

HR-XML Consortium 3.2.1 Drug and Alcohol Test Specification

Copyright statement

©2013 HR-XML. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. Printed in the United States of America.



Table of Contents

Drug and Alcohol Testing Specification Overview	3
Actors	3
Trigger / Precondition	4
Supported Processes	5
UC001A - Preordered Drug Test	5
UC001B - Non-preordered Drug Test	8
UC002A - Preordered Alcohol Test	11
UC002B - Non-preordered Alcohol Test	13
UC003A - Preordered Instant Drug Test	15
UC003B - Non-preordered Instant Drug Test	18
Appendix A: Examples	20
UC001A - Preordered Drug Test with Negative Result	20
UC001A - Preordered Drug Test with Positive Result	20
UC001A - Preordered Drug Test, Lab Canceled	20
UC001A – Preordered Drug Test, MRO Canceled	21
UC002A - Preordered Alcohol Test with Negative Result	21
UC002A - Preordered Alcohol Test with Positive Result	21
UC003A - Instant Drug Test with Positive Result	21
UC003A – Instant Drug Test with Negative Result	22
Appendix B: Noun Layouts	23
Appendix C: Business Object Document Diagrams	24



Drug and Alcohol Testing Specification Overview

Keeping the workplace free from the dangers of substance abuse typically starts with prevention methods. One of the most practiced and recognized of these methods is to implement a drug and alcohol testing program. Job applicants may be required to be screened for drug and alcohol use prior to being hired. Additionally, existing employees may be tested for drug and alcohol in the workplace, where allowed by state regulation. In addition to employee safety concerns, substance abuse in the workplace has a negative impact on a company's productivity. The types of drug screening programs can include blood tests, breath alcohol tests, urine drug tests, hair drug tests, saliva drug tests and even sweat drug tests depending on company preference and industry requirements. The lab based urine drug test is the most commonly used screening test for drug substance abuse. The breath alcohol test is the most commonly used screening test for alcohol abuse.

A typical drug test requires collaboration between several service providers, including collection sites, laboratories, medical review officers, and third party administrators. In addition, employers increasingly want drug testing information to be more integrated with other human resource processes and systems. Currently, employers and service providers must negotiate separate requirements for each business-to-business interface of information. With thousands of distinct businesses providing services for specimen collection, analysis, medical review, and program management, establishing and maintaining electronic communication has become a large burden for all participants, ultimately adding to the costs of all participants in the process. This specification is intended to assist trading partners and customers in the exchange of drug testing data.

The key schema included:

DrugTest. This schema provides the information needed to request a drug or alcohol test, provide status of the request, and provide results of the test.

The Drug Test Business Rules (.xls) outline which elements/attributes are required or the best practice for each Drug and Alcohol Testing transaction.

Actors

The potential actors for drug and alcohol screening electronic transactions are described below:

- Applicant Tracking System (ATS). Systems that allow for the electronic handling of recruitment data. These systems provide a mechanism for gathering candidate information and communication with other trading partners. The ATS is responsible for storing candidate eligibility information to work within the United States.
- Front End System (HCM, HRIS, HRMS, Staffing Front Office, etc.). System used by an employer to electronically track an employee's personal data, employment data, payroll data and benefits information. This data is accessed directly by the End User.
- **Employer.** Legal entity that controls and directs a worker under an express or implied contract of employment and pays (or is obligated to pay) him or her salary or wages in compensation.

HR-XML Drug Test 28 January 2013 Page 3



- Medical Review Officer (MRO). An MRO is a licensed physician with knowledge of substance abuse disorders and who has appropriate medical training to interpret and evaluate a positive test result considering the individual's medical history.
- Drug Testing Laboratory. A drug testing laboratory is a medical laboratory certified to conduct
 drug tests. These laboratories may also conduct other types of medical tests. Laboratories follow
 procedures to manage custody and control of test specimens. Laboratories administer
 requested "test panels". A "certifying scientist" at the lab reviews and certifies the result. Under
 U.S. DOT processes, the result is passed on to an independent medical review officer (MRO) for
 interpretation and certification.
- **Specimen Collection Site.** A place selected by the employer where employees present themselves for the purpose of providing a specimen for a drug test.

