Welcome!
I am happy you are interested in teaching 4-H members about hippology!

Here are few resources to help you begin.

Melissa Woodall
4-H Club Leader, Dona Ana County
The following will help you teach the basics about horse judging for 4-H members wanting to compete in the Hippology contest.
The four criteria that conformation is evaluated on:

1. Balance
2. Muscling
3. Structural Correctness
4. Breed and Sex Characteristics
The American Quarter Horse Association

Association with the American Quarter Horse application to register an animal great importance when making horse knowledge of points of this chart shows the points of a

- Hoof
- Forearm
- Elbow
- Amn
- Chest
- Point of Shoulder
- Throat Latch
- Under Lip
- Lower Lip
- Upper Lip
- Muzzle
- Nasal Pillar
- Bridge of Nose
- Poll

- Abdomen
- Girth
- Thigh
- Barrel
- Shoulder
- Flank
- Hock
- Fetlock
- Coronet
- Buttock
- Gaskin
- Joint
- Stifle
- Back
- Group
- Lion
- Back

- Withers
- Crest
- Face
- Forehead
The American Quarter Horse

Color Chart

- Gray
- Black
- Bay
- Sorrel
- Chestnut
- Brown
- Buckskin
- Palomino
- Dun
- Grullo
- Red Dun
- Blue Roan
- Red Roan
Balance
Markings

Star
Snip
Blaze
Bald
Stripe

Coronet  Half Pastern  Pastern  Sock  Stocking
Conformation Faults of Forelegs

Normal  Base-Wide  Base-Narrow  Toe-Out or Splay-Footed  Pigeon-Toed  Bowlegged  Knock-Kneed

Normal  Camped Out  Calf-Kneed  Camped Under  Buck-Kneed

(A)  (B)  (C)
CORRECT AND INCORRECT STRUCTURE OF THE REAR LEGS

Side View
(Drop imaginary line from point of the buttock)

Rear View
(Drop imaginary line from point of the buttock)
Reference Books
An introduction to

Hippology

The Study of the Horse

for young children and beginners

By

Jacinda Hinkson
Hippology

Week 1; Health
Week 2; Grooming
Week 3; Nutrition and Feed
Week 4; Tack and Training
Week 5; Hooves and Farrier
Week 6; Anatomy and Physiology
Week 7; Unsoundnesses and Blemishes
Week 8; Housing, Fencing and Transportation
Health
Health

Normal Vital Signs

- Temperature: Normal 99.5 to 101.5 in mature horse
- Pulse-Normal: 32 to 36 beats per minute (at rest)
- Respiratory Rate: 8-12 breaths per minute (at rest)
- Mucous Membrane: Color-light pink
- Capillary refill time: 1-2 seconds
- Hydration: skin test-skin should return normal within 1 second
- Gut sounds: should be present. Sounds like water, gurgling

Diseases

- A disease is defined as “a disorder with a specific cause and recognizable signs and symptoms; any body abnormality or failure to function properly, except that resulting directly from physical injury” (Bantam Medical Dictionary)

There are three types of diseases:

- **Congenital**: inherited or born with the disorder
- **Infectious**: disease caused by a specific infectious agent
  - Viral
  - Bacterial
  - Protozoal
- **Non-infectious**: ex. Colic, tying up

Vaccinating

- Vaccination and limiting exposure to infectious agents aid in preventing disease. However, nothing is 100 percent.
- Vaccination schedule should be developed by horse owner and veterinarian. Things to consider:
  - Demographics of target disease
  - Risks of exposure
  - Effects of the disease
  - Cost, efficacy and potential for negative reactions
- Always follow directions on vaccine labels
- Annual booster shots are needed
Ways to prevent infectious diseases

- Minimize exposure to infection
  - Restrict movement on and off property
  - Quarantine new horses for 4-6 weeks
  - Keep very close eye on new horse and horses on property
- Develop and use a good health management program
  - Group horses by age, use, etc
  - Have horses tested for EIA on a yearly basis
  - Keep vaccinations and boosters up to date
  - Horses should be de-wormed regularly
  - When traveling, bring own feed

