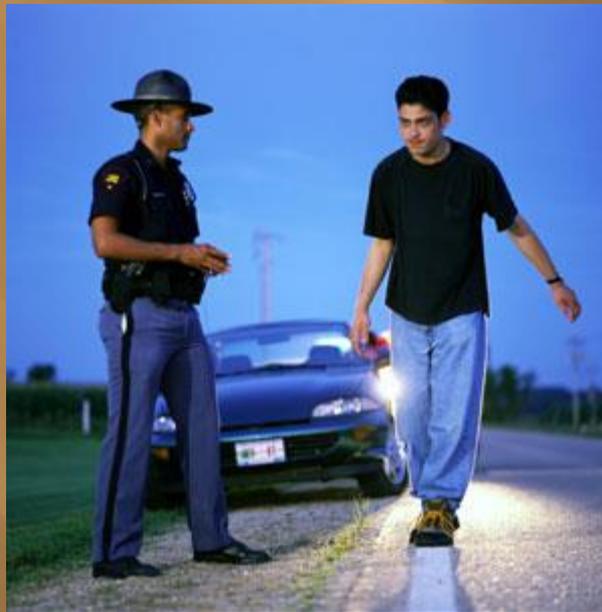


STANDARDIZED FIELD SOBRIETY TESTING AND INTOXILYZER REVIEW



My Contact Info:

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What Our Unit Can Do for You:

- ▣ For the entire state, we cover:
 - Intoxilyzer
 - Standardized Field Sobriety Testing
 - ARIDE (Advanced Roadside Impaired Driving Enforcement)
 - DRE (Drug Recognition Expert) Program
 - Trooper/Officer Phlebotomist Program
- ▣ We can:
 - Help you establish rebuttable presumption for Intox
 - Provide expert testimony on the Intox and SFST's
 - Retrograde extrapolation and Widmark analyses

New NHTSA Manual!

October 2015 Edition

Now available at fine police departments
everywhere...

2015 NHTSA Updates:

- ▣ Made language more ofc/ pros. friendly: “If any one of the SFST elements is changed, the validity may be comprised.” (emphasis added)
- ▣ Added HGN instructions on non-functioning eyes.
- ▣ Should be a break on video between medical assessment and LOSP
- ▣ WAT turn: don't count 'improper turn' if ended up on wrong foot in front.

2013/2015 NHTSA Updates

- ▣ Review of field research showed increased predictive capability for the SFST's:
 - HGN: 88% correct on this alone (up from 77%)
 - WAT: 79% correct on this alone (up from 68%)
 - OLS: 83% correct on this alone (up from 65%)
- ▣ Review showed strong possibility SFST's could discriminate BAC's above 0.04 (new 0.05 recommendations?).
- ▣ Removed HGN/WAT combined probability

Overview

- ▣ Standardized battery consists of three tests:
 - Horizontal Gaze Nystagmus (HGN)
 - Walk and Turn (WAT)
 - One Leg Stand (OLS)
- ▣ Research began in late 1975.
- ▣ SFST's have enjoyed wide-spread acceptance.
- ▣ By following standardized practices, officers can increase their predictive capability.

Standardized Elements

- ▣ Administrative Procedures or Instructions
 - Verbatim recital is NOT required.
 - Crucial points *must* be covered, however.
- ▣ Standardized Criteria (Clues)
 - All officers are looking for the same things nationwide.
- ▣ Standardized Evaluation or Decision Point
- ▣ Tests should be given in proper order unless there is a reason not to (injury, refusal, etc.).

Horizontal Gaze Nystagmus

- ▣ This test is the most reliable and accurate of the standardized battery.
- ▣ While the severity of nystagmus will vary between individuals, nearly *everyone* who is above per se levels will exhibit some of the clues.

HGN Continued

- ▣ Alternative Causes of Nystagmus:
 - Vestibular:
 - ▣ Rotational and post-rotational
 - ▣ Caloric
 - ▣ PAN
 - Neurological:
 - ▣ Optokinetic
 - ▣ Physiological
 - ▣ Pathology or Injury
 - Please Note: Many alternative causes of nystagmus exhibit as resting nystagmus

HGN Procedures

- ▣ The following must be covered according to the NHTSA Manual:
 - The officer must check for resting nystagmus, equal tracking and pupil size to rule out medical conditions or injuries.
 - Eyeglasses should be removed.
 - The stimulus should be held 12-15 inches from the face, slightly above eye level.
 - Each clue must be checked in order, and each eye must be checked for each clue at least twice.
 - The officer must start with the subject's left eye, or the officer's right side.

