

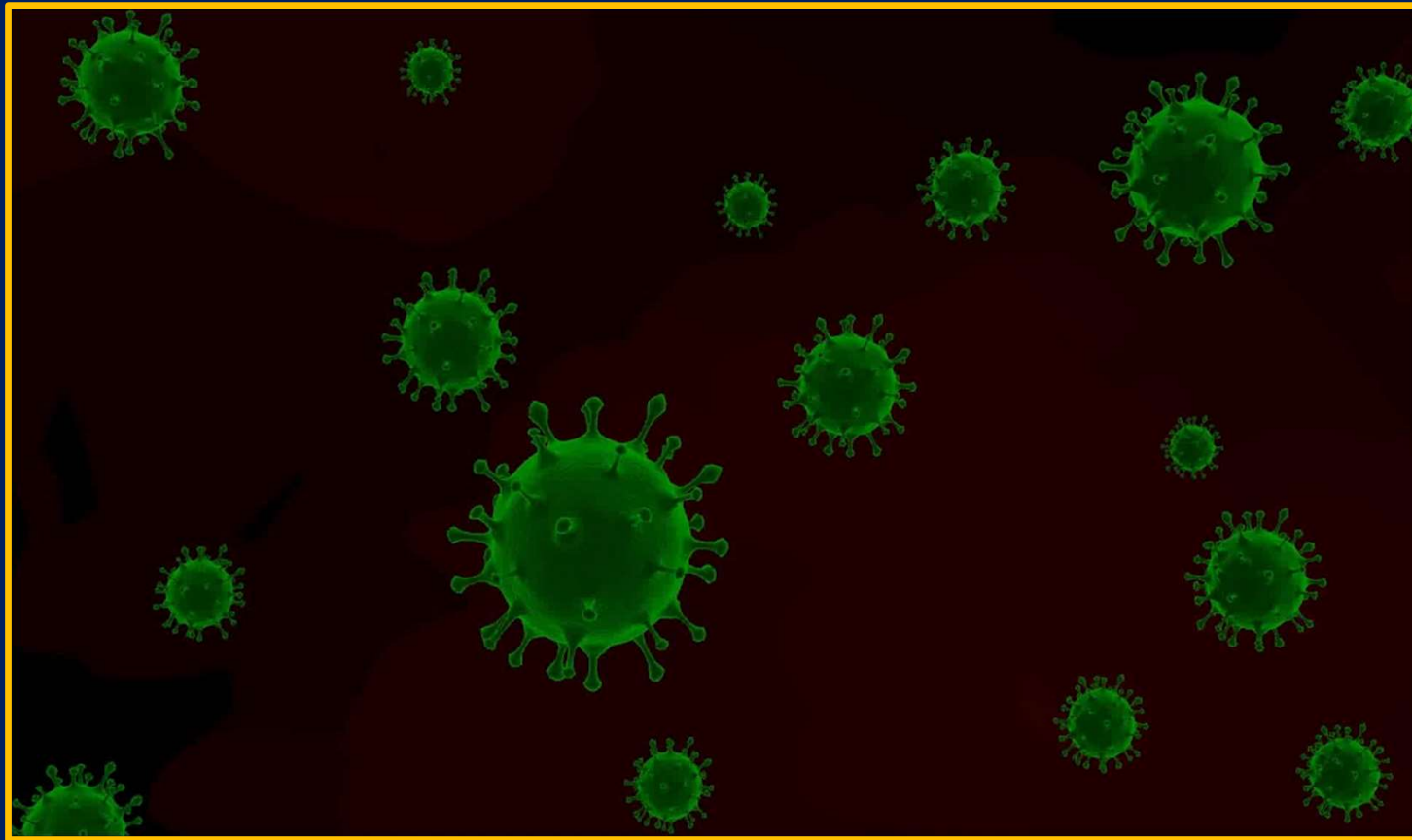
ANTIBODY TESTING

Applications in Clinical Practice



Richard B. Ford, DVM, MS
North Carolina State University

Measuring Antibody



Adult Booster Interval

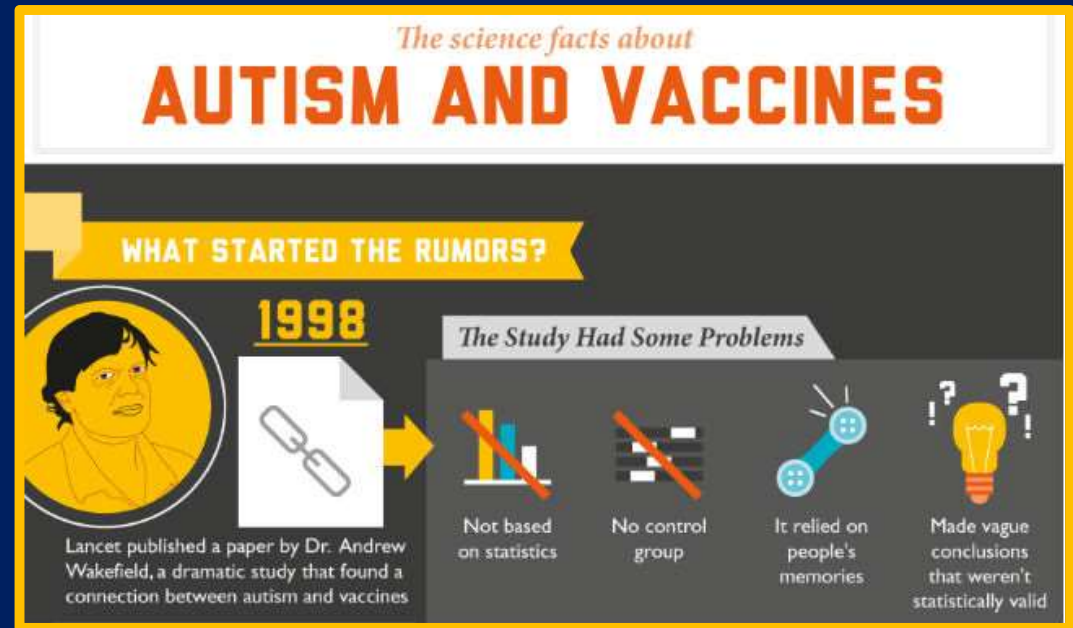
- *Canine Distemper*
- *Parvovirus*
- *Adenovirus*

1 year -or- 3 years?

- *Feline Panleukopenia (Feline Parvovirus)*
- *Feline Herpesvirus*
- *Feline Calicivirus*

AAHA Canine and Feline Vaccination Guidelines
WSAVA Vaccination Guidelines

Public concerns over
excessive vaccination &
injury.



VACCINATIONS FOR DOGS

THE DANGERS OF OVER-VACCINATING!



ANTIBODY TESTING and HERD HEALTH



TITERS in Individual Patients





- ARE ANTIBODY TEST RESULTS VALID?
- WHAT ARE THE INDICATIONS FOR TESTING?
- INTERPRETATION: how do test results affect patient management?