Common diseases and their symptoms

Viral Diseases

- **Encephalomyelitis** (also known as sleeping sickness). Affects the nervous system.
  - Three types:
    - Western Equine Encephalomyelitis (WEE): 50% mortality rate
    - Eastern Equine Encephalomyelitis (EEE): 90% mortality rate
    - Venezuelan Equine Encephalomyelitis (VEE): 90% mortality rate
  - Clinical signs: fever, weakness, ataxic (uncoordinated), head-pressing, paralysis, protruding tongue, lips not working, circling and blindness
- **Rabies**: caused by bites from infected wildlife such as skunks and raccoons
  - Clinical signs: fever anorexia, altered behavior, apparent lameness, incoordination and blindness
- **West Nile Virus** (WNV): mosquitos are the most common carriers of the virus
  - First identified in the 1930s in Africa. First noticed in New York in 1999, and since then, has spread across the United States
  - 30-40% mortality rate
  - Similar symptoms of Encephalomyelitis as well as swollen lymph nodes, vomiting and diarrhea
• **Equine Infectious Anemia (EIA):** transmitted by biting insects, generally mosquitos
  o There are three types of degree of infection
    ▪ Acute: develop severe symptoms and die within 2-3 weeks. May only show fever
    ▪ Chronic: recurring symptoms include fever, anorexia, limb edema (retention of fluid) and anemia
    ▪ Unapparent: carrier of disease, but shows no symptoms
      o Because of the unapparent carriers, there is a need for a test. This is the **Coggins Test.**

*Viral Respiratory Diseases*

Signs of respiratory diseases: fever, nasal discharge, cough and loss of appetite

• **Equine Influenza**
  o Highly contagious, spread through the air

• **Equine Herpesvirus (rhinopneumonitis)**
  o EHV-1 and EHV-4 infect respiratory tract
  o More common in young horses
  o Spread through the air
  o EHV-1 can cause abortion

• **Streptococcus equi** (strangles, distemper)
  o Highly contagious bacterial disease
  o Generally affects younger horses
  o Transmitted by nasal discharge; able to also live in the soil
  o Lymph nodes can rupture

*Bacterial*

• **Tetanus** (Lockjaw): caused by exotoxin of *Clostridium tetani* which is present in feces and soil.
  o It's an anaerobic bacteria that enters the horse through a puncture wound, cut or a foal's umbilical cord
  o Clinical signs: colic, muscle spasms, lockjaw, excessive salivation, excessive sweating, convulsions, breathing difficulties, death
  o Can be prevented with vaccination of Tetanus Toxoid—protection begins in 14 days
  o Tetanus antitoxin: immediate protection, but only for a very short time
Protozoal

- **Equine Protozoal Myelitis (EPM)**: Disease carried through the feces of opossums and cats
  - Clinical signs: gait abnormalities, ataxia, weakness, neurological damage and muscle wasting
  - Prevented by minimizing exposure
  - Treated through long-term antimicrobial therapy

Internal Parasites

- Parasites can be present in the horse at any time
- Some parasites can lay 200,000 eggs per day
- Parasites develop resistance to many of the chemicals designed to kill them
- Parasites are often called silent killers because they can have severe outcomes without the horse showing clinical signs

Deworming program and schedule

- Consult veterinarian
- Horses at different ages and varying stages of activity may require different things for parasite control
- Climate and season influence deworming program
- Use a rotational deworming schedule
- On average, a horse should be dewormed every 3 or 4 months
Grooming
Grooming tools and basic equipment

- **Basic 4 grooming tools**
  - **Curry comb**
    - Used in a circular motion on the horse’s body to remove dirt and old hair
  - **Brush**
    - Used in the way the hair grows to smooth hair and remove loose hair and dirt
  - **Mane/tail comb**
    - Comb tangles out of mane and tail
  - **Hoof pick**
    - Remove dirt, rocks and any other foreign material from horse’s hooves

- **Why daily grooming is important**
  - Keeps horse’s coat clean, healthy and shiny
  - Allows a person to check their horse for overall health and look for scrapes and cuts that may need to be cleaned
  - Gets the horse used to being touched and handled
  - Allows for horse and handler to form a bond
• Other grooming/cleaning tools
  o Metal curry comb or shedding blade
    ▪ Good for removing mud and thick hair
    ▪ Only use on horse’s body, never on their legs or head
  o Face brush
    ▪ Soft brush good to use on face and legs
  o Mane and tail brush
    ▪ Used to remove tangles from horse’s mane and tail
  o Sweat scraper
    ▪ Generally used to remove excess water from horse’s body, i.e. after rinsing or washing a horse
- **Common tools and equipment**
  - Halter (A)
  - Lead rope (B)
  - Rope halter and lead (C)
  - Lunge-line (D)
  - Sheet (E)
  - Blanket (F)
  - Horse hood or slinky (G)
  - Manure fork (H)
  - Bucket (I)
Nutrition and Feed
Nutrition and Feedstuffs