HGN Clues

- ▣ The following clues will ordinarily appear in order as the level of intoxication rises.
 - Lack of smooth pursuit: The eye will exhibit a jerky or 'ratchet' motion as it moves laterally
 - Distinct and sustained nystagmus at maximum deviation. The stimulus must be held for a minimum of four seconds but less than 30.
 - Onset of nystagmus prior to 45 degrees. To accurately see this clue, the officer must stop the stimulus once it is observed. Generally, as intoxication rises, the angle of onset gets closer to centerline.
 - Total clues and check for VGN.

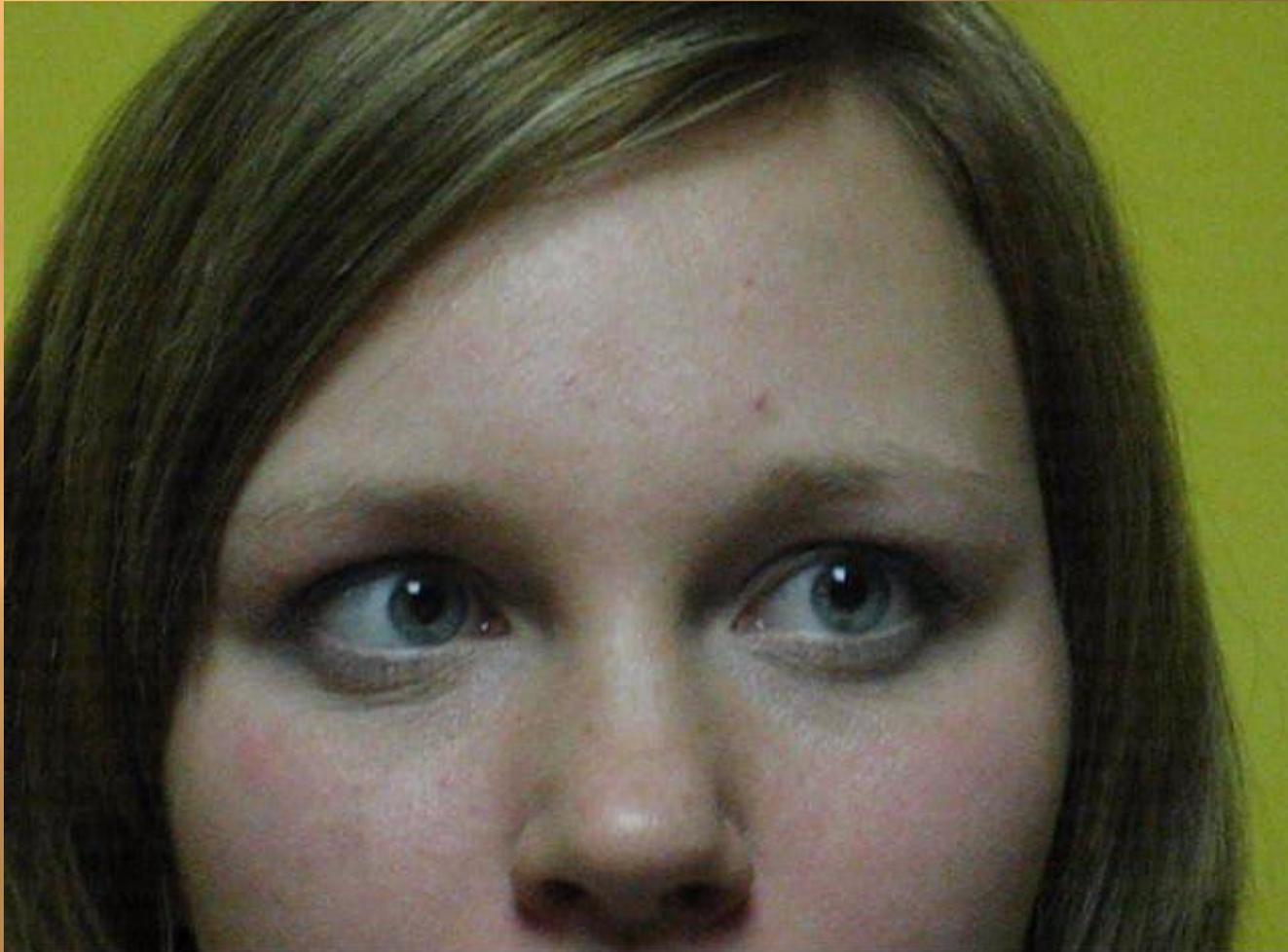
HGN Procedures, Cont'd

- ▣ Timings:
 - LOSP: approx. 2 seconds out and back
 - Max. Deviation: hold for at least 4 seconds no more than 30 seconds
 - Onset < 45: Approx. 4 seconds to reach 45 degrees
 - VGN: Treat like max. deviation (hold at least 4 seconds)
- ▣ HGN should take approximately 1.5 minutes with correct timings.

Sober Individual, 'Jodi'
BrAC .000

Same Individual, 'Jodi'
BrAC .155

Unequal Tracking



Immediate Onset



Optokinetic Nystagmus



Caloric Nystagmus



HGN Considerations

- ▣ Officers are trained to look for VGN.
- ▣ There are 6 clues possible on this test. If 4 or more are exhibited, there is an excellent chance the subject is .08 or higher. (4/6 = 88%)
- ▣ HGN is not accepted as scientific, but helps establish probable cause for the arrest.

HGN New for 2013/2015:

- ▣ NHTSA recommends a noticeable 'break' between equal tracking and LOSP.
- ▣ NHTSA now states 'at least' twice when checking each eye and states additional passes ok on LOSP.
- ▣ Manual also now indicates that HGN can be performed on someone lying down. (2013 Manual, Session VIII, pg. 13)
- ▣ Optokinetic nystagmus now has stronger disclaimer that it will not be seen.

Common HGN Defenses

- ▣ Alternative Causes:
 - Optokinetic, caloric (occasionally), post-rotational and pathology
 - Other substances/ drugs

Common HGN Defenses

- ▣ Procedural:
 - Medical/Injury screening
 - Foot positioning
 - Timings on all phases of the test
 - Stimulus position and how distance was estimated
 - Estimating 45 degrees...how was it done?
 - *Subject position (standing, sitting, laying, feet together)
 - *Number of passes
- *Should be less problematic with 2013 program

Walk and Turn

- ▣ Extensive 'Instructional Phase'
