

**COMMONWEALTH OF VIRGINIA DEPARTMENT OF EMERGENCY
MANAGEMENT SEARCH AND RESCUE PROGRAM
STANDARDS FOR EQUINE SEARCH (MSAR) MEMBERS**

I. Scope

A. These standards are intended to define the minimum qualifications expected of an equine search (Mounted Search and Rescue/MSAR) unit.

B. The certification issued under this standard is required only for those personnel who wish to voluntarily participate in the equine search and rescue program of the Department of Emergency Management.

C. An equine search unit should be able to perform the following functions in the general environment of the Commonwealth of Virginia:

1. Search for missing persons in wilderness, rural and suburban areas.
2. Work with and support other search units.
3. Assist in evacuating the subject (where equine evacuation would be appropriate, see Appendix E).
4. Help evaluate, organize and investigate missing person incidents.
5. Be a self-supporting MSAR resource for 24 continuous hours

D. The equine field unit should be capable of performing these functions any time of the year, day or night, and in all weather conditions. The unit may work with a variety of individuals and organizations, including law enforcement, fire and rescue, casual volunteers and family members of the missing subject(s). To do this, the handler/rider should be able to:

1. Understand the search and rescue system used in the Commonwealth.
2. Understand the theory and practice of a missing-person search.
3. Plan, execute, debrief and document a variety of search tasks.
4. Navigate accurately on land.
5. Be equipped and trained to survive an unexpected wilderness emergency.

E. Equine requirements

1. These standards do not address any particular species, breed, size, age or gender of the equine family. However, the animal must have the stamina for long hours (6 hours minimum, up to one operational period) of work under varied conditions of terrain and weather.
2. The animal must be sociable and controllable in situations involving crowds, noise, traffic, other equines, dogs or other domestic animals, and other distractions encountered.

F. Mounted Team Requirements

- 1.** In order for a search and rescue mounted team, functional mounted unit or organizational mounted group to apply for a (Equine SAR) VDEM MOU, the requesting component must have a minimum of four (4) mounted searchers on horseback (4 horses and their 4 handlers) that have the knowledge, skills and abilities outlined within this standards document.
- 2.** Each mounted team or organizational mounted unit must supply each of their two-person mounted field teams with a minimum of one handheld SAR radio that is programmed with VDEM recommended frequencies and insure their members have two-way dispatch capabilities
- 3.** In the event a search and rescue mounted team or organizational mounted unit personnel strength falls below three (3) mounted searchers, the organization shall notify VDEM of its single operational period status

II. Terminology

A. The definitions listed here are for the purposes of these standards only. They may or may not reflect definitions used by other groups, individuals or organizations.

1. Aggressive Equine Behavior - Biting, lunging, kicking or striking out at people or other animals.
2. Area Search - Search of a specific geographical area. The area could be urban, suburban, rural or wilderness.
3. Equine - Any member of the equine family, being any breed of horse, mule, donkey, etc
4. Equine Search Unit – The combination of a certified equine and a certified handler/rider, for the purposes of performing search and rescue.
5. Handler/Rider - The person who is controlling the horse while on foot or in the saddle. The person need not own the horse, but is required to have taken the horse through the test included in this standard.
6. Equine Search/Field Team - must consist of at least two (2) but generally not more than three equine units.
7. Equine Strike Force Leader- The person that supervises all equine activities on a mission
8. Mounted - The act of riding an equine while in the performance of the duties of search and rescue: Being on an equine.
9. Ponied - The act of leading a riderless equine at the end of a lead line while the handler/rider is mounted.
10. Rural - Country often given to farming or to woodland and sparsely to moderately populated.
11. SAR Equine Standards Committee - A committee of representatives of each equine search team that has an M.O.U. with VDEM. Each team may have up to two voting members on the committee. The VDEM may also appoint a member to the committee.
12. Suburban - Moderately to heavily populated areas given primarily to business and residential development.
13. Urban - Characteristic of cities or towns; metropolitan area.
14. Wilderness- An area generally uncultivated and uninhabited, and often inaccessible by vehicle.