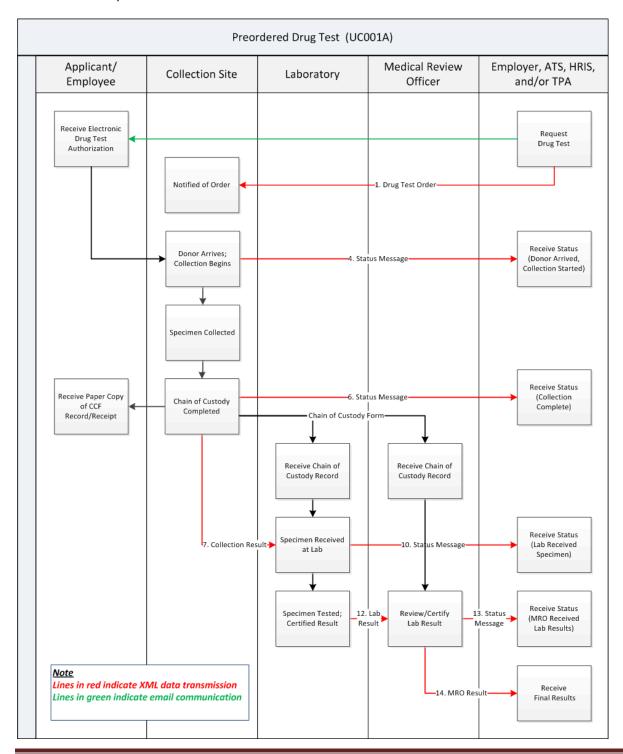
Trigger / Precondition

- Candidate Qualification. Broadly speaking, this refers to a stage within the employer's hiring process at which the candidate is considered to have met the basic job qualifications or otherwise still remains within a pool of candidates considered for a position after the elimination of unqualified candidates. The process and policy governing how candidates are qualified varies widely from employer-to-employer. The key aspect of "qualification" as an event, is that it is likely to trigger other hiring or evaluation processes, such as the scheduling of on-site or follow-up interviews and pre-employment assessments and screenings. Qualification often is not a single threshold, but a series of graduated thresholds, each of which might serve as an event trigger.
- Conditional Employment Offer. This is an offer of employment that is contingent upon the successful completion of a background check or screening or the candidate's delivery of some evidence or requisite related to qualifications or employability (e.g., the candidate's successful graduation or completion of a current course of study, obtainment of a license, etc.). Conditional employment offers need to be constructed with knowledge of applicable law and the particular hiring situation. However, broadly speaking, conditional offers can be: 1. contingent upon the individual passing a background check before they start work, 2. made without restrictions before the background check has cleared, or 3. made with restrictions before the background check has cleared (e.g., a truck driver may enter on duty, but not actually perform in the role of a vehicle driver until screenings are complete).
- Hire. A "hire event" coincides with the point in time at which a person who has been a
 candidate becomes associated with an employer as an employee. Sometimes systems are preprovisioned with information about an individual after he or she has accepted the offer, but
 before the employee enters-on-duty.
- **Periodic or Random Screenings.** Certain compliance or risk management requirements may require categories of employees to undergo scheduled periodic screenings or random screenings (e.g., alcohol and drug use testing).



UC001A - Preordered Drug Test

Summary. This use case defines a Standard Regulated Drug test from the time of pre-order/collection to the time the result is reported to the consumer. The test shows a negative result. Alternate scenarios are available for positive and cancelled tests. Italics in business narrative denote HR-XML transactions.





Business Narrative. ABC Trucking works with a third party administrator to facilitate a drug and alcohol testing program. The Designated Employee Representative for ABC trucking is Jeremy Johnson.

Jonathan Donor was selected for a D.O.T. Regulated random drug screen. His employer, ABC Trucking, provided him with a CCF and sent him to XYZ Collection Facility in Denver, Co. His employer preregistered him for testing electronically and provided him with a registration ID and collection site information. *A notification was sent to the collection site electronically confirming that the order had been placed*. Jonathan showed up at XYZ Collection Facility an hour later and provided the site with the CCF and a copy of his registration ID. The collector, Jane Doe, entered the registration ID in her system and pulled up Jonathan Donor's patient information. *A notification was sent to the consumer electronically notifying them that the patient had shown up for his collection and the collection had begun.* Jane Doe performed the collection for the D.O.T. Regulated random drug screen. Jonathan Donor provided a valid specimen and retained his copy of the CCF and was sent on his way. Jane Doe entered the collection and chain of custody information electronically into her system and completed the collection process. The record of chain of custody was electronically sent to the laboratory and to the MRO. *A notification was sent to the consumer electronically confirming that the collection had been completed*. Lastly, Jane Doe shipped the specimen to the local lab for testing.