ANTIBODY TESTING

Serological Testing for Vaccine-
Preventable Diseases

Antibody Testing

Quantitative Testing (Reference Standard)

- Antibody TITERS: 1:1600
- Is an “end-point” test; laboratory based.
- Parvovirus “**positive**”
- Results: in days.

Qualitative/Semi-Quantitative Testing

- “**YES**” [positive] or “**NO**” [negative]
- In-clinic, “point-of-care” test kit.
- Results: in minutes.

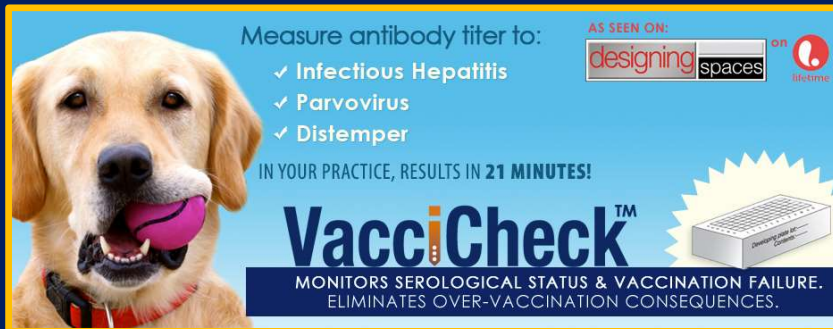
Slide 9

RF1

FIRST...for CDV, CPV, CAV and FPV..."positive" quant results are interpreted the same as qualitative results.



RICHARD FORD, 02/12/2019

Point-of-Care Testing



Measure antibody titer to:

- ✓ Infectious Hepatitis
- ✓ Parvovirus
- ✓ Distemper

AS SEEN ON:  

IN YOUR PRACTICE, RESULTS IN 21 MINUTES!

