

Indiana and the EC/IR II

- ### Goals
- Talk about the EC/IR II
 - Talk about officer training on the EC/IR II
 - Talk about the state of the Indiana breath test case law
 - Update on the Department of Toxicology

- ### New Breath Test Instrument
- Switching from the BAC DataMaster to the Intox EC/IR II
 - NHTSA approved as an evidentiary breath alcohol instrument
 - EC = Electrochemical (fuel cell)
 - Measures the amount of ethanol
 - IR = Infrared
 - Detects mouth alcohol

EC/IR II

- How does it work?
- Electrochemical process takes place which creates an electrical charge
- The strength and consistency of the charge is graphed to get an accurate readout
- From the amount of the energy produced, you can determine the amount of "fuel" put in

EC/IR II

- What is it detecting?
- The fuel cell is specific to alcohol, but not only ethanol, HOWEVER...
 - Methanol and isopropanol are detected as interferences, so you won't get a reading if those are the detected alcohol
 - Nothing checks for acetone, but the levels of acetone required to register would be fatal

EC/IR II

- How do I know it's working?
- Instrument performs a calibration check before and after each breath test by testing a sample from an internal dry gas tank containing a certified value of ethanol and nitrogen

EC/IR II

- Instrument will disable if result of each calibration check is not within .005 or 5%, whichever is greater, of the target value
 - The target value automatically adjusts for barometric pressure
 - This will explain why a .08 tank may readout at .79 as the target
 - Decreased pressure means less ethanol in a sample, so you'll have a lower number
 - Note: This is an issue with current Datamaster instruments as well

EC/IR II

- Safeguards
- The instrument will display a status message when it:
 - Fails a calibration check
 - Malfunctions
 - The dry gas tank is low

EC/IR II

- The instrument should not be operated around:
 - Heavy alcohol vapor
 - Cigarette Smoke
 - High levels of radio frequencies
 - Magnetic Interference
- The instrument is designed so none of these will effect the readings, but may shorten the life of the fuel cell

Sample Ticket																																					
<p style="font-size: small;">Intox EC/IR-II Subject Test ISDT 550 W. 26th Street Indianapolis, IN 46202 Serial Number: 011082 Test Number: 47 Test Date: 08/07/2013 Test Time: 10:50 EDT Operator Name: Bunion, Paul R Operator Certification Number: G99999 Agency Name: Skyville Observation Began: 08/07/2013 at 10:40 Observer Name: Bunion, Paul R Driver License Number: 13456789 Subject Name: Sobel, Stone Subject D.O.B.: 05/31/1964 Dry Gas Target: 0.077 Lot Number: AG327603 Tank Number: 4 Exp Date: 06/05/2015 System Check: Passed internal diagnostics Test g/210L Time</p> <table border="0" style="font-size: x-small;"> <tr><td>BLK</td><td>0.000</td><td>11:00</td><td>blank check</td></tr> <tr><td>CHK</td><td>0.076</td><td>11:01</td><td>calibration check</td></tr> <tr><td>BLK</td><td>0.000</td><td>11:02</td><td>blank check</td></tr> <tr><td>SUBJ</td><td>0.120</td><td>11:03</td><td>1st subject test</td></tr> <tr><td>BLK</td><td>0.000</td><td>11:04</td><td>blank check</td></tr> <tr><td>SUBJ</td><td>0.118</td><td>11:04</td><td>2nd subject test</td></tr> <tr><td>BLK</td><td>0.000</td><td>11:05</td><td>blank check</td></tr> <tr><td>CHK</td><td>0.076</td><td>11:06</td><td>calibration check</td></tr> <tr><td>BLK</td><td>0.000</td><td>11:07</td><td>blank check</td></tr> </table> <p>Test Status: Sample Complete RESULT: 0.118 g/210L subject's BAC 11:04 EDT, (the lower of the two results)</p> <p style="font-size: x-small;">08/07/2013 ALCOHOL READINGS ARE EXPRESSED AS GRAMS OF ALCOHOL PER 210 LITERS OF BREATH</p> <p style="text-align: center; font-size: x-small;">Operator Signature _____</p>		BLK	0.000	11:00	blank check	CHK	0.076	11:01	calibration check	BLK	0.000	11:02	blank check	SUBJ	0.120	11:03	1st subject test	BLK	0.000	11:04	blank check	SUBJ	0.118	11:04	2nd subject test	BLK	0.000	11:05	blank check	CHK	0.076	11:06	calibration check	BLK	0.000	11:07	blank check
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EC/IR II – Notable Changes	
<ul style="list-style-type: none"> ▪ Waiting period adjustment <ul style="list-style-type: none"> ▪ Current waiting period is 20 minutes ▪ This waiting period was established to insure that any mouth alcohol and sufficient time to dissipate ▪ Most experts agree that mouth alcohol dissipates in 12 minutes ▪ Waiting time is being changed to 15 minutes to help allow for the difference in time taken to complete two tests 	<hr/>

