DWI DETECTION CLUES, 2018 NHTSA Participant Manual – Rev. 02/18

VEHICLE IN MOTION (5-9/161/190) *

Maintaining Proper Lane Position (p .50-.75)

1. Weaving
2. Weaving across lane lines
3. Drifting
4. Straddling a lane line
5. Swerving
6. Almost striking object or vehicle
7. Turning with a wide radius

Speed and Braking Problems (p .45-.70)

8. Stopping too far, too short, too jerky
9. Unnecessary Accelerating or Decelerating
10. Varying Speed
11. 10mph or more under the speed limit

Vigilance Problems (p .55-.65) (5-11/163/194)

12. Driving Without headlights at night
13. Failure to signal or signal inconsistent with action
14. Driving in opposite lanes or wrong way on one way
15. Slow response to traffic signals
16. Slow or failure to respond to officer's signals
17. Stopping in lane for no apparent reason

Judgment Problems (p .35-.90) (5-12/164/195)

18. Following too closely
19. Improper or unsafe lane change
20. Illegal or improper turn
21. Driving on other than designated roadway
22. Stopping inappropriately in response to officer
23. Inappropriate or unusual behavior (throwing objects, arguing, etc.)
24. Appearing to be impaired

Stopping Sequence (5-25/177)

25. Tries to flee
26. No/slow response
27. Abrupt weave
28. Sudden stop
29. Strikes curb
30. New violations
31. Anything else

PERSONAL CONTACT (p. ≥ .85) (5-13/165)

1. Difficulty with motor vehicle controls
2. Fumbling with driver's license or registration
3. Difficulty exiting the vehicle (Post-Exit)
4. Repeating questions or comments
5. Swaying, unsteady, or balance problems (Post-Exit)
6. Leaning on the vehicle or other object (Post-Exit)
7. Slurred speech (and 6-9/227)
8. Slow to respond to officer or officer must repeat
9. Provides incorrect information, changes answers
10. Odor of alcoholic beverage *from the driver*
11. Bloodshot eyes **(6-7/225)**
12. Soiled clothing
13. Fumbling fingers
14. Alcohol containers
15. Drugs or paraphernalia
16. Bruises bumps or scratches
17. Unusual actions
18. Admission of drinking **(6-9/227)**
19. Inconsistent responses
20. Unusual Statements
21. Abusive language
22. Smell of marijuana **(6-11/229)**
23. Cover-up odors
24. Unusual odors

Exit (6-23/241)

25. Angry, unusual reaction
26. Can't follow instructions
27. Can't open door
28. Leaves vehicle in gear
29. Climbs out of vehicle
30. Leans against vehicle
31. Keeps hand on car

Visual Detection Appendix 5-33/185 Descriptions of Vehicle in Motion Clues

Weaving is alternately moving toward one side of the lane then the other, but within the lane
Weaving across lane lines is more extreme weaving where the vehicle crosses lane lines before a correction is made
Drifting is moving generally in a straight line but at a slight angle to the lane and correcting when approaching or crossing a boundary
Straddling a lane line is moving straight ahead with tires over the line
Swerving is making an abrupt turn away from a generally straight course to either correct drift or avoid a hazard
Inappropriate or Unusual Behavior is throwing objects, drinking in the vehicle, urinating roadside, arguing, or being disorderly
Appearing to be impaired is gripping wheel tightly, face close to windshield, slouching, staring ahead with eyes fixed

SFST PROCEDURES, Session 8, 2018 NHTSA Participant Manual – Rev. 02/18

HORIZONTAL GAZE NYSTAGMUS (HGN)

I. **TEST CONDITIONS** (8-83/369)
- A. Wind, dust, etc. (irritating subject's eyes)
- B. Try to face subject away from flashing or strobe lights that could cause visual or other distractions that could impede the test
- C. Visual or other distractions impeding the test

II. **PROCEDURES TO ASSESS POSSIBLE MEDICAL IMPAIRMENT**
- A. Ask questions about subject's eye and general health questions prior to HGN. Continuing does not follow protocol. (8-29/315)
- B. Prior to administering the HGN, the eyes are checked for equal pupil size, resting nystagmus and equal tracking. (8-27/313)
- C. Unequal Pupil size: medical conditions or injuries (ex. Prosthetic eye, suffering from head injury, or neurological disorder)
  Resting Nystagmus: pathology or Dissociative Anesthetic (PCP) Unequal Tracking ability: injury or illness affecting the brain