Once the laboratory received the specimen and copy of CCF they sent the specimen into testing and entered the specimen information electronically into their database. A notification was sent to the consumer electronically notifying them that the specimen had been received by the laboratory. Approximately 24-72 hours later the specimen testing process was completed and the results were verified as negative. The laboratory electronically transmitted the results to the MRO for review. A notification was sent to the consumer electronically notifying them that the specimen results were sent from the laboratory to the MRO for review. The MRO reviewed and certified the results from the laboratory. A notification was sent to the consumer electronically notifying them that the results had been verified/ certified and a final result were now available for review. The consumer reviewed the results for Jonathan Consumer and took any necessary action based on those results.

Technical Narrative

- 1. Employer orders drug test from collection site (ProcessDrugTest/AcknowledgeDrugTest)
- 2. Employer provides Donor with Authorization (contains ID) and collection site information
- 3. Donor presents at collection site (using ID); Chain of Custody created
- Donor Arrival and/or Collection suspension status sent to Employer (ProcessDrugTest/AcknowledgeDrugTest)
- 5. Urine Collection performed; Chain of Custody completed.
- 6. Urine Collection status sent to employer (ProcessDrugTest/AcknowledgeDrugTest)
- Chain of Custody data sent to laboratory; If non-DOT, electronic CCF may be sent to lab (ProcessDrugTest/AcknowledgeDrugTest)
- 8. Chain of Custody data sent to MRO
- 9. Urine Specimen shipped/received at lab
- *Optional Lab sends Status to account owner/ employer (ProcessDrugTest/AcknowledgeDrugTest)
- 11. Urine Specimen analyzed, Lab result determined/certified



- 12. Lab result sent to MRO for review and MRO determination made (ProcessDrugTest/AcknowledgeDrugTest)
- 13. MRO Status sent to employer (ProcessDrugTest/AcknowledgeDrugTest)
- 14. MRO Result sent to employer (ProcessDrugTest/AcknowledgeDrugTest). This may include the laboratory information as well as their confirmation or it may only include the MRO confirmation.

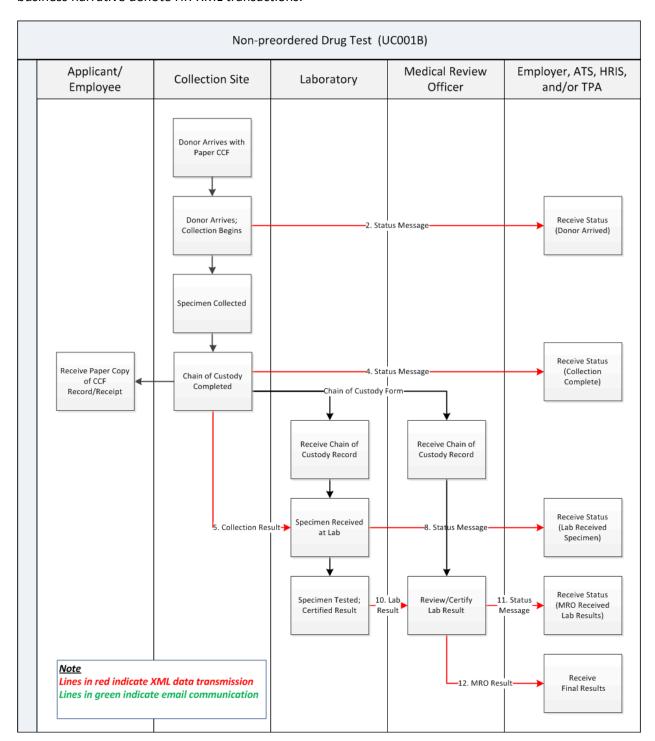
Alternate Scenarios

- 1. Positive Results. Lab analyte results not typically sent to MRO in a positive result.
- 2. Lab Canceled Result. The lab is unable to get a valid result for several reasons, such as adulteration, medicine use, imprecision in validity test, and specimen degradation. The laboratory reports the specimen as invalid by checking "Invalid Result" on the CCF and adding a comment in "Remarks". If a regulated urine specimen is invalid and a negative result is needed, another urine specimen must be collected. The MRO may still receive the results to do further research as needed.
- 3. MRO Canceled Result. The MRO would typically request immediate retest.
- 4. Use Paper CCF for pre-order. There may be situations where an ATS or some other ordering system is used but the employer still gives the donor a paper CCF. Typically the collection site will check for and fetch the electronic order and continue the collection discarding the CCF provided by the donor.
- 5. Non-Regulated. Donor name, phone numbers and DOB may be sent to the lab.
- 6. Non-Regulated. Some Non-Regulated Urine collections do not use an MRO for result verification. Results could go directly to the employer.