EC/IR II – Notable Changes	
<ul style="list-style-type: none"> ▪ Two tests <ul style="list-style-type: none"> ▪ Eliminates possibility of mouth alcohol <ul style="list-style-type: none"> ▪ GERD effects ▪ Burping ▪ Refusals <ul style="list-style-type: none"> ▪ Statute still says any and all tests offered by the officer ▪ No different than offering an extremely intoxicated person a blood test after a .09 breath test 	<hr/>

EC/IR II – Notable Changes

- Operator cards
 - All officers will have a swipe card to use prior to a test
 - Officers who are not certified will not be able to conduct the test
 - Prevents misuse of codes

Officer Training

- Remains mostly the same
 - Same recertification periods
 - Same Pharmacology/Legal Aspects/Theory/Use standards
- Very little in IAC Title 260 changed in regards to officer training
- Datamaster training is NOT sufficient for EC/IR II certification

Officer Training

- Still in deployment
- By the end of the year, all Datamasters will be phased out
- No departments should use Datamasters

Approved method for Intox EC/IR II

- The approved method that **shall be followed** in making an analysis of breath for ethanol using the Intox EC/IR II breath test instrument has twelve steps (260 IAC 2-4-2)

Approved method for Intox EC/IR II

- STEP ONE: Person to be tested must:
 - > have had nothing to eat or drink,
 - > not have put any foreign substance into mouth or respiratory tract, and
 - > not smokewithin **15** minutes before time first breath sample is taken or at any time from first breath sample until after final breath sample
 - > Fifteen-minute period can begin before subject arrives at testing site

Approved method for Intox EC/IR II

- STEP TWO: Verify that instrument is in ready mode, as indicated by instrument display*
- STEP THREE: Press "Enter" key to start subject test
- STEP FOUR: Insert identification card into barcode reader, or press "Enter" key and use keyboard to enter breath test operator information requested by instrument display

Approved method for Intox EC/IR II

- STEP FIVE: When requested by instrument display, enter beginning date and time of the 15-minute period
- STEP SIX: When requested by instrument display, select "Y" or "N" to indicate whether operator is officer with control of subject during the 15-minute period

Approved method for Intox EC/IR II

- STEP SEVEN: If "N" is selected in STEP SIX, when requested by instrument display, enter information of officer with control of subject during the 15-minute period
- STEP EIGHT: Enter incident information requested by instrument display

Approved method for Intox EC/IR II

- STEP NINE: Enter subject information requested by instrument display by:
 - > inserting subject's driver/operator license or identification card into barcode reader or
 - > pressing "Enter" key and using keyboard to enter available subject information requested by instrument display

Approved method for Intox EC/IR II

- **STEP TEN:** When "Please blow" appears on instrument display, place new mouthpiece in breath tube. Instruct subject to deliver a breath sample. Remove mouthpiece when prompted by instrument display and discard.