III. Handler Knowledge and Performance Expectations

- A. The handler/rider must have a current FTM (Field Team Member) or equivalent certificate.
- B. The handler/rider must also have current certificates in Basic First Aid or higher, and CPR.
- C. The handler/rider must understand that their designated Equine Strike Force Leader may periodically inspect each equine field unit for proper SAR equipment and tack to ensure that each equine unit (horse/rider) is prepared for search conditions.
- D. The handler/rider shall report to The Equine Strike Force Leader after you are signed in at base/command prior to participating in search tasks or field operations.
- E. It is the responsibility of each handler/rider to ensure that tack and SAR gear is in safe and operational condition.
- F. Each handler/rider shall maintain compliance with the applicable FEMA National Incident Management System (NIMS) Standards, as required.

IV. Equine Performance Expectations

A. Behavior Behave quietly and well-mannered.

1. Show no aggression toward people and domestic animals.
2. Demonstrate the ability to be transported between search sites easily.
3. Stand quietly while tethered.
4. Work independently of other equines, as well as with other equines.

B. Agility

1. Move forward smoothly in a variety of gaits.
2. Back on command
3. Ford creeks and streams.
4. Cross bridges
5. Negotiate obstacles normally found in urban, rural and wilderness areas.

V. Test Methods

A. Handler/Rider Written Test - the handler/rider will complete a written test containing questions representative of these standards and must achieve a passing score of at least 80%. The test will incorporate aspects of common horsemanship knowledge as well as mounted SAR knowledge. The testing required by these standards may only be conducted by a certified/approved MSAR Evaluator. Testing materials and checklists will be supplied to evaluators or upon request by the State SAR Coordinator.

B. Equine Field Test - The field test is designed to approximate potential conditions that may be found in the field while on a search. The equine unit will perform the following tests at a walk unless otherwise indicated. During the evaluation, the handler/rider must maintain control of the equine, and the equine should act in a mannerly and calm fashion. The evaluator has the prerogative to discontinue testing should a control or safety problem be noted.

B-1 The equine must perform the following tasks while the handler/rider is not mounted.

1. Stand quietly while the handler/rider mounts, from either side.
2. Load in a horse trailer within five minutes. The time begins when the equine approaches the entry point of the trailer, and ends when the equine is secured in the trailer with all trailer doors closed. The handler/rider may use one assistant.
3. Unload from a horse trailer within two minutes. The time begins when the exit door is opened and ends when the equine is off the trailer. The handler may use one assistant.
4. Stand calmly for at least 30 minutes while tied.
5. Stand quietly for at least two minutes while being held with one other equine by a handler/rider other than the owner.
6. Be ponied by another handler/rider (100 feet).

B-2 The equine must perform the following tasks while the handler/rider is mounted.

1. Stand quietly on the flat for 2 minutes.
2. Negotiate three complete figure eights or 6 serpentines, with a complete stop at the end of the pattern, while the handler/rider is holding the reins in one hand.
3. Turn 180 degrees within a 7 foot diameter circle.
4. For a distance of at least 100 feet, slowly move up and down perpendicular to the ridge of a hill that has an incline of at least 45 degrees.
5. Stand quietly for at least two minutes on a hill with an incline of at least 45 degrees.
6. Walk through a body of water at least three feet wide and three inches deep.
7. Cross a bridge.
8. Cross an area of mud requiring a minimum of four steps.
9. Travel 100 feet through heavily wooded and/or brushy areas.

10. Back a minimum of six feet (in a straight line) between parallel poles.
11. Walk over an obstacle at least 18 inches in height.
12. At a walk, move out of sight of people and other equines at a minimum distance of 100 feet without difficulty.
13. At a gait faster than a walk, move out of sight of people and other equines for a minimum distance of 100 feet without difficulty.
14. Simulating a line search, maintain a two-unit formation (side by side), with 10 to 12 feet between each equine, for at least 100 feet.
15. Stand quietly for one minute while being subjected to loud noises from whistles, sirens, automobile horns, etc.
16. While being subjected to distractions such as opening umbrellas, flying flags, moving trash bags, and road flares, stand quietly for at least two minutes after the distractions have stopped.
17. Walk and/or stand quietly while being subjected to bright, flashing lights.
18. Stand quietly for at least two minutes while the handler/rider is holding one other equine.
19. Pony a riderless equine for 100 feet.