UC001B - Non-preordered Drug Test

Summary. This use case articulates the workflow of a Standard Regulated Drug test, with or without Alcohol test, from the time of collection to the time the result is reported to the consumer. Italics in business narrative denote HR-XML transactions.





Business Narrative. Jonathan Donor was selected for a D.O.T. Regulated random drug test. His employer provided him with a CCF and sent him to XYZ Collection Facility in Denver, Co. Jonathan showed up at XYZ Collection Facility an hour later and provided the site with the CCF. The collector, Jane Doe, entered Jonathan Donor's patient information into their system after receiving the information from Jonathan verbally and viewing his CCF. Jane Doe performed the collection for the D.O.T. Regulated random drug. Jonathan Donor provided a valid specimen and retained his copy of the CCF and was sent on his way. Jane Doe entered the collection information electronically into her system and completed the collection process. *The specimen and CCF information was electronically sent to the laboratory and the MRO.* Jane Doe then shipped the specimen to the local lab for testing.

Once the laboratory received the specimen and copy of CCF they sent the specimen into testing and entered the specimen information electronically into their database. A notification was sent to the consumer electronically notifying them that the specimen had been received by the laboratory. Approximately 24-72 hours later the specimen testing process was completed and the results were verified as negative or positive. The laboratory electronically transmitted the results to the MRO for review. A notification was sent to the consumer electronically notifying them that the specimen results were sent from the laboratory to the MRO for review. The MRO reviewed and certified the results from the laboratory. A notification was sent to the consumer electronically notifying them that the results had been verified/certified and a final result were now available for review. The consumer reviewed the results for Jonathan Consumer and took any necessary action based on those results.

Technical Narrative

- 1. Donor presents at collection site (using ID) with paper Chain of Custody
- Donor Arrival and/or Collection suspension status sent to Employer (ProcessDrugTest/AcknowledgeDrugTest)
- 3. Urine Collection performed; Chain of Custody completed
- 4. Urine Collection status sent to employer (ProcessDrugTest/AcknowledgeDrugTest)
- Chain of Custody data sent to laboratory; If non-DOT, electronic CCF may be sent to lab (ProcessDrugTest/AcknowledgeDrugTest)
- 6. Chain of Custody data sent to MRO
- 7. Urine Specimen shipped/received at lab
- 8. * Optional Lab sends Status to account owner/ employer (ProcessDrugTest/AcknowledgeDrugTest)
- 9. Urine Specimen analyzed, Lab result determined/certified
- Result sent to MRO for review and MRO determination made (ProcessDrugTest/AcknowledgeDrugTest)
- 11. MRO Status sent to employer (ProcessDrugTest/AcknowledgeDrugTest)
- 12. MRO Result sent to employer (ProcessDrugTest/AcknowledgeDrugTest)

Alternate Scenarios

1. Non-Regulated Scenario. Donor name, phone numbers and DOB may be sent to the lab.

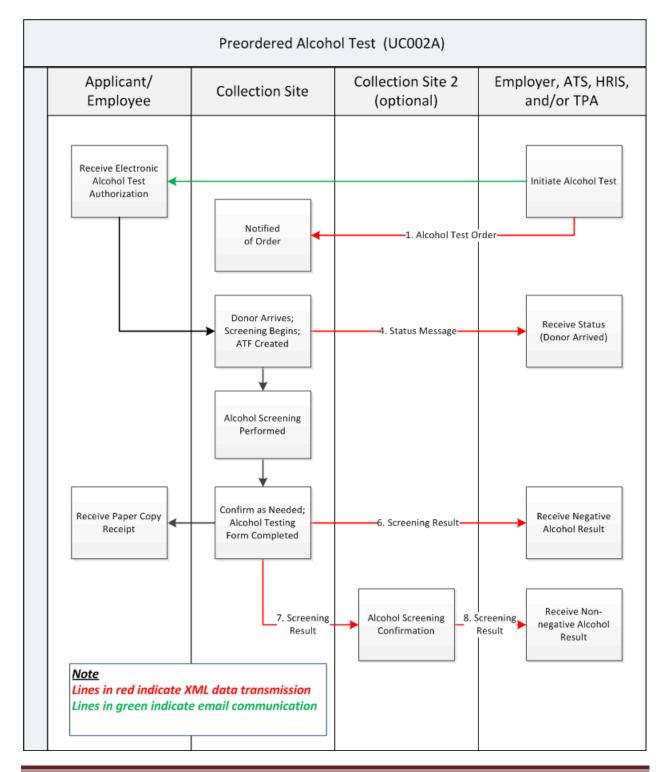


2. Non-Regulated Scenario. Some Non-Regulated Urine collections do not use an MRO for result verification. Results could go directly to the employer.