Approved method for Intox EC/IR II

- If "**Please blow**" appears on instrument display after completion of STEPS ONE through ELEVEN, perform an additional breath test, beginning with STEP ELEVEN
- If "**No 0.020 Agreement**" is printed on report after this additional test:
 - perform an additional breath test, beginning with STEP TWO and proceeding through STEP TWELVE;
 - obtain an alternate chemical test for ethanol, or
 - perform a breath test on another instrument

Approved method for Intox EC/IR II

- If "**Interfering Substance**" is printed on report, perform an additional breath test beginning with STEP ONE and proceeding through STEP TWELVE
- If "**Interfering Substance**" is printed on report after this additional test sequence:
 - obtain an alternate chemical test for ethanol;
 - perform a breath test on another instrument, or
 - if a numerical value for subject's BAC is printed on a report, check for correct date and time and sign where indicated

Approved method for Intox EC/IR II

- If **"RFI Detected"** is printed on report, locate and remove source of interference, and perform an additional breath test, beginning with STEP TWO and proceeding through STEPTWELVE
- If **"RFI Detected"** is printed on report after this additional test sequence:
 - obtain an alternate chemical test for ethanol;
 - perform a breath test on another instrument, or
 - if a numerical value for subject's BAC is printed on a report, check for correct date and time and sign where indicated

Approved method for Intox EC/IR II

- If **"Mouth Alcohol"** is printed on report, perform an additional breath test, beginning with STEP ONE and proceeding through STEP TWELVE
- If **"Mouth Alcohol"** is printed on report after this additional test sequence:
 - obtain an alternate chemical test for ethanol;
 - perform a breath test on another instrument, or
 - if a numerical value for subject's BAC is printed on a report, check for correct date and time and sign where indicated

Approved method for Intox EC/IR II

- If **"Insufficient Sample"** or **"Time Out"** is printed on report, perform an additional breath test, beginning with STEP TWO and proceeding through STEP TWELVE
- If **"Insufficient Sample"** or **"Time Out"** is printed on report after this additional test sequence:
 - obtain an alternate chemical test for ethanol;
 - perform a breath test on another instrument, or
 - if a numerical value for subject's BAC is printed on a report, check for correct date and time and sign where indicated

Approved method for Intox EC/IR II

- If “Insufficient Sample” or “Time Out” is caused by subject’s lack of cooperation, operator should record that test was refused
- If a numerical value for subject’s BAC is printed on a report, check for correct date and time and sign where indicated.

EC/IR II Challenges

- Repeats of old attacks
 - Object “put” in mouth
 - Observation vs. Deprivation
- Department of Toxicology left most wording in the rules the same
- Same reasoning will apply in most cases

EC/IR II Challenges

- News stories
 - Press still using Toxicology stories
 - Thanks a lot, Mr. Irsay!
 - Defense Attorney class still focuses on these issues
- DOT has adjusted for these issues
 - Extended warranty with Intoximeters
 - All fuel cells tested, and if necessary, replaced
 - Instrument will check to make sure all tests are reliable

EC/IR II Challenges

- Effectiveness of instrument in other states
 - Wyoming ran into trouble with their EC/IR II...
 - ...because they had disabled the IR
- Instrument measurements are based on coding specific to Indiana. Other instruments have a different coding system

EC/IR II Challenges

- Officer certification
 - Portions of the class moved online
 - Defense claims practical test required
 - Department of Toxicology determines certification standards
 - "Competency...I don't know what means"

EC/IR II Challenges

- Rule making authority of Tox
 - Piotrowski decision still in our favor, but expect further attacks
 - Stay in contact with IPAC and DOT
 - These are PRE-trial motions
 - Use notice of lab results statute to bring out early issues

Toxicology Update - Challenges

- Backlog
 - Currently the backlog is months for drugs
 - 4-5 months for alcohol
 - The lab is able adjust for speedy trials, however 'rush jobs' cannot be the norm
 - Call the lab if you have an immediate court date
- Solution
 - Further analysts are being sought which would help reduce the backlog
 - New testing equipment will eventually help
 - PLEASE inform the lab if a case pleads early!

Toxicology Update - Challenges

- Limited testing capability
 - ISDT is only able to test for some drugs
 - Some samples are still being sent on to NMS labs for additional testing
 - Substances tested by NMS may still require out of state witnesses
 - Spice is a special exception...very few labs test for spice, and must be sent out at the county's expense

Toxicology Update - Challenges

- "Can we trust results from the ISDT?"
 - Yes
 - First of major changes was to stop reporting results that should not be reported
 - Testing done now can be supported in court
 - Problems now consist of budgetary and staffing concerns more than testing credibility

Contact Info

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