- Terms
  - Forage: plant matter consumed by animals by grazing of fed to them as hay, silage or straw
    - Usually high in fiber
  - Roughage: non-forage feed such as cereal grains, corn cobs and beet pulp
    - High in fiber and low in energy
  - Concentrate: General term that refers to everything that isn’t forage or roughage, often the part of the horse’s diet that is made up of grains
    - High in energy and low in fiber
  - Supplement: added to a diet to increase a specific nutrient
  - Complete feed: feed that has all the required nutrients needed by the horse, except water. Often bagged feeds that contain roughage and concentrate.
  - Diet: the mixture of feedstuffs being fed
  - Ration: amount of diet fed in a 24 hour period

- Types of forages
  - Legumes: alfalfa, clovers and soybeans
    - Have a lot of protein and calcium and energy (usually more than grasses)
    - Leaves contain most of the nutrients
  - Grasses: cool and warm season
    - Cool season
      - Bluegrass, timothy, brome and fescue
    - Warm season
      - Bermudagrass, bluestem
    - Nutrient contents depend on plant growth and soil quality

- Hay
  - Characteristics of good, high quality hay
    - Free of mold, dust, weeds and foreign material
    - Smells good
    - Bright green color
    - Leafy
• Concentrates and complete feeds

- Whole corn
- Oats
- Barley
- Wheat
- Pellet
- Complete feed
- Sweet feed

• Six required nutrients
  - Carbohydrates
  - Fats
  - Protein
  - Vitamins
    - Fat soluble vitamins: A, D, E, K (stored in body)
    - Water soluble vitamins: excreted in urine
  - Minerals
    - 7 macro minerals
    - 8 micro minerals
    - Calcium to Phosphorus ratio: should be 1.5 to 1 or 2 to 1
  - Water
    - Horses will generally drink 10-15 gallons of water a day
    - A good rule of thumb: 1 gallon per 100 pounds of body weight per day
• **Feeding horses**
  
  ➢ Working adult horses should generally consume .75 to 1 percent of their body weight in forage/roughage per day. Example a 1000 pound horse should eat about 10 pounds of forage per day.
  
  ➢ Always feed by weight, not by volume

• **Rules of thumb for feeding horses**
  
  o If it is practical, formulate a diet for each horse
  
  o Horses living and being fed in groups should be penned by age, use and stage of production
  
  o Try to keep a regular feeding time and observe horses at feeding time for sickness or strange behavior

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• **Body Condition Score (BCS)**
  
  o Assesses a horse’s condition on a scale from 1 to 9
  
  ▪ 1 is extremely poor, emancipated
  
  ▪ 9 is extremely fat
  
  ▪ Most horses should be maintained to have a BCS of 5 to 7

  ▪ There are several places on the horse to evaluate BCS:
    
    • Along the neck (A)
    • By the withers (B)
    • Crease down the back (C)
    • Tailhead (D)
    • Ribs (E)
    • Behind the shoulder (F)
Equine Body Condition Score

**POOR**
- Horse is extremely emaciated. The backbone, ribs, hipbones, and tailhead project prominently three structures of the shoulders, shoulde, and rump easily noticeable. The fatty tissue can be felt.

**VERY THIN**
- Horse is emaciated. Slight or covering even visible backbone, ribs, tailhead, and hipbones are prominent. Withers, shoulder, and neck structures are discernible.

**THIN**
- Fat layer up above halfway on vertebra. Slight fat layer can be felt over ribs, but ribs easily discernable. The backbone is evident, but individual vertebrae cannot be seen. The hipbones cannot be seen, but withers, shoulder, and neck are palpable.

**MODERATELY THIN**
- Fat layer creates strong back. Fat covering of ribs can be seen. Fat can be felt along tailhead. Hip bones cannot be seen. Withers, neck, and shoulders not obvious.

