

## OWNER CHECKLIST

Thank you for participating in the **Muscle Disease in Horses Survey!** Please gather the following information (if applicable) regarding both your horses prior to starting the survey.

### OWNER AND VETERINARIAN INFORMATION:

- First/Last name
- Valid e-mail address
- Valid phone number
- Street address
- Permission to contact veterinarian

### HORSE INFORMATION:

- Barn name
- Breed
- Equine passport number (if applicable)
- Microchip number (if applicable)
- Date of birth
- Gender
- Length of ownership
- Activities horse is used for
- If deceased:
  - Year of death
  - Cause of death

### REGISTRATION INFORMATION (IF APPLICABLE):

- Registered name
- Breed association name
- Registration number
- Permanent tattoo number / Freeze brand number
- Other identifying marks (i.e. hot brands associated with registration)

### DIET INFORMATION:

- Weight/amount of Hay
- Type of Hay
- Weight/amount of grain
- Brand and type of grain
- Supplements
- Hand grazing information, if applicable (i.e. days/minutes spent hand grazing)
- Previous diet information if changed in the last 12 months

### EXERCISE AND TURNOUT:

- Exercise information (i.e. day/minutes spent exercising; types of gaits)

- Days/minutes spent exercising
- Types of gaits used during exercise session
- Exercise intolerance
- Time spent in stall, pasture, and/or dry lot (if applicable)

**CLINICAL SIGNS OF TYING UP (RHABDOMYOLISIS):** **CASE/AFFECTED HORSES:**

- Does it occur?
  - Seen by veterinarian?
  - Dark, coffee-colored urine?
- Timing of episodes: 90 days to 12 months
- Tie up during at rest or during exercise
  - How many episodes
  - Bloodwork values (creatine kinase (CK) and aspartate transaminase (AST)) taken at rest or during exercise, if applicable)
- Times bloodwork was performed (i.e. during or after episodes of tying-up)
- Three most recent bloodwork values for CK (if applicable)
  - Dates collected, values, and if taken while at rest
  - Highest bloodwork value for CK
- Three most recent bloodwork values for AST (if applicable)
  - Dates collected, values, and if taken while at rest
  - Highest bloodwork value for AST
- Tying-up treatment, if applicable

 **CONTROL/UNAFFECTED HORSES:**

- Does it occur?

**CLINICAL SIGNS OF MUSCLE FASCICULATIONS:** **CASE/AFFECTED HORSES:**

- Do they occur?
- Has your horse seen a veterinarian for fasciculations?
- Where they occur on your horse
- If the fasciculations are symmetrical

 **CONTROL/UNAFFECTED HORSES:**

- Do they occur?

**CLINICAL SIGNS OF MUSCLE FASCICULATIONS:** **CASE/AFFECTED HORSES:**

- Do they occur?
- Has your horse seen a veterinarian for fasciculations?
- Where they occur on your horse

- If the fasciculations are symmetrical
- CONTROL/UNAFFECTED HORSES:**
  - Do they occur?

**CLINICAL SIGNS OF MUSCLE ATROPHY:**

- CASE/AFFECTED HORSES:**
  - Does it occur?
  - Has your horse seen a veterinarian for atrophy?
  - Muscle affected (see [Basic Muscle Anatomy in Horses](#))
  - If the atrophy is symmetrical
  - Vaccination timing from atrophy, if applicable
  - Type of respiratory disease before atrophy, if applicable
  - If atrophy has resolved
- CONTROL/UNAFFECTED HORSES:**
  - Does it occur?

**CLINICAL SIGNS OF LAMENESS:**

- If lameness has occurred within the last 12 months
- Has your horse seen a veterinarian for lameness?
- Which limb is affected
- Limb(s) affected
  - Area of limb(s) affected (see front limb anatomy and hind limb anatomy)
  - Changes during exercise
  - Changes under saddle or harness
  - Location of joint injections, if applicable (See [Front and Hind Limb Joints](#))
  - Status of condition (i.e. improved, worsened, or no change)

**GAIT ABNORMALITIES**

- Back soreness
- Gait abnormality diagnosis by veterinarian
- Neurologic disease diagnosis by veterinarian

**ADDITIONAL QUESTIONS**

- Muscle biopsy performed?
- Genotype of horse, if applicable
- Genetic relation to other horses on the property
- Additional information about your horse

**AFTER SURVEY ([Instructions here](#)):**

- UPLOAD TO DROPBOX:**
  - Bloodwork Values (From the Past 12 Months)

## OWNER CHECKLIST

- Genetic Testing Results (PDF)
- Muscle Biopsy Results (PDF)
- Photos of your horses
  - Left side
  - Hind side
  - Right side
  - Episodes of tying-up, if available
- Videos of your horses
  - Walking towards and away from camera
  - Trotting towards and away from camera (with horse trotting at least 50% of the distance both directions)
  - Trotting in large circles of lunging with a direction change
  - Turning in small circles with a direction change
  - Walking backwards
  - Episodes of tying-up, if available
- MAIL TO THE UNIVERSITY OF MINNESOTA:**
  - Participants within the United States of America:
    - Sample of hay
    - Sample of grain
    - Sample of supplement(s)
    - Blood or hair root sample
      - Sample submission sheets for both case and control horses from survey
  - Participants outside the United States of America (see instructions [here](#)):
    - Blood or hair root sample
      - Sample submission sheets for both case and control horses from survey