B-3 The equine may perform this task with or without the handler/rider mounted:

1. Stand quietly and under control while vehicular traffic moves past.

C. Equine Field Evaluation Procedures

2. Except as required for specific examination purposes, evaluations will be conducted on an individual basis without interference from other equines or people.
3. Each unit (horse/rider) will be observed by two evaluators, who must be certified according to the requirements listed in Appendix D.
4. The evaluator will have a separate checklist for scoring each of the equine units. (See Appendix C).
5. The performance of the equine unit will be rated as either “Satisfactory” or “Unsatisfactory.”

D. Retesting

1. If an equine unit receives a score of “Unsatisfactory” on any individual test component, the unit may repeat the test component once, at the discretion of the evaluator.
2. If the unit receives a score of “Unsatisfactory,” on the second attempt at a test component, the unit may be re-evaluated no earlier than one month or later than six months after the initial test date.
3. The evaluator who originally tested the unit on the first two attempts must be the evaluator for the third attempt.
4. An equine unit that receives three “Unsatisfactory” scores on any individual field test component may not be used as a MSAR asset until it can pass the entire field test at the next scheduled opportunity.
5. If the handler/rider feels he (he/she) is being unfairly rated, he/she may request a retest with a different evaluator at the next scheduled testing date. The evaluator who originally rated the unit as unsatisfactory may observe the test, but will have no input on the evaluation results. The handler/rider must submit the request for retesting through his/her MSAR unit’s designated liaison officer, and include the reason(s) he/she feels the unit was unfairly rated.

E. Groups whose internal evaluation procedures meet or exceed these standards may use those procedures for certification testing, provided the following conditions are met:

1. The procedures, checklist and field test are accepted by VDEM.
2. The group (MSAR team) is a member in good standing of the Virginia SAR Council.
3. The approved field test is completed and signed by at least two evaluators.

VI. Certification Procedures

A. Prerequisites

1. To be certified as an “Equine Search Unit,” the handler/rider must be an active member in good standing of a SAR group currently operating under a Memorandum of Understanding (M.O.U.) with the Commonwealth of Virginia.
2. The applicant must hold a current FTM (Field Team Member) or equivalent certificate.
3. The equine must have a current copy of a negative Coggins test issued from the Virginia Department of Agriculture and Consumer Services, or from the state of origin if the equine is not boarded in the Commonwealth.

B. An Equine Unit (horse/rider) must satisfactorily complete all written and field tests to be considered for MSAR certification.

C. Certification Application Instructions

1. The MSAR candidate must meet all prerequisites and successfully complete all requirements.
2. Upon completion of all MSAR requirements, the MSAR team’s training officer will submit the applicant’s name for MSAR certification to the office of the State SAR coordinator, and include the person on the team’s duty roster.
3. The application must be signed by both the applicant and either the MSAR group leader or training officer and will be maintained at the team level.
4. Each candidate must maintain a personal record book that reflects proof they hold a FTM or equivalent SAR certificate, completion of the written MSAR test of at least 80% correct and results from the equine field testing and training events,.
5. Upon receipt of the above documentation, the State SAR Coordinator will send confirmation of certification to the candidate’s MSAR unit. (See the next section for more information.)
6. Upon completion of all the requirements outlined in this document, the certified equine search unit may respond (when requested) as a state MSAR resource on any State Mission with a valid mission number designation, as a representative of the MSAR organization holding the M.O.U.

D. Conditions of Certification

1. Provided that all requirements are met, the unit will be certified by the VDEM as an "Equine Search Unit.” On a regularly scheduled basis, the MSAR team leader must supply VDEM with an active roster of all their MSAR Equine Search units.
2. This certification does not constitute a license to practice the skills tested, but signifies only that the equine unit holding the certification has met an established

standard of knowledge and performance and has demonstrated competency at the level indicated.

3. The initial certification will be valid for one year. Thereafter, it will be renewed for an additional three years. (See the next section for information on re-certification.)
4. The certification will be for the handler/rider and equine (the equine unit) that completed the testing together. If the handler/rider wishes to certify as a unit with another equine, the entire testing procedure must be repeated with the new equine.
5. The certified handler/rider will be allowed to ride only the equine upon which he/she certified. However, during an emergency a certified handler/rider may be authorized to ride an equine that is certified by another handler/rider.

