



VETERINARY PREVENTIVE HEALTHCARE CURRICULUM

Module 2: Vaccinations and Parasites

Clinical Vignettes Activity

Time: 1–2 hours

Group Size: 4–6

Materials Needed: Print or Digital Worksheets

Student Requirements: Personal computers / other desired resources

INSTRUCTIONS:

In-Class Activity

Randomly divide students into groups. Provide groups up to 1 hour to complete the assignment, based on time availability. As groups submit their results for each question, you can review them in real-time. For help on how to access results, refer to the Course Navigation Guide. After an appropriate amount of time, hold a discussion based on student responses.

Pre-Class Activity

Alternatively, distribute the Clinical Vignettes Worksheet to students in advance of class. Ask them to turn the worksheets in prior to the class period, so that in-class time can be dedicated to discussion.

Note that answers may differ dependent on your geography. Provided below are very broad answers to the questions to serve as a starting point for your class discussion. Where possible, class discussion should focus on the risk variables and thought process of vaccinations and parasite protocols. The following discussion points include other aspects of preventive care, though you might wish to instruct students to only answer the question with regards to particular preventive care topics.



VETERINARY PREVENTIVE HEALTHCARE CURRICULUM

Module 2: Vaccinations and Parasites

1. List the vaccine and preventive health recommendations for a 4-year-old indoor/outdoor, intact male DSH cat in your area. This cat has 2 housemates that are indoor only. Assume this cat received all the proper vaccinations and boosters previously. What else do you need to consider regarding this cat's healthcare?

- *Perform annual wellness visits*
- *Administer rabies vaccine as per statute; use least inflammatory product; recommended site is distal on right hind leg*
 - *Not necessary in the UK*
- *Administer FVRCP vaccine every 3 years (annually if using intranasal vaccine)*
 - *Australian equivalent = F3 vaccine*
 - *UK equivalent = flu and enteritis vaccines*
- *Administer FeLV vaccine annually since the patient is indoor/outdoor*
 - *Not necessary in Australia*
- *Perform a FeLV/FIV test; recommend annual tests if the patient continues to be indoor/outdoor; monitor area prevalence data*
- *Discuss risks of owning outdoor cats and ways to minimize these*
- *Perform fecal examination every 6–12 months*
- *Examine for external parasites; begin regular ectoparasite/heartworm/internal parasite preventives*
- *Recommend castration*
- *Place microchip if one is not present; check microchip annually*
- *Assess body and muscle condition scores; perform nutritional assessment; make diet recommendation*
- *Evaluate pain score*
- *Assess oral health*
- *Perform behavioral assessment*

2. What would the preventive health protocol be for the household's indoor cats in the previous question?

You might recommend that the indoor cats receive the same protocol as the outdoor cat since they could be exposed to the same diseases and parasites. Some clinicians will recommend FeLV vaccination administration less frequently (e.g., every 3 years) if the indoor cats are adults who have received immunizations in the past.

3. A new client comes into your clinic with a stray 6-month-old intact male Doberman pinscher mix. The client has grown attached to the puppy, and would like keep him. She plans to take him hiking on the weekends. Because the puppy is a stray, you have no history. Explain what vaccinations you would suggest to give and when they need to be boosted. What other healthcare recommendations would be appropriate for this patient? What are the potential consequences of vaccinating this puppy if it had just received vaccines from a rescue group 2 weeks ago, and you were unaware?

