbook. Our schedule is very fluid, so check frequently for cancellations and add-ons.
- The Healthy Weight Clinic usually sees up to 3 cases per day on average
- All appointments, including drop offs, must have a complete history.
- Drop off appointments generally do not go home until late afternoon, so no guarantees are to be made about earlier pick-up times without consulting with the clinician assigned to the case first.
- If you cannot finish your discharge instructions by the end of the day due to unforeseen events, or poor planning, you must find a peer to finish them for you as this is not the clinician's responsibility. Failure to do so will reflect poorly on your performance.
- When calling a client with lab results, it is best to tell them you have information for them and need to have them call you back. That way we can be sure they get the message and have an opportunity to ask any questions for clarification.
- When leaving a message asking a client to call you back, please have them call **785-532-5690**, which is the front desk main number. Do not give them one of the Pet Health numbers to call back as those phones are not answered 24-7.

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