

# CASE

*Curriculum for Agricultural  
Science Education*

**Principles of Agricultural Science – Animal**

# Disease Prevention

Unit 8 – Lesson 8.4 Pathogens Prevented

# Prevention Practices

Keeping the  
Doctor Away



- Reduce stress
- Sanitary conditions
- Adequate ventilation
- Proper nutrition
- Vaccinations

# Providing Immunity



- Vaccinations increase immunity.
- Types of immunity:
  - **Passive:** transfer of antibodies
  - **Active:** animal produces antibodies

# Types of vaccines:

- **Killed** – organism within the vaccine is completely inactivated
  - First vaccination initiates immune response
  - Second dose to produce effective levels of antibodies
  - Periodic boosters are needed
- **Modified live** – small amount of antigen in vaccine
  - Longer lasting and more complete immunity
  - Fewer doses needed throughout life of animal

# Scheduling Vaccinations

- Work with a veterinarian to determine necessary vaccinations.
- Plan vaccinations and boosters according to age and use of the animal.



# Vaccination Records

- Assist in scheduling vaccinations and boosters

**VACCINATION RECORD**

AGE	DATE								
WKS.									
WKS.									
WKS.									
WKS.	6/24	X	X	X	X				
WKS.									
1 YR.									
2 YRS.									
3 YRS.									
4 YRS.									
5 YRS.									

  
**Health Record  
of**

NAME Dusty

DATE OF BIRTH \_\_\_\_\_

BREED \_\_\_\_\_ SEX \_\_\_\_\_

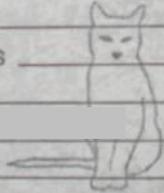
MARKINGS \_\_\_\_\_

OWNER \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ PHONE \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_



# Administering Shots

Common methods of giving vaccinations:



- Intramuscular
- Subcutaneous
- Intravenous
- Intranasal

# Balanced Approach



One practice will not prevent disease.

- Animal environments should be low stress, clean, and well-ventilated.
- Vaccinations should be used in combination with a healthy environment.

# References



- Lawhead, J., & Baker, M. (2005). *Introduction to veterinary science*. Clifton Park, NY: Delmar.
- Parker, R. (2003). *Equine science* (2nd ed.). Clifton Park, NY: Delmar.