VaccCheck™

MONITORS SEROLOGICAL STATUS & VACCINATION FAILURE.
ELIMINATES OVER-VACCINATION CONSEQUENCES.

Canine

Distemper
Parvovirus
Adenovirus

Feline

Panleukopenia



Results in less than 25 minutes

Canine Vaccine Antigens

r Distemper

Distemper-MLV

Measles

Parvovirus-MLV

Parainfluenza Virus-MLV (parenteral)

Parainfluenza Virus-MLV (intranasal)

Adenovirus-2 (CAV-2)-MLV

Adenovirus-2 (CAV-2)-AvL

Adenovirus-2 (CAV-2)-killed

Rabies 1-year

Rabies 3-year

Coronavirus-MLV

Coronavirus-killed

Canine Influenza (H3N8)-killed

Canine Influenza (H3N2)-killed

B. bronchiseptica-AvL (intranasal)

B. bronchiseptica-killed (parenteral)

B. bronchiseptica-AvL (oral)

Leptospirosis *var. canicola*

Leptospirosis *var. icterohaemorr.*

Leptospirosis *var. pomona*

Leptospirosis *var. grippotyphosa*

r Lyme (*OspA*)

rcLyme (*OspA* + C)

Lyme (*OspA*)-killed

Lyme (*OspA*+C)-killed

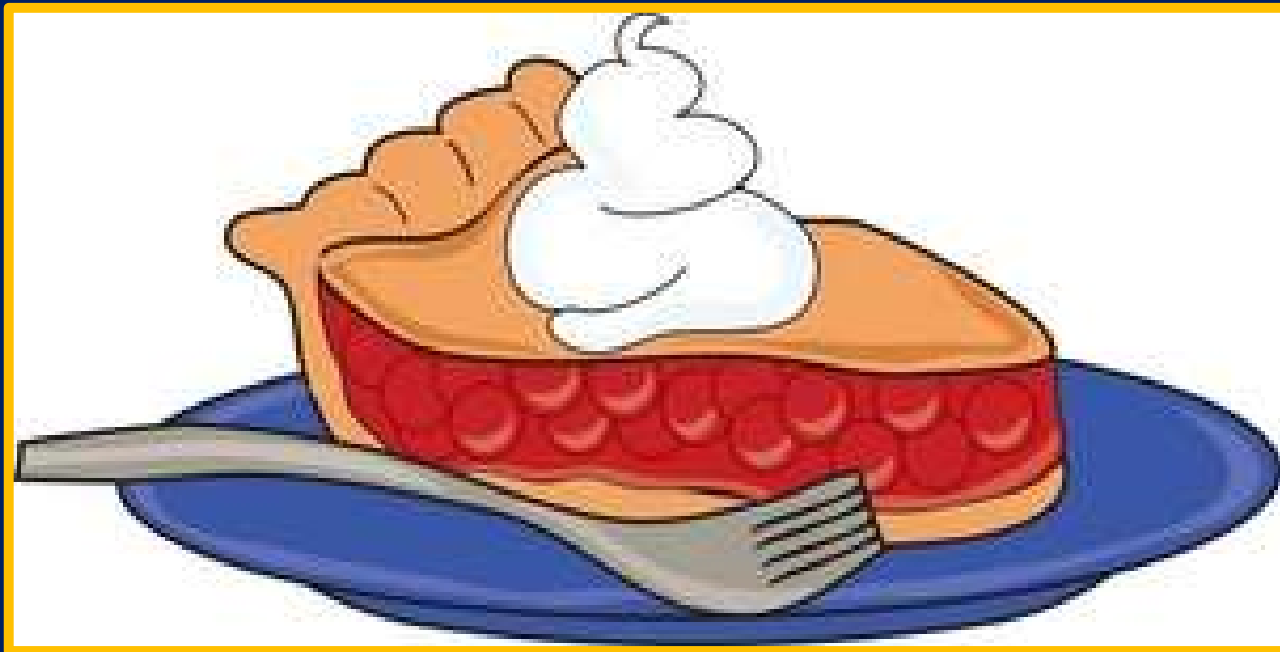
Leishmaniasis

Giardia spp.