**Mild**
- Back is bony. Ribs can be felt, but not easily. Fat around tailhead beginning to spread over back. Withers are rounded and shoulders and neck blurred somewhat into the body.

**MODERATELY FLESHY**
- May have a slight crease down the back. Fat on tailhead lines soft hip over the croup. Tail sparsely. Fat beginning to be deposited along the sides of the withers, behind the shoulders, and along the neck.

**FLESHY**
- A crease is seen down the back. Individual ribs can be felt. Fat over the croup. Fat filling between ribs with fat. Fat around tailhead is soft. Hochenbige fat deposited along the withers, behind the shoulders, and along the neck.

**Fat**
- Crease down back is prominent. Fat evident in body due to fat in between. Fat around tailhead very soft. Even along withers. Fat with fat, reachshoulder, and behind the shoulders. Fat along lower extremities may not be together. Hair is fluffed up with the hairs of the body.

**EXTREMELY FAT**
- Obvious crease down back. Fat layer entire rib area, with body back. Fat covering tailhead, withers, neck, and shoulders. Fat along lower extremities may not be together. Hair is fluffed up with the hairs of the body.

Illustrations by Dr. Robin Peterson, based on Togau Body Condition Score.

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http://www.tacomaequine.com/images/bcs.ht1.jpg
Tack and Training
Ground Safety, Tack and Training

Ground Safety

- **Approaching a horse**
  - Approach from front
  - Angle towards shoulder
  - Don’t approach straight toward horse’s head
  - Don’t approach toward horse’s hindquarters
- **Proper way to tie a horse**
  - Tie horse at head level
  - Tie horse with enough slack to move head but not enough to put head to ground
  - **Always use a quick release knot**
    - Example:
Western Saddle and Tack

- Western saddle pad
English saddle parts

- English saddle pad
Parts of the western bridle

Headpiece (Crownpiece)
Browband
Throatlatch
Cheek Piece
Curb Strap
Bit

Reins

Parts of the English bridle

Crownpiece
Browband
Throatlatch
Noseband or cavesson
Cheekpiece
Bit
Reins
Bits

Snaffle:

Curb:

**Parts of a snaffle bit**

- cheek (on some designs)
- ring
- mouthpiece

**Parts of a curb bit**

- Purchase
- Cheek
- Shank
- Mouth
- Bars
- Port
Bosal

Mechanical hackamore

Sur single
draw reins
Saddling

- Correct order of saddling a horse in western tack
  - Front cinch
  - Back cinch
  - Breast collar

- Correct order of unsaddling a horse in western tack
  - Breast collar
  - Back cinch
  - Front cinch

- The five natural aids
  - Hands
  - Legs
  - Seat
  - Weight
  - Voice

Movement and Gaits

- **Stride**: the repeated limb coordination and placement pattern exhibited by the moving horse
- **Gait**: a specific way of going with a specific sequence of limb movements that are repeated each stride with a regular cadence

- **The natural gaits**:
  - Walk: 4 beat gait
  - Trot: 2 beat diagonal gait
  - Pace: 2 beat lateral gait
  - Lope/canter: 3 beat gait
    - Right lead
    - Left lead
  - Gallop: 4 beat gait; fastest gait
Hooves, Farrier tools and Shoeing

Common saying:
- NO HOOF, NO HORSE

Importance of cleaning hooves daily:
- Removal of foreign materials that can cause bruising
  - Check for rocks, nails, etc
- Prevent thrush
  - Thrush is fungus that lives in the frog
- Observation
  - Check for uneven wear, abnormal growth and general hoof condition

Parts of the hoof

Parts of the lower leg

Diagram labels:
- Bulbs
- Central sulcus of frog
- Angle of wall
- Bars
- Collateral sulcus
- White line
- Apex of frog
- Wall
- Sole
- Cannon bone
- Long pastern
- Short pastern
- Coronary band
- Coffin bone
- Sensitive laminae
- Deep flexor tendon
- Plantar cushion
- Sensitive frog
- Ininsensitive frog
- White line
- Navicular bone
Farrier: an individual who has extensive knowledge and expertise on horse and hoof structure and applies this knowledge to trimming and shoeing horses' hooves

- Horses hooves grow about \( \frac{1}{4} \) to \( \frac{1}{2} \) inch per month
- Horses should be trimmed or re-shod every 6-8 weeks