III. **ADMINISTRATIVE PROCEDURES** (8-31/317)
- A. Eyeglasses – instruct subject to remove eyeglasses, if worn
- B. Verbal Instructions (8-33/319)
  1. "Put feet together, hands at the side."
  2. "Keep your head still, look at the stimulus, and follow movement of the stimulus with the eyes only."
  3. "Keep looking at the stimulus until the test is over."
- C. Position stimulus 12 to 15 inches from suspect's nose and slightly above eye level (8-31/317)
- D. **Check for Equal Pupil Size & Resting Nystagmus** (8-34/320) - if either are present, it may indicate a medical condition (8-27/313)
- E. **Check for Equal Tracking** – Move the stimulus from center to far right, to far left and back to center (**8 seconds**)
  Speed of the stimulus should be same as for Smooth Pursuit (8-34/320) No Equal Tracking indicates medical condition (8/28/314)
  There should be a clear, distinguishable break between the check equal tracking and lack of smooth pursuit. (Instr. 8-34/366)
- F. **CHECK FOR LACK OF SMOOTH PURSUIT** (8-39/325)
  1. Start in center position, to far right where eye can go no further, to far left, then to center
  2. Check subject's LEFT EYE, then RIGHT EYE (8-40/326)
  3. Stimulus must be moved steadily at a speed that takes 2 seconds from center to side (8-41/327)
  4. Speed/Timing: For each eye check, 2 seconds out, 2 seconds back
  5. Checking for this clue, make at least two complete passes

  (**NOTE: Minimum total time to perform this check on both eyes & to repeat is 16 seconds**)
  6. If the eye is observed to jerk while moving, that is one clue (8-35/321)
- G. **CHECK FOR DISTINCT NYSTAGMUS AT MAXIMUM DEVIATION** (8-45/331)
  1. Check subject's LEFT EYE, then RIGHT EYE
  2. Move stimulus until the eye has gone as far as possible. (8-45/331) Verify no white is showing in corner of eye (15-7/511)
  3. Speed/Timing: Hold the stimulus steady at that position for a minimum of 4 seconds (8-45/331)
  4. Tester must conduct at least 2 passes for each eye

  (**NOTE: Minimum total time to perform this check on both eyes & to repeat is 32 seconds**)
  (NOTE: Nystagmus must be distinct and sustained for a minimum of 4 seconds, slight nystagmus is not enough (8-46/332)
  (NOTE: Unimpaired people have nystagmus at maximum deviation, but it won't be sustained > few seconds. (Instr. 8-30/362)
- H. **CHECK ONSET OF NYSTAGMUS PRIOR TO 45 DEGREES** (8-49/335)
  1. The nose is the starting point
  2. Check subject's LEFT EYE, then RIGHT EYE (8-51/337)
  3. Speed/Timing: Move stimulus at a speed that will take 4 seconds to reach a 45-degree angle
  4. When you see the jerking begin, immediately stop moving the stimulus and hold it steady at that position. If the jerking is not evident when the stimulus is held steady, you have not located the point of onset.
     You must determine whether it is prior to 45 degrees. Verify some white is still showing in the corner of the eye. (8-51/337)
  5. Tester must conduct at least 2 passes for each eye.
  6. If jerking begins prior to 45 degrees, that is one clue. (8-35/321)

  (NOTE: BAC = 50 - Angle of Onset (DRE Participant Manual 2018: 5-2/144))
  (**NOTE: Minimum total time to perform this check on both eyes & to repeat is 40 seconds for a BAC of .10**)

IV. **TOTAL THE CLUES**
- A. Total of 6 clues; 3 for each eye
- B. 4 or more clues equals a 88% likelihood that subject is over .08% BAC (8-56/342)
- C. If the jerking begins prior to 45 degrees it is evident that the BAC is above a .08. (8-30/316)

V. Other Non-Alcohol Causes of Nystagmus – medications or drugs, PAN I&II, Optokinetic, medical conditions/injury (8-19-21/305-307)

VERTICAL NYSTAGMUS – (Used to detect Dissociative Anesthetics (PCP), CNS depressants (High doses alcohol), or Inhalants)
- A. Position stimulus horizontally (parallel to the ground) about 12 to 15 inches in front of subject's nose (8-60/346)
- B. Instruct subject to hold his head still, and follow the object with his eyes only
- C. Raise the object until the suspect's eyes are elevated as far as possible
- D. Hold for a minimum 4 seconds – Must be definite, distinct and sustained for a minimum of four seconds
- E. Watch closely for evidence of the eyes jerking upward

(NOTE: VGN was not examined in the research that validated the SFST's, HGN, WAT, and OLS (Instr. DD-15/621)