VII. Re-Certification Procedures

A. Initial Certification Revalidation: At the end of the first year, the equine unit (horse/rider) must revalidate the certification. To revalidate the certification for three additional years, the handler/rider must submit a letter from his/her MSAR unit leader or training officer requesting that the unit's certification be renewed and stating:

1. The handler/rider is an active member in good standing.
2. The number of searches and training exercises in which the equine unit has participated within the past year. The application should include photocopies of the pertinent TAF forms (mission task sheets), or documentation of tasks in team training logs.
3. The handler/rider shall maintain documentation of no less than three (3) completed mounted tasks from a search, mock search and/or training exercises within the past year.
4. After completion of the original one-year certification; the certification will be renewed for three additional years from the anniversary date or equivalent certification and retake the equine field test (see Sect V, Item b).
5. If a handler fails to re-certify within six months of the expiration date, the certification will be dropped and the candidate will be required to complete the entire evaluation process. The (horse/rider) unit cannot be used again as a SAR asset until certification is completed.

APPENDIX B EVALUATOR INSTRUCTIONS

A. All tests and evaluations will be scored on forms that have been approved by the State SAR Coordinator and will be signed by the evaluator(s).

B. The behavior and agility evaluations are designed to help ensure the equine and handle/rider can work together as a unit safely, efficiently and in conjunction with other units and personnel. Performance on these evaluations should be as written.

C. All copies of test sheets, forms and other related evaluator forms shall be maintain by the equine unit's training officer. Such documentation shall be available for inspection at the request of the State SAR Coordinator.

APPENDIX C EQUINE PERFORMANCE EVALUATION CHECKLIST

Rider: _____ Equine: _____ Breed: _____

Color: _____ Gender: _____ Age: __ Location (housed): _____

Coggins Verified: Yes No Date: _____ Accession Number: _____ Location/State: _____

Location of Evaluation Site: _____

TEST	SATISFACTORY	UNSATISFACTORY 1 st Attempt	UNSATISFACTORY 2 nd Attempt	RETEST 3 rd Attempt Sat/Unsat/Date	TEST	SATISFACTORY	UNSATISFACTORY 1 st Attempt	UNSATISFACTORY 2 nd Attempt	RETEST 3 rd Attempt Sat/Unsat/Date
<i>RIDER DISMOUNTED</i>					<i>RIDER MOUNTED</i>				
Load on trailer (5 minutes)					Cross bridge				
Unload from trailer (2 minutes)					Cross mud (4 steps)				
Tied on lead (30 minutes)					Cross an 18" obstacle				
Stand quietly while rider is mounting (from both sides)					Travel through heavily wooded areas and/or brush				
Held with one other equine (2 minutes)					Back 6 feet through parallel poles (straight line)				
Ponied by another handler/ rider (100 feet)					Search formation - 100 feet				
					Leave others - Gait 1 for 100 feet				
<i>RIDER MOUNTED</i>					Leave others - Gait 2 for 100 feet				
(3) Figure 8's or (6) serpentines with one hand to include complete stop between each pattern					React to loud noises - stand quietly (1 minute)				
					React to distractions - stand quietly (2 minute)				
Turn 180 degrees within a 7 foot diameter circle					Stand quietly while subjected to bright, flashing lights				
Move up and down hill at 45° angle (100 feet)					Rider/handler holds an additional equine (2 minutes)				
Stand quietly – Flat (2 minutes)					Pony a riderless equine (100 feet)				
Stand quietly – on 45° angle (2 minutes)					<i>OPTIONAL – MOUNTED or DISMOUNTED</i>				
Cross water – Minimum 3' wide and 6" deep					Stand quietly and under control near vehicular traffic				

TEST	SATISFACTORY	UNSATISFACTORY 1st Attempt	UNSATISFACTORY 2nd Attempt	RETEST 3rd Attempt Sat/Unsat/Date	TEST	SATISFACTORY	UNSATISFACTORY 1st Attempt	UNSATISFACTORY 2nd Attempt	RETEST 3rd Attempt Sat/Unsat/Date
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		Date	Pass	Fail
Evaluators Name (printed)	Signature			
		Date	Pass	Fail

APPENDIX D
CRITERIA FOR STATE EVALUATORS

To be a recognized evaluator of the Standards for Equine Search Units, you must satisfy the following criteria:

1. Hold a current FTM or equivalent certification.
2. Be, or have been, the handler/rider for a state-certified Equine Search Unit.
3. Have responded to a minimum of five searches, search simulations, or training exercises, and have completed a total of nine mounted task assignments within the past three years.
4. Have been nominated and approved by your SAR unit to become a state evaluator and have been accepted and/or recognized by VDEM as a MSAR evaluator.