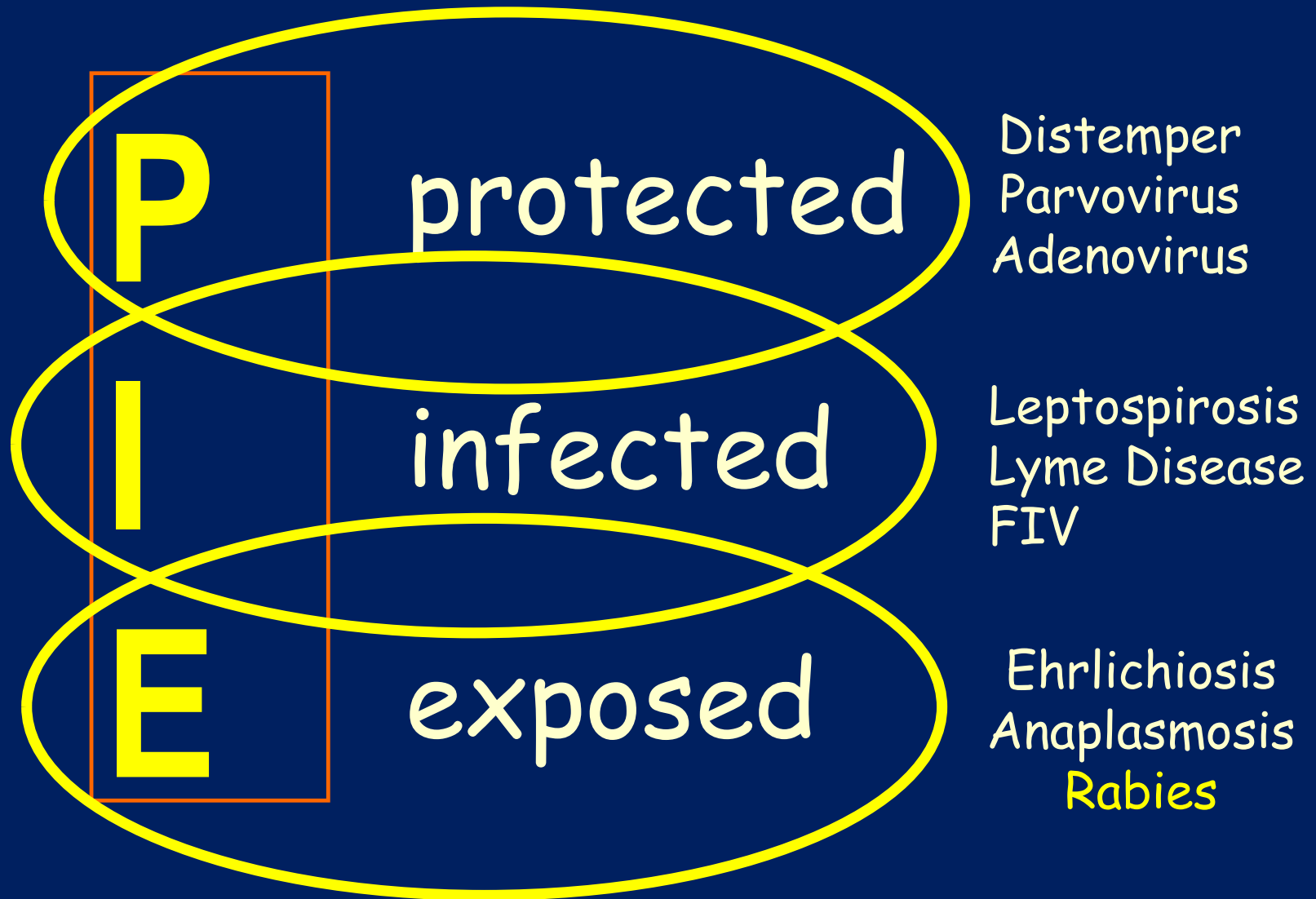
...and others

>115 vaccines

When tests results are "positive"...



Think PIE...