WALK & TURN (WAT)

I. **TEST CONDITIONS** (8-62/348)

A. Whenever possible, the WAT test should be conducted on a reasonably dry, hard, level, non-slippery surface
B. Subjects over 65 years old, or persons with back, leg or inner ear problems may have difficulty performing this test
C. Subjects wearing shoes with heels more than 2 inches high should be given the opportunity to remove shoes
D. Subjects with unusual footwear (flip flops, platform shoes, etc.) should be given chance to remove shoes (Instr. 8-62/394)
E. Officers should consider all factors when conducting SFSTs
F. Conditions which may interfere with suspect's performance on WAT include wind/weather conditions, suspect's age, and suspect's footwear (8-86/372)
G. Check for physical problems or disabilities prior to test. Totality of factors should not be overlooked (Instr.8-62/394)

II. **ADMINISTRATIVE PROCEDURES** (8-64/350)

A. **INSTRUCTION PHASE**: Explain the test requirements by giving instructions, **accompanied by demonstrations**

1. "Place your left foot on the line." (real or imaginary)
2. "Place your right foot on the line ahead of the left foot, with heel of right foot against toe of left foot."
3. "Place your arms down at your sides."
4. "Maintain this position until I have completed the instructions. Do not start to walk until told to do so."
5. "Do you understand the instructions so far?" (Make sure subject indicates understanding)
6. "When I tell you to start, take nine heel-to-toe steps on the line, turn, and take nine heel-to-toe steps down the line."
7. "When you turn, keep the front (lead) foot on the line, and turn by taking a series of small steps with the other foot, like this."
8. "While you are walking, keep your arms at your sides, watch your feet at all times, and count your steps out loud."
9. "Once you start walking, don't stop until you have completed the test."
10. "Do you understand the instructions?" (Make sure suspect understands)
11. Instruct the person to begin the test.

NOTE: May be instances to remind suspect the first step from heel-to-toe position is step one. (Instr. 8-65/397)
NOTE: Do NOT deviate from SFST instructions (7-17/263)
NOTE: The WAT is administered and interpreted in a standardized manner i.e., in the same way every time (7-21/267)

B. **TEST INTERPRETATION OF THE WALK & TURN** (8-66-70/352-356)

1. Cannot Keep His Balance While Listening To The Instructions
   a. Record this clue only if subject does not maintain the heel-to-toe position throughout the instructions (feet must actually break apart or step off the line)
   b. Do not score this clue if suspect sways or uses the arms to balance, but maintains the heel-to-toe position
2. Starts too soon – Since you instructed not to start walking until told to do so, record this clue of the subject does not wait
3. Stops While Walking – Do not record this clue if the subject is merely walking slowly
4. Does Not Touch Heel-to-Toe – gap between heel and toe must be more than ½ inch
5. Steps Off The Line –the subject steps so that one foot is entirely off the line
6. Uses Arms To Balance – **one or both arm(s)** must be raised more than 6 inches from sides in order to maintain balance
7. Improper Turn
   a. Subject removes front foot from the line while turning
   b. Subject has not followed directions as demonstrated (ie. spins/pivots around or loses balance while turning)
   c. Taking the wrong number of steps and turning right is not a clue for improper turn if the turn is done correctly with a series of small steps. (Instr. 8-68/400)
8. Incorrect Number of Steps – either more or fewer than nine steps in either direction.
   a. Actual steps taken not number of verbal count. (Instr. 8-68/400)

NOTE: If suspect cannot do test, record observed clues and document the reason for not completing test, e.g., suspect's safety
NOTE: If suspect has difficulty at some point performing this test (ex. steps off the line), Continue from that point, not from the beginning. This test may lose its sensitivity if it is repeated several times.
NOTE: Observe from a safe distance and limit your movement which may distract the subject during the test. (8-69/355)

III. **TOTAL THE CLUES** (8-79/356)

A. Total of 8 clues
B. If subject exhibits 2 or more clues or fails to complete it, classify the subject's BAC at or above a .08 (79% accurate)
C. Remember, each clue may appear several times, but still only constitutes one clue. (8-88/374 OLS)
D. Remind Participants, if a subject stops while walking even once, that will count as one clue; but in order to prepare a clear, descriptive arrest report, it is best to document how many times subject paused while walking. (Instr. 8-84/416)

ONE-LEG STAND (OLS)

I. **TEST CONDITIONS** (8-73/359)

A. Test should be conducted on a reasonably dry, hard, level, non-slippery surface.
If not, research recommends, subject be asked to perform the test elsewhere or only HGN be administered