APPENDIX E
STANDARD FOR EQUINE SEARCH TEAMS PERFORMING
MOUNTED EVACUATIONS of PERSONS
(Optional Horse and Rider Skill)

I. Scope

1. This standard defines the minimum qualifications expected of mounted search and rescue (MSAR) field team handlers and side walkers who would voluntarily elect to perform a mounted evacuation of a subject (being transported in the saddle on horseback).
2. Mounted SAR field team members (MSAR specialists) performing mounted evacuations shall be validated MSAR resources recognized by the Commonwealth of Virginia or by another state government agency that has an interstate response agreement with the Commonwealth of Virginia. All MSAR specialists shall meet the requirements of ASTM International MSAR Responder Standard F32-2794-09.
3. Side flank walkers who assist with a mounted evacuation task should be (SAR) mission personnel that have formally signed-in as incident resources and should hold basic first aid (or higher) certification, but do not need to be an MSAR handler.
4. The requirements outlined in this standard are applicable to MSAR responders and side walkers who wish to voluntarily participate in mounted evacuation of a person; this is a basic level standard.
5. The mounted SAR field team should be able to perform the following functions in the general environment of the Commonwealth of Virginia, or as mission taskings resulting from an interstate resource request.
6. The evacuation of casualties is one of the most critical tasks facing any SAR or MSAR Team, often times there is not enough manpower readily available to perform a conventional litter carry evacuation.
7. Duty positions within a MSAR Mounted Evacuation team must be staffed with trained personnel. Mounted evacuation courses should be taught by competent instructors that hold both MSAR and Advanced First Aid (wilderness first aid or above) credentials.
8. These standards do not address any particular breed, size, or gender of the equine family.
9. The animal must be sociable and controllable in situations involving mounted evacuations and other distractions encountered.

II. Terminology

1. The definitions provided are for the purposes of this standard only, which may or may not reflect other definitions used by other groups or organizations.
2. Aggressive Horse Behavior - Biting, lunging, kicking or striking out at people or other animals.
3. Equine - Any member of the equine family, being any breed of horse, mule, donkey, etc.
4. Equine Search Team - The combination of a certified equine and certified handler, for the purposes of performing search and rescue.
5. Handler - The person who is controlling the horse while on foot.
6. Horse Team - One handler with one horse.
7. Mounted- The act of being on horseback.
8. Mounted Evacuation – A subject being transported on a horseback, with the horse being lead by a MSAR responder.
9. Subject- The “person” being evacuated or transported by horseback.
10. Walker- The persons on the left and right side of the horse that are assisting with the mounted evacuation.

III. Suitable Candidates for Mounted Evacuation are:

1. Subjects with blisters, minor (no-head or spine) injuries or limb sprains;
2. Subjects who are cooperative and alert;
3. Subjects who are not afraid of horses; and
4. Subjects who are not allergic to horses.

IV. Patient Assessment and instructions:

1. The MSAR specialist shall conduct the preliminary wellness assessment following the guidelines of their first aid training certification.
2. Conduct Patient ABC's and ensure there are no head, back, neck, pelvic injuries, compound fractures or bleeding present, if present a conventional litter carry is required.
3. Make sure the subject is not bleeding, apply direct pressure to wound (all bleeding must be stopped before a mounted evacuation can be considered).
4. If subject begins to bleed while on horseback stop the evacuation and place victim on the ground.
5. Explain to the subject that he/she they will need to wear a riding helmet.
6. Explain that someone will be holding the leadline (a horse type leash) at all times.
7. Explain that someone will be beside them at all times on their left side to monitor their health status and on the right side to ensure they will not fall, while they are in the saddle.