Farrier tools

- Anvil
- Nippers
- Pinchers
- Rasp
- Hoof knife
- Clincher
- Hoof testers
- Clinch block
- Clinch cutter
- Farrier hammer or driving hammer
Anatomy and Physiology

- **Major systems of the horse:**
  - Skeletal (bones and joints)
  - Digestive (gastro-intestinal tract and urinary system)
  - Muscular (the muscles)
  - Nervous (brain, spinal cord and nerves)
  - Circulatory (heart and blood vessels)
  - Respiratory (lungs and air passages)
  - Reproductive (ovaries, testicles and associated organs)
  - Endocrine (ductless glands, responsible for chemical control of the body)
  - Integumentary (skin and associated parts)

- **Skeletal system**
  - 205 bones in the horse
  - Three types of bones:
    - Long, short and flat
  - Five sections of vertebrae
    - Cervical (7 vertebrae), Thoracic (18 vertebrae), Lumbar (6 vertebrae), Sacral (5 fused vertebrae), Coccygeal (tail: 18 vertebrae)
- **Digestive system**
  - Foregut consists of:
    - Mouth, esophagus, stomach, small intestine
  - Hindgut consists of:
    - Large intestine (consists of cecum and large and small colon) and rectum
  - Stomach is relatively small
    - 8-19 quart capacity
    - Food stays in the stomach for 15 minutes
- **Muscular system**
  - Largest tissue mass in the horse's body
  - Three types of muscles:
    - Smooth, long and cardiac

- **Nervous system**
  - Comprised of:
    - Brain, spinal cord and nerves
• Circulatory system
  o Heart size corresponds with body size
  o Arteries: carry blood away from the heart
  o Veins: carry blood to the heart

THE EQUINE HEART

• Respiratory system
  o Series of air passages that connect lungs with external air
  • Upper airways
  • Tracheobronchial airways
  • Lungs
Unsoundnesses and Blemishes
Unsoundnesses and Blemishes

**Unsoundness**: defect in form or function that interferes with the usefulness of the horse

**Blemish**: an acquired physical defect that does not interfere with the usefulness of the horse

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**Front Legs**

- **Splint** (very common)
  - Calcification or bony growth on the inside of the cannon bone. Result of trauma
  - Occurs more often in young and growing horses

- **Bucked shins**
  - Enlargement on the front of the cannon
  - Common in young racehorses
  - Corrected through rest and treatment

- **Bowed tendon**
  - Inflammation and enlargement of the flexor tendons on the back of the cannon
  - Bowed appearance
  - Poor conformation and trauma cause this
  - Corrected through rest and treatment

- **Sidebones**
- Calcifications of the lateral cartilages of the phalynx
- Once bone has ossified, horse should be sound with rest and corrective shoeing

- **Ringbone**
  - Bony ridge that runs parallel to coronary band
  - Result from concussion and strain
  - Can lead to chronic lameness

- **Wind puffs**
  - Soft, puff, fluid-filled swellings that occur around a joint or tendon sheath
  - Usually on the fetlock and pasterns of on all four legs
  - Don’t usually cause lameness (blemish)

- **Navicular disease**
  - Injury of the navicular bone in the front hoof
  - Horse may “point” foot forward to display the disease
  - Could be chronic
  - Horse will require special shoeing

- **Carpitis (popped knee)**
  - Swelling of the knee resulting from inflammation of the joint capsule, bones or ligaments
  - Due to trauma or concussion
  - Generally considered a blemish

- **Capped elbow (shoe boil)**
  - Swelling at the point of the elbow
  - Caused by irritation
  - Generally a blemish

- **Sweeney**
  - Atrophy of the muscles of the shoulder
  - Caused by direct injury the shoulder
  - No successful treatment. Generally results in permanent lameness

**Hind leg**

- **Knocked-down hip**
  - One hip lower than the other
  - Caused by direct injury and usually permanent condition.
  - Generally affect horse’s gait

- **Stifle**
  - Upward fixation of the patella. The patella locks and causes the leg to remain in the extended position
  - Stifle and hock are unable to flex and the foot is dragged.
- Young horses can outgrow condition; older horses need surgery

- **Stringhalt**
  - Exaggerated lifting and forward motion of one or both hocks
  - May be the result of nerve damage
  - Can fix itself over time

- **Capped hock**
  - Firm enlargement at the point of the hock due to inflammation
  - Caused by trauma
  - Generally a blemish