- *Check the patient for an existing microchip and search for lost dog posts in the area*
- *Perform a new pet examination; perform special senses, cardiac, and neuro exams*
- *Administer rabies vaccine and boost in 12 months (or as per statute)*
- *Administer DA2P(P) vaccine; boost in 2–4 weeks*
 - *Because the patient is 6 months old, some clinicians may give a single dose and boost in 12 months*
 - *Australian equivalent = C3/C4 vaccines*



VETERINARY PREVENTIVE HEALTHCARE CURRICULUM

Module 2: Vaccinations and Parasites

- Administer *Bordetella* vaccine; boost based on lifestyle (12 months if using intranasal vaccine; 2–4 weeks if using killed SQ vaccine)
- Consider other vaccinations based on geography (e.g., leptospirosis, Lyme disease, canine influenza)
- Perform fecal examination
- Administer broad-spectrum dewormer; recommend procedures for promptly cleaning up feces
- Perform heartworm examination (antigen test and blood smear); repeat in 6 months
- Begin flea/tick/internal parasite/heartworm preventives
- Discuss risk and benefits of castration +/- gastropexy
- Discuss advantages of genetic disease testing and breed-related disease testing
- Place microchip placement if one is not present; contact microchip company for data on any microchip found
- Assess body and muscle condition scores; perform nutritional assessment; make diet recommendation
- Evaluate pain score
- Discuss behavioral/puppy training

There are unlikely to be consequences of vaccinating a puppy two weeks after previous vaccinations were administered. However, it is still important to have a conversation with the client about monitoring for vaccine reactions. Note: Make sure students do NOT recommend Corona virus immunization (as per AAHA).

4. A new client comes to your clinic and wants to know whether or not her cat needs to be vaccinated for FeLV. What questions might you ask the client to assess whether you would vaccinate this cat?

This is an opportunity to reinforce communication skills and the use of open-ended questions. Questions such as “tell me about the cat’s lifestyle” will help elicit information. Other topics include:

- Indoor/outdoor/escape tendencies
- Cat’s age
- Where the cat came from (e.g., shelter, adoption group, stray)
- Previous history of preventive care
- Previous history of illness
- Cat’s FeLV/FIV status, including when/how it was tested
- Presence of other household cats (and their FeLV status)
- Desire to adopt/foster other cats in the future
- Client’s approach to vaccines/risk factors, and what concerns they have about vaccinating

5. You have an 8-week-old, female Golden Retriever puppy that is at your clinic for the first time. The breeder told the client to take the puppy to the veterinarian to receive its vaccines. The puppy is apparently healthy and has been appropriately dewormed. The client plans to use the puppy as a field trial dog, and it will go to a nearby training facility at 4 months of age. The puppy currently lives on a 5-acre ranch, and will have free access to the ranch. What would you recommend to the client regarding vaccinations and boosters? What other health procedures/treatments should you discuss with the client?

Note: All vaccines should be administered with consideration for onset of immunity. Review resources to ensure that adequate protection is attained before the patient goes to the training facility.



VETERINARY PREVENTIVE HEALTHCARE CURRICULUM

Module 2: Vaccinations and Parasites

- Administer rabies vaccine as per statute
- Administer DA2P(P) vaccine; boost at 12 and 16 weeks old; consider booster at 6 months old
- Administer Bordetella vaccine; boost based on lifestyle (12 months if using intranasal vaccine; 2–4 weeks if using killed SQ vaccine)
- Administer canine influenza vaccine at 8 or 12 weeks; boost 4 weeks later, based on geography
- Administer Leptospirosis vaccine at 12 and 16 weeks old, based on geography
- Hold discussion about vaccination for Lyme disease, based on geography of training facility and home
- Perform fecal examination
- Administer broad-spectrum dewormer; repeat in 2 and 4 weeks; recommend procedures for promptly cleaning up feces
- Begin regular flea/tick/internal parasite/HW preventives
- Discuss risks and benefits of OHE +/- gastropexy; consider age of OHE based on patient's size, breed, and lifestyle
- Discuss advantages of genetic disease testing and breed-related disease testing
- Place microchip
- Assess body and muscle condition scores; perform nutritional assessment; make diet recommendation
- Evaluate pain score
- Perform behavioral assessment; make recommendations for socialization and preventing unwanted behaviors

6. A client's dog has not been to a veterinary clinic for the last 4 years. The dog is an 8-year-old, female spayed Cocker Spaniel. The patient is overweight (BCS 7/9) but otherwise apparently healthy on physical exam. The client wants to know what vaccines she requires. She is a beloved family pet that frequently goes camping and hiking in the wilderness with the owners. The dog received proper and full vaccinations when she was 1 ½ years old but nothing since. Please list what vaccines you will recommend and when those vaccines will be due again. Explain your answer. What other healthcare measures should be considered?