**ANTIBODY
TESTING**

**TESTING
INDICATIONS**

**Preventable
Disease**

AAHA Canine Vaccination Guidelines

VACCINATION
RECOMMENDATIONS
Practice

RABIES VACCINATION
(NEW)

OVERDUE for
VACCINATION (NEW)

VACCINATION
RECOMMENDATIONS
Shelter-Housed Dogs

ANTIBODY TESTING for
VACCINE PREVENTABLE
DISEASES (NEW)

LEGAL
CONSIDERATIONS

VACCINE ADVERSE
REACTIONS

VACCINE TYPES

VACCINE STORAGE &
HANDLING (NEW)

THERAPEUTIC
BIOLOGICS (NEW)

LICENSING of
VACCINES

THE VACCINE
LABEL (NEW)

FREQUENTLY
ASKED QUESTIONS

REFERENCES and
Appendices

LIFESTYLE
FACTORS (NEW)

Canine CORE Vaccines

INITIAL SERIES (Puppy)

MLV or rDistemper

MLV Parvovirus

MLV Adenovirus-2

Rabies

**Booster within
*1 year***

6 weeks

7 weeks

8 weeks ←

9 weeks

10 weeks

11 weeks

12 weeks ←

13 weeks

14 weeks

15 weeks

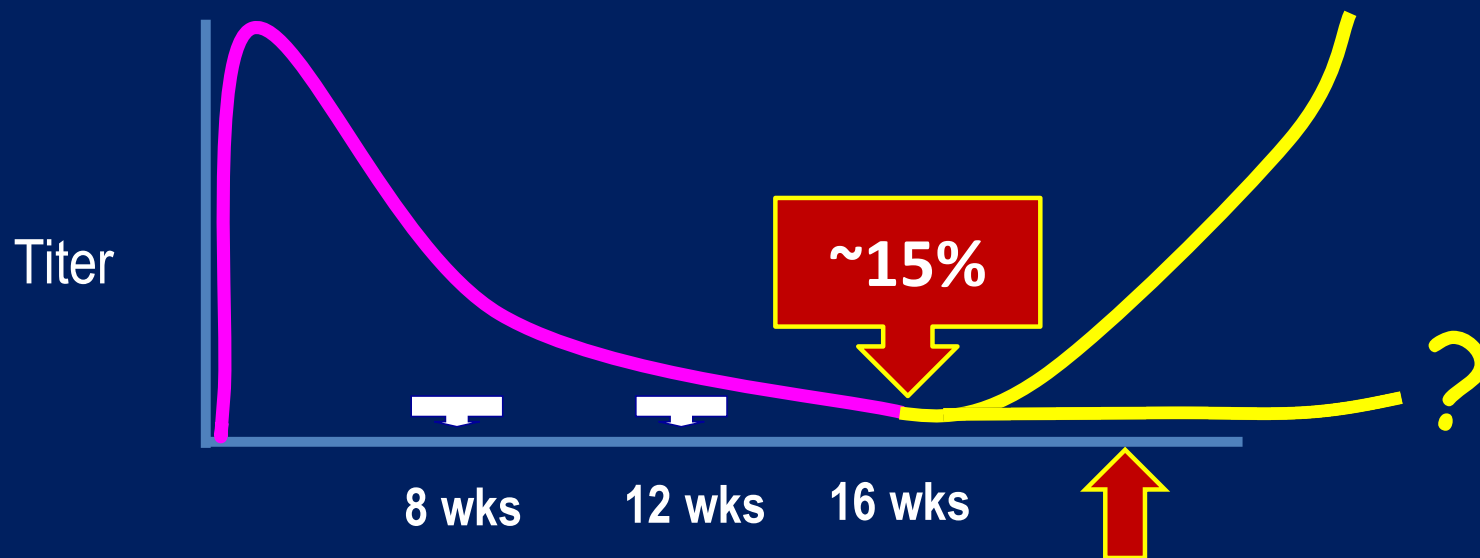
16 weeks ←

Post-Vaccination Immune Status

Antibody Test 2-4 weeks

If **NEGATIVE**, re-vaccinate
the initial series.

MLV Vaccines
(distemper,
parvovirus,
adenovirus)





For Parvo
...Genetic

**American Pit Bull Terrier
at increased risk?**



Vaccine Hesitancy



- Pet “over-vaccination”
- Vaccine-associated injury
- Unnecessary vaccination

Does a “positive” test today assure the patient will be protected tomorrow?

History: Vaccine Adverse Reaction



Risk of Revaccination?

Vaccination of Geriatric Patients



**At what AGE can
vaccination be
discontinued?**

Assessment of patients with Systemic or Chronic Illness



History of Immune-Mediated Disease



**Re-Vaccination may
Re-Activate Disease**

SHELTER MEDICINE: Assessment of Infection Risk



Outbreak Management



Owner anxiety over risk associated with vaccination



VACCINATIONS FOR DOGS

THE DANGERS OF OVER-VACCINATING!