B. Individuals over 65 years of age, people have back, leg or inner ear problems, or people who are overweight by 50 or more pounds have difficulty performing this test

C. Individuals wearing heels more than 2 inches high should be given the opportunity to remove their shoes

D. Subjects with unusual footwear (flip flop, platform shoes, etc.) should be offered opportunity to remove (Instr. 8-74/406)

E. Check for physical problems or disabilities prior to test. Totality of factors should not be overlooked (Instr.8-72-74/404-406)

II. **ADMINISTRATIVE PROCEDURES**

A. **INSTRUCTION PHASE – INITIAL POSITIONING & VERBAL INSTRUCTIONS** (8-75/361)

Initiate the test by giving the following instructions, accompanied by demonstrations.

1. "Please stand with your feet together and your arms down at the sides, like this."
2. "Do not start to perform the test until I tell you to do so."
3. "Do you understand the instructions so far?"
4. "When I tell you to start, raise either leg with the foot approximately six inches off the ground, parallel to the ground"
5. "Keep both legs straight, arms at your side."
6. "While holding that position, count out loud in the following manner: 'one thousand one, one thousand two, one thousand three, and so on until told to stop."
7. "Keep your arms at your sides at all times and keep watching the raised foot."
8. "Do you understand?" (Officer must receive affirmative response before continuing, (Instr. 8-76/408))
9. "Go ahead and perform the test."

NOTE: The officer should always time the 30 seconds. Test should be discontinued after 30 seconds

NOTE: If the suspect puts the foot down, give instructions to pick the foot up again and continue counting from the point at which the foot touched. (8-78/364)

NOTE: If suspect can't do the test, record observed clues and document the reason for not completing the test, e.g., suspect's safety (8-78/364) Inability to complete the OLS occurs when the subject is in danger of falling. (7-26/272)

NOTE: 30 second timing is important! (7-24/270)

NOTE: Minimize officer movement during the test so as not to interfere (8-79/365)

B. **TEST INTERPRETATION OF THE OLS TEST** (8-77/363)

1. Sways While Balancing – side-to-side or back-and-forth motion while maintaining one-leg stand position
Slight tremors of the foot or body should not be interpreted as swaying
2. Uses Arms To Balance – subject moves **arms** 6 or more inches from side of the body in order to keep balance
3. Hopping – Subject is able to keep one foot off the ground, but resorts to hopping in order to maintain balance
4. Puts Foot Down – not able to maintain one-leg position, putting the foot down one or more times during 30 second count. If subject puts the foot down, instruct to pick the foot up and continue counting. (8-78/364)

III. **TOTAL THE CLUES** (8-79/365)

A. Total of 4 clues

B. If subject exhibits 2 or more clues or fails to complete it, classify the subject's BAC at or above a .08 (83% accurate)

C. Remember, each clue may appear several times, but still only constitutes one clue. (8-88/374)

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Preface: Instructor Admin. 6

The DWI Detection and Standardized Field Sobriety Testing (SFST) training curriculum prepares police officers and other qualified persons to conduct the SFSTs for use in driving while impaired (DWI) investigations. This training, developed under the auspices and direction of the NHTSA and the IACP, has experienced remarkable success since its inception in the early 1980s. As in any educational training program, an instructor guide is considered a "living document" that is subject to updates and changes based on advances in technology and science. A thorough review is made of information by the IACP Technical Advisory Panel (TAP) of the Highway Safety Committee of the IACP with contributions from many sources in health care science, toxicology, jurisprudence, and law enforcement. Based on this information, any appropriate revisions and modifications in background theory, facts, examination, and decision-making methods are made to improve the quality of the instruction as well as the standardization of guidelines for the implementation of the SFST curriculum. The reorganized manuals are then prepared and disseminated, both domestically and internationally. Changes will take effect 90 days after approval by the TAP, unless otherwise specified or when so designated. The procedures outlined in this manual describe how the SFSTs are to be administered under ideal conditions. We recognize that the SFSTs will not always be administered under ideal conditions in the field because such conditions do not always exist. Even when administered under less than ideal conditions, they will generally serve as valid and useful indicators of impairment. Slight variations from the ideal, i.e., the inability to find a perfectly smooth surface at roadside, may have some effect on the evidentiary weight given to the results; however, this does not necessarily make the SFSTs invalid.