- ▣ Relies, as does the one leg stand, on the concept of 'divided attention'. Useful for drugs other than alcohol.
- ▣ Injuries of the legs or back, as well as individuals over 65 years of age or with inner ear disorders can affect the performance on this test.
- ▣ Should be conducted on a 'reasonably dry, hard, level, non-slippery surface'.

WAT Procedures

- ▣ Administrative Procedures:
 - Subjects should be questioned about injuries and given the option to remove unusual footwear.
 - An actual straight line is NOT required. An imaginary line will suffice.
 - Subject must be placed in a heel-to-toe position for the instructional phase or the two clues in this section cannot be counted.
 - Research found that varying environmental conditions did NOT affect the validity.

WAT, Cont'd

- ▣ Administrative Procedures, Cont'd:
 - “Place your left foot on the line (real or imaginary).”
 - “Place your right foot in front of it, touching heel to toe.” (Demonstrate)
 - “Keep your arms at your sides and do not start until instructed to begin. Do you understand?”
 - “When told to start, take nine steps touching heel-to-toe, down the line, turn in the manner I will demonstrate, and take nine steps back.” (Demonstrate the turn)
 - “While walking, keep your arms at your sides, look at your feet, and count your steps out loud. Once you have begun, do not stop walking until you have completed the test. Do you understand? Do you have any questions?”

Walk and Turn Clues

- ▣ Instructional Phase:
 - Cannot maintain balance
 - Starts too soon
- ▣ Walking Phase:
 - Miss heel to toe ($> \frac{1}{2}$ inch)
 - Steps offline
 - Raises arms (> 6 inches)
 - Stops Walking (for any reason)
 - Improper Turn
 - Improper number of steps

WAT Considerations

- ▣ Exhibiting a particular clue more than once still only counts as one clue.
- ▣ There are 8 possible clues on this test. If 2 or more are exhibited, there is an excellent chance that the subject is over .08. ($2/8 = 79\%$)
- ▣ If the test must be discontinued for safety reasons, the clues observed to that point are counted and the reason for discontinuation noted.
- ▣ The test is still possible with an injured person. Clarification of the injury is necessary.
- ▣ The test is still possible with an elderly or obese individual. However, those conditions must weigh on the officer's decision.