- Administer rabies vaccine and boost in 3 years (or as per statute)
- Administer DA2P(P) vaccine; boost in 3 years
 - Some clinicians might boost in 12 months and then start a 3-year protocol thereafter, based on the patient only receiving appropriate vaccinations for her first year of life
- Administer Bordetella vaccine; boost based on lifestyle (12 months if using intranasal vaccine; 2–4 weeks if using killed SQ vaccine)
- Consider other vaccinations based on geography and lifestyle (e.g., leptospirosis, Lyme disease, canine influenza)
- Perform fecal examination
- Perform heartworm examination (antigen test and blood smear); repeat in 6 months
- Begin flea/tick/internal parasite/heartworm preventives
- Discuss advantages of genetic disease testing and breed-related disease testing
- Place microchip if one is not present
- Assess body and muscle condition scores; perform nutritional assessment; make diet recommendation; create weight loss plan
- Evaluate pain score
- Assess oral health
- Discuss screening tests (e.g., CBC, chemistry, UA, blood pressure, ophthalmic pressure, otic exam)



VETERINARY PREVENTIVE HEALTHCARE CURRICULUM

Module 2: Vaccinations and Parasites

7. An 8-year-old spayed female DSH presents for her annual examination. She is indoor-only, and has no housemates. List any vaccines you would recommend for her, the route of administration, and when the cat is due for her next vaccines. What other healthcare measures should you consider?

- *Perform annual wellness visits*
- *Administer rabies vaccine as per statute; use least inflammatory product; recommended site is distal on right hind leg*
- *Administer FVRCP vaccine every 3 years (annually if using intranasal vaccine)*
- *Perform fecal examination*
- *Begin regular flea/heartworm preventives*
- *Place microchip if one is not present*
- *Assess body and muscle condition scores; perform nutritional assessment; make diet recommendation*
- *Discuss screening tests (e.g., CBC, chemistry, urinalysis, thyroid, blood pressure)*
- *Evaluate pain score*
- *Assess oral health*
- *Perform behavioral assessment*

8. A client brings in a 3-year-old beagle for an annual examination. The client doesn't particularly believe in vaccinations, and just wants the patient to be examined. How would you communicate with this client? Why might you recommend a Rabies vaccination (among others)?

Have a discussion with clients to learn what their concerns are regarding vaccinations. From a communication standpoint, it is important to listen to their concerns and validate that you are hearing their perspective. Providing education without understanding their resistance to vaccinating will not likely lead to adherence to your recommendations.

Vaccinations are performed to protect the individual animal as well as the community at large. Consider the rabies vaccine. Clients might not respond to simply hearing that the vaccination is required by law. Driving a car over the speed limit is against the law too, yet this act occurs frequently. It might be important to focus on rabies as a uniformly fatal zoonotic disease. We vaccinate against this disease out of concern for the health and safety of each pet.

Speak with the client about relative risks/benefits of each immunization and risks of infection if immunizations not given, considering the patient's age, location, and lifestyle. Consider serology to check current antibody levels.

9. A researcher develops a killed bacterin vaccine for a new disease that is spreading across the country. Using what you know about infectious disease agents and immunization principles, suggest a vaccination schedule for an adult, naive dog and justify your answer. Include future recommendations in your answer.

Since this is a new disease, it should be assumed that the dog does not have any immunity to it. The patient should be vaccinated for the disease, and then boosted 2–4 weeks later. Thereafter, the dog should be vaccinated annually unless it can be shown that the vaccine provides immunity for longer than a year (which is unlikely based on the duration of immunity of existing bacterins).