- **Curb**
  - Hard enlargement on the rear of the cannon directly below the hock
  - Due to faulty conformation and stress
  - Can result in temporary lameness

- **Bog spavin**
  - Soft distension on the inside front portion of the hock
  - Due to poor conformation and trauma
  - Result in temporary lameness

- **Bone spavin**
  - Bony enlargement on the lower surface of the hock joint that may result in limited flexion of the joint
  - Results in varying degrees of temporary lameness

- **Thoroughpin**
  - Soft, fluid-filled enlargement in the hollow on the outside of the hock
  - Caused by stress on the flexor tendon
  - Generally a blemish

**Body**

- **Fistula of the withers**
  - Infection and inflammation at the withers
  - Can come from saddle and girth sores

- **Poll evil**
  - Inflammation and infection of the poll

- **Parrot mouth**
  - Upper jaw overshoots lower jaw

- **Hernia**
Housing, Fencing and Transportation
Housing, Fencing and Transportation

- There are 4 environmental needs of a horse:
  - Physical: temperature and stall or pen size
  - Social: interaction with other horses
  - Chemical: air and water quality
  - Biological: minimize exposure to disease and foreign pathogens

Space requirements

- **Stalls**
  - For regular horses: 12 X 12 feet is suggested
  - Stallions, foaling stalls should be larger
    - 16 x 16 feet for stallions
    - 15 x 20 or larger suggested for foaling pen

- **Pens**
  - About 500 square feet per horse for exercise purposes

- **Pasture**
  - Minimum of 2 acres per horse for grazing purposes
Building considerations

- **Ventilation (most important)**
  - Fresh air flow needed to control moisture buildup and help with temperature extremes
  - Natural ventilation is most common and cost effective
  - Windows a good way to provide ventilation

- **Electrical**
  - Lighting
    - Fluorescent is more efficient
    - Certain areas may require more light
  - Be sure to install a lot of electrical outlets

- **Flooring**
  - Alleyways
    - Concrete-expensive, slick, easy to clean
    - Sand-absorbs moisture, messy
    - Crushed limestone-relatively inexpensive
  - Stalls
    - Clay
    - Clay and sand mix
    - Wood
    - Concrete, Asphalt
    - Rubber maps
    - Shavings for cover

- **Other aspects to keep in mind**
  - Office space
  - Bathrooms
  - Feed and tack rooms
Fencing

- **Things to keep in mind when choosing horse fencing**
  - Type of horse being managed
  - Intended use of area being fenced
  - Number of horses that will live within fenced area
  - Homes, buildings, businesses in the surrounding of the area
  - Does it need to be pretty?
  - Cost
  - Maintenance

- **Types of fencing**
  - *Pipe*
    - Advantage: visible, generally low maintenance
    - Disadvantage: cost, installation and temperature extremes affect pipes and welds
  - *Post and rail*
    - Advantage: safe, visible, visible, looks good
    - Disadvantage: cost and maintenance
  - *PVC pipe*
    - Advantage: looks good, visible, relatively low maintenance
    - Disadvantage: cost, not very sturdy, and installation time
  - *Cable*
    - Advantage: visible, low maintenance, sturdy
    - Disadvantage: cost, safety and instillation
  - *Woven-wire*
    - Advantage: visible, low maintenance
    - Disadvantage: cost, safety
  - *V-mesh wire*
    - Advantage: visible, safe, low maintenance
    - Disadvantage: cost, instillation time
  - *Barbed wire*
    - Advantage: sturdy, easy to build, initial cost is low
    - Disadvantage: safety, cost over the long term
Transporting horses

- **Ideas to keep in mind when hauling a horse:**
  - What type of trailer is being used
    - Goose neck or bumper pull
    - Slant load, straight load, stock-type trailer
  - How long is the trip
    - May need to stop to let horses out and drink water
  - How many horses are being hauled in the same trailer
  - What papers are needed to transport horse away from home/property

- **In New Mexico, a horse owner needs:**
  - Copy of a negative Coggins Test
  - Health paper issued by a veterinarian
  - Brand Inspection

![New Mexico Livestock Board Horse Transportation Permit No. 003-1 001-4]

![Horse in transport]

![Horse transport permit]

![Horse in transport]

![Horse transport permit]

![Horse in transport]