WAT 'Cheating'

- ▣ Hands in pockets or grabbing pants.
- ▣ Eyes forward rather than on feet.
- ▣ Bent knees / almost crouched walking
- ▣ All will make test *easier* to perform. Officers should correct when seen.

WAT New for 2013/2015

- ▣ Clarifies that first step taken from instructional position is 'step 1'.
- ▣ 'Steps offline' is clarified to mean one foot entirely offline.
- ▣ Clarifies 'improper turn' in the event that an improper number of steps is taken. (No longer considered 2 clues. It is a symptom of the improper # of steps.)

Common WAT Defenses

- ▣ Injuries/Illness:
 - Solution: Clarify extent of injury at current time. “Can you walk and stand normally? Do you limp? Do you require mobility assistance normally? What do you do for a living? I see the stamp on your hand. Are you coming from the club? Were you dancing?”
 - Solution: Clarify how long ago injury occurred and what treatment received.
 - Solution: In court, how do they walk/stand in court? Any medical documentation of injuries offered?

Common WAT Defenses

▣ Shoes/Footwear

- NHTSA manual states only that individuals with heels higher than 2" or any unusual footwear should be given the opportunity to remove.
- Solution: Give subjects the OPTION to remove footwear.
- Solution: Conduct tests on reasonably hard, flat, dry and level surface to make removing footwear more plausible.
- Solution: What does def. ordinarily wear?
- Moving def. to different area: custody/vehicle impound considerations?

Common WAT Defenses

▣ Environmental Conditions

- “Recent field validation studies have indicated that varying environmental conditions have not affected a suspect’s ability to perform this test.” –NHTSA Manual, 2013, VIII-41
- Reasonable effort to provide the best environment should be made.
- Solutions in Court: How did the *officer* do while demonstrating? Has the officer conducted tests on sober individuals in similar conditions?

Common WAT Defenses

▣ Semantics:

- “So he stopped only to clarify your poor instructions, correct? But you still counted that as a clue because he stopped, correct?”
- “Would you say it takes more or less dexterity and coordination to pivot on the balls of both feet simultaneously than taking small steps?”
- “What does this test have to do with driving?”
- Solution: Test is designed to be as simple and easy as possible. Inability to follow instructions, regardless of whether their actual performance was more ‘difficult’ *is a sign of impairment.*

21:02:33;14



One Leg Stand

- ▣ Relies on the concept of 'divided attention' to measure impairment.
- ▣ Like the WAT, divided attention tests are useful for determining impairment with drugs other than alcohol.
- ▣ Injuries, inner ear problems, age over 65 years or being 50 lbs or more overweight can affect the test.

OLS Procedures

- ▣ Subjects should be questioned about injuries or illness and given the option to remove unusual footwear.
- ▣ “Please stand with your feet together and arms at your sides while I explain this test.”
- ▣ “When told to begin, raise either foot you prefer roughly six inches off the ground.”
- ▣ “Point your toe so that your foot is parallel to the ground.”

OLS Procedures, Cont'd

- ▣ “Look at your foot, keep both legs straight and keep your arms at your sides.”
- ▣ “Count out loud in the following manner: ‘One thousand one, one thousand two, one thousand three and so on until told to stop.’”
- ▣ “The test will last approximately 30 seconds, but continue to count until told to stop. Do you understand? Do you have any questions?”

OLS Clues

- ▣ Swaying: side-to-side, back-and-forth or circular.
- ▣ Raises Arms for Balance: > 6 inches as in the WAT.
- ▣ Hops
- ▣ Puts foot down

OLS Considerations

- ▣ There are four clues possible and if 2 or more are observed, there is an excellent chance that the subject is above a .08. ($2/4 = 83\%$)
- ▣ One clue can be exhibited multiple times, but still counts as only one clue.
- ▣ This test **MUST** be timed for 30 seconds.
- ▣ If the test is discontinued for safety, the clues observed to that point are counted and the reason for stopping noted.
- ▣ The test can still be conducted with persons who are injured, obese or elderly.

OLS Considerations Cont'd

- ▣ OLS can give some information on how def.'s internal clock is functioning.
- ▣ Officers should be cognizant of and correct 'cheating' such as:
 - Bending knees (shock absorbers = easier test)
 - Hands in pockets/ grabbing pants
 - Eyes forward rather than on foot
 - Prosecutors: If these are noted in a report, this will make the test *easier* for def. to perform.