DWI Detection and Standardized Field Sobriety Testing (SFST)

2-51/75: On the average, a person's BAC after peak will drop by 0.015 per hour.
2-54/78: Four beers in quick succession on an empty stomach will put 175lb. man at .08
4-11/127: Duty to carry out appropriate tasks to make sure all relevant evidence of DUI is gathered
4-16-21/132-137: Importance of field notes/reports and must be completely documented as it is extremely short-lived (21)
5-16-17/168-169 & Pamphlet on 201-218: Motorcycle clues
6-20/238: Non-Standardized FST's
Instr. 6-22/286: The alphabet, count down, and finger count tests, etc. have not been scientifically validated
7-15/261: Tests that are difficult for a sober subject to perform have little or no evidentiary value
7-17/263: Do NOT deviate from SFST instructions. Not exclusive to WAT - Instr. 7-17/309
7-27/273: PBT does <u>not</u> indicate impairment. Impairment varies widely for people with the same BAC
7-28/274: PBT should never be sole basis for arrest, Use PBT *<u>after</u>* SFST's
7-31/277: False high PBT: mouth alcohol/cigarettes/acetone/other contaminants. Use 15-20 min observation period
7-34/280: The arrest decision is based on all evidence that has come to light since your attention first drawn to the vehicle
8-7/293: Finger to nose and Finger Dexterity were in the group of tests they tried to validate and they were rejected.
8-17/303: It is necessary to emphasize this validation applies only when: (1) The tests are administered in the prescribed, standardized manner, (2) The standardization clues are used to assess the suspect's performance, (3) The standardization criteria are employed to interpret that performance.
<u>If any one of the SFST elements is changed, the validity may be compromised.</u>
8-28/314: Even though a possibility of alcohol/drug impairment may exist be aware of medical conditions having symptoms in common with alcohol influence.
8-29/315: If the eyes track together, continue with the test. If testing is continued this does not follow the standardized protocol.
8-68/363: WAT: The subject raises **one or both arms** six or more inches from the sides in order to maintain balance.
8-77/363: OLS: Subject moves **arms** 6 or more inches from the side of the body in order to keep balance.
8-81/367: The number of clues is important to the police officer in the field, because they help determine whether there is probable cause to arrest. But to secure a conviction, more descriptive evidence is needed.
11-6/404: IACP & NHTSA strongly recommend use of SFST Field Arrest Log. It is important in documenting an officer's experience and proficiency in performing and interpreting SFST's.
DD-33/589: Tolerance means the same dose will produce diminishing effects, may exhibit little evidence of impairment
DD-37/593: No HGN or VGN on marijuana
Instr. 8-62/394: Prior to any psychophysical tests officers are to ask if they have any physical problems or disabilities
References to Validation Studies:
8-5/291: California Lab – 1977, California Lab and Field – 1981, Maryland/DC/NC/Virginia Field – 1983
8-12-17/298-303: Colorado – 1995, Florida – 1997, San Diego – 1998

Validation Study References

Robustness of the HGN Test 2007: Pg. 15/25: 6 Clues >= .06 and 4 Clues >= .03
False Positive: Too High = 61% Pg. 18/28, Too Low = 52% Pg. 18/28, Too Close 69% Pg. 21/31, Too Far, 61% Pg. 21/31
Nystagmus Testing in Intoxicated Individuals 2003: Pg. 2/2: Saccades for can start at 30 degrees per second (2 second pace)
Detection of DWI at BACs <.10: Pg. E-10/98: Clues eliminated as unreliable: Flushed face, bloodshot eyes, disheveled appearance
Validation of SFSTS at BACs <.10 1998: Pg. 21/31: Percentage of failure under the legal limit: WAT 53%, OLS 41%, HGN 37%

ARIDE: Advanced Roadside Impaired Driving Enforcement

Tests: LOC 5-6/154, Pupil Size 5-14/162, Modified Romberg 5-17/165, Finger to Nose FTN 5-25/173
Romberg Grading: tremors, sway, stop at 90 sec, estimate number of inches of sway and direction, +- 5 Seconds 5-24/172
Instructions 5-21/169
5-28/176: HGN VGN LOC and Pupil size in relation to drug categories
8-28/356: If you didn't write it down it didn't happen

DRE: Drug Recognition Expert Course

4-6/96: 1. Breath Alcohol Test 2. Interview of Arresting Officer 3. Preliminary Examination 4. Examinations of the Eyes 5. Divided Attention Tests 6. Examination of Vital Signs 7. Dark Room Examinations 8. Examination of Muscle Tone 9. Examination of Injection sites 10. Subject Statements and Other Observations 11. Opinion of Evaluator 12. Toxicological Exam
5-4/144: 50 minus angle of onset equals BAC (Tharp's Equation)