IV. HANDLER KNOWLEDGE AND PERFORMANCE EXPECTATIONS

1. The handler will demonstrate an understanding of the items listed under each subject header and the ability to perform the skills listed.
2. The handler must perform a medical assessment of an injured subject, before requesting assistance to perform any type of evacuation transport.
3. Under the proper conditions a mounted evacuation team may be able to replace over a dozen litter-carry personnel.
4. Regardless of the transport type and once in your care, you are responsible to the safety of the (evacuated) subject.
5. Head and eye protection is recommended for all patients/subjects being evacuated by horseback.
6. Secondary Injuries due to your actions or carelessness during an evacuation could result in legal action against you and your Mounted Team. Insure that the subject is not allergic to horses and/or does not

have phobias of being on equines. Should either condition is present do not perform a mounted evacuation.

7. Explain the entire process to the subject to increase their comfort level as passenger. Include general (mounted) safety education and continue to provide calming information.
8. Mounted evacuations are incident specific and have limitations. Protect and stabilize the injury during assisted mounting. Use a “chair carry” or other method appropriate to the situation. An appropriate equine used transportation must be calm and reliable that has been trained for someone to mount/dismount from both sides. A shorter equine is recommended to reduce height for any lifting into the saddle.

VI. Mounted Evacuation Team – Roles and Responsibilities

A. The Evacuation Point (Handler)

1. Must brief all members and assign a team leader prior to preparing the subject for a mounted evacuation.
2. Before considering a mounted evacuation, Insure the subject can ~~person~~ can safely sit in an upright position and is mentally alert.
3. Tell the subject that someone will be beside them at all times on their right side to insure they will not fall, while they are in the saddle.
4. Advise the subject to say STOP if the transport becomes too painful, or if a rest break is needed.
5. This person shall maintain control of the equine at all times while the patient is being lifted onto or carried by the horse.

B. Left Flank Walker (Team Lead, holds the highest first aid credentials):

1. This person is the Evacuation Team lead and should hold the highest first aid certification.
2. This person does not need to have experience with horse and shall ask the horse handler (point) for any equine related specifics.
3. This person provides voice commands to the team and is to stay with subject until advanced medical care is available. This person will assist in placing, maintaining and removing the subject from the saddle.

4. This person shall remain on the left side of the subject and within arms reach all times.
5. This person shall monitor the health status of the subject and will help prevent the subject from falling.
6. Whenever possible maintain gentle physical contact with the subject's knee.
7. If the subject begins to fall from the saddle, this person will help break the fall (reduce impact) of the subject.

C. Right Flank Walker (safety aid and communicator)

1. This person will assist in placing, maintain and removing the subject from the saddle and shall remain on the right side and within arms reach of the subject all times.
2. This person does not need to have experience with horses and shall ask the horse handler (point) for any equine related specifics.
3. This person will maintain radio communication with Base or the ICP.
4. If the subject begins to fall from the saddle, this person will help break the fall (reduce impact) of the subject.
5. This person shall also serve as the team navigator.

D. Rear Flank (horse handler)

1. Once the spare equines are secure, this member will assist with the loading and unloading of subject.
2. This member will lead the other horses back to the transportation area or will secure the horses until evacuation members can return.
3. The handler (with spare horses) will remain to the rear and at least 25 feet away from the Evacuation Team, while the transport is taking place.

VII. General Safety Considerations:

1. Never perform a mounted evacuation during a mission, without having the skills successfully practiced at the local MSAR Team level before hand.
2. A horse used for mounted evacuation must demonstrate competence with this standard, the Virginia Equine SAR stands and meet the requirements of ASTM International MSAR Responder Standard F32-2794-09.
3. Each person on the mounted evac team should know the duty positions within a MSAR Mounted Evacuation team. Mounted evacuation courses should be taught by competent instructors that hold both MSAR and Advance First Aid (wilderness first aid or above) credentials.
4. The horse must have demonstrated the ability to transport a human, while being led by a handler (point person).
5. All MSAR team members shall attend (team level conducted) mounted evacuation training every three years.

VIII. VALIDATION OF TRAINING

1. It shall be the responsibility of the MSAR team's training officer to maintain a record of those persons and MSAR mounts that have successfully attended a mounted evacuation training course.
2. The training officer of each MSAR Team shall provide proof of evacuation training to any government search and rescue official.
3. Never transport a subject who is NOT a good candidate for a mounted evacuation.

Viewing this standard does NOT qualify anyone to perform this specialized task (mounted evacuation).