Common OLS Defenses

- ▣ Most objections are exactly the same as those for WAT and can be disarmed in the same ways.
- ▣ Environment: Which way were they faced? Incline? Given the option of which way to face?

OLS New for 2013/2015:

- ▣ Not a whole lot.
- ▣ Emphasized “with your foot parallel to the ground” rather than “point your toe.”

Optional, Screening and Additional Tests

- ▣ With the non-standardized and non-validated tests, the officers must be able to articulate what actions were indicative of impairment and why.
- ▣ They can be used in place of the standardized, divided attention tests when physical disabilities are present.

Alphabet and Counting

- ▣ Based on divided attention again, but purely mental.
- ▣ Alphabet:
 - Confirm education level
 - Ask the subject to recite the alphabet forward starting at any letter other than 'A' and ending at any letter other than 'Z'.
- ▣ Counting:
 - Confirm education level
 - Ask the subject to count backwards any series of numbers greater than 15. The start and end points should not end with 5 or 0. (Ex. — "Please count backwards starting at 67 and stop at 41.")

Typical Impaired Alphabet
Performance: Bryan

Mistakes and Compromised Validity

- ❑ ~~Defense Attorneys typically cite NHTSA Manual, Session VIII, page 19: “IF ANY ONE OF THE STANDARDIZED FIELD SOBRIETY TEST ELEMENTS IS CHANGED, THE VALIDITY IS COMPROMISED.” (Section no longer exists in 2013 Manual)~~
- ❑ Compromised validity can mean two different things:
 - A mistake can make an officer more likely to *arrest* an individual who is not impaired.
 - A mistake can make an officer more likely to *release* an individual who is impaired.
 - ‘Compromised Validity’ simply means a change in the predictive capability of the test. It can go both ways.

Mistakes and Compromised Validity

- ▣ For example:
 - Moving the stimulus in HGN faster than 30 degrees per second can induce optokinetic nystagmus.
 - Moving the stimulus *slower* than 2 seconds out and back, though, makes an officer more likely to miss the clue entirely.
- ▣ Example 2, Improper Instructions on 9 Step WAT :
 - Failing to instruct a subject how turn can cause an officer to record a clue improperly.
 - Failing to put a subject in the heel to toe position deprives the officer of two clues entirely.

Intoxilyzer

Intoxilyzer Intro

- ▣ Intoxilyzer:
 - IR spectroscopy
 - Slope detector
 - Temperature *control*
 - RFI detection
 - Full diagnostic prior to test
 - Periodic calibration checks
 - Evidentiary value

Intoxilyzer Program Features

- ▣ Legislative authority: 41-6a-515
- ▣ Administrative Rule: R714-500
- ▣ Technicians check within 40 days.
- ▣ Technicians use a wet-bath simulator and trip fail-safes intentionally.
- ▣ Produced/provided certificates establish the rebuttable presumption and meet hearsay exception 803(6)
- ▣ Notes on cert's don't necessarily mean anything was wrong.

Intoxilyzer

- ▣ Intoxilyzer 'Insufficient Sample':
 - Requirements not met.
 - Allow Intox to 'time out' (3 minutes).
 - Attempt another test or get blood!
 - Argument can be made in court that this is a baseline.
 - Count as a 'refusal' for DLD purposes.
- ▣ Utah is a one test state!
 - If you get a valid test and do not like the result, do not continue doing breath tests.
 - Get blood.



Intoxilyzer

- ▣ Common Intoxilyzer Defenses:
 - Baker
 - ▣ Not going away.
 - ▣ Silent burp/belch is common assertion.
 - ▣ Leave handcuffs on.
 - ▣ Ask 'em! No harm.
 - ▣ Trained best practices are not the only effective way to do it.
 - Timekeeping
 - ▣ Intox not synced to anything.
 - Conditions (if mobile, typically)
 - Other defenses are asserted, but usually answered by technician; not arresting officer

Intoxilyzer

- ▣ What novel Intox defenses have you seen?
 - Gender/size bias?
 - “Margin of Error”?
 - Foreign Substances/Interferents?
 - Mouthpiece Issues?
 - Lack of independent testing?
 - Utah program vs. other states?

Questions???



Contact Info, Take Two

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