UC002A - Preordered Alcohol Test

Summary. This use case defines a Standard Regulated Alcohol test, from the time of pre-order/collection to the time the result is reported to the consumer. The test shows a negative result. Alternate scenarios are available for positive results. Italics in business narrative denote HR-XML transactions.





Business Narrative. Jonathan Donor was selected for a D.O.T. Regulated random alcohol screen (accompanied by a random drug screen as discussed in UC001A). His employer pre-registered him for the random alcohol test (and random drug screen) electronically and provided him with a registration ID and collection site information for XYZ Collection Facility in Denver, Co.. A notification was sent to the collection site electronically confirming that the order had been placed. Jonathan showed up at XYZ Collection Facility an hour later and provided the site with the CCF and a copy of his registration ID. The collector, Jane Doe, entered the registration ID in her system and pulled up Jonathan Donor's patient information. A notification was sent to the consumer electronically notifying them that the patient had shown up for his collection and the collection had begun. Jane Doe began the screening for the alcohol test and created the ATF for the D.O.T. Regulated random alcohol screen (and random drug screen as discussed in UC0001A). Jonathan Donor provided a valid breath alcohol specimen, retained his copy of the CCF and was sent on his way. (In the event Jonathan Donor provided a "positive" screen on his initial breath alcohol specimen, the collector would have performed a confirmation alcohol test). A notification was sent to the consumer electronically notifying them that the results were confirmed and available for review. Jane Doe electronically sent the alcohol results (along with the specimen information from the drug screen collection) to the laboratory and then shipped the specimen to the local lab for testing.

Technical Narrative

- 1. Employer orders alcohol test from collection site (ProcessDrugTest/AcknowledgeDrugTest)
- 2. Employer provides Donor with Authorization (contains ID) and collection site information.
- 3. Donor presents at collection site (using ID)
- 4. Donor Arrival and/or Collection suspension status sent to Employer; Alcohol Test Form Created (ProcessDrugTest/AcknowledgeDrugTest)
- 5. Alcohol Screening test performed (collection may occur with breath machine or D.O.T. approved oral device)
- If Negative, Alcohol Testing Form completed. Screen test results sent to Employer (ProcessDrugTest/AcknowledgeDrugTest)
- 7. *Optional. If Non-negative, Alcohol confirmation test performed (donor may be sent to an alternate collection facility) (ProcessDrugTest/AcknowledgeDrugTest)
- 8. Test results sent to Employer (ProcessDrugTest/AcknowledgeDrugTest)

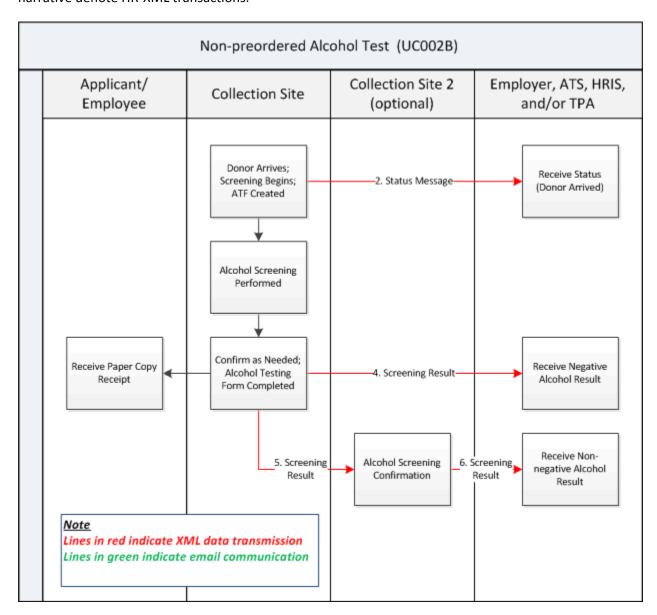
Alternate Scenario

- 1. Positive Results. The donor may be sent to an alternate collection facility for confirmation.
- 2. Drug Test results included. The breath alcohol results are known as soon as the test is complete and entered into the system. The collection site conducting the breath alcohol test shall inform the employer of the positive results. In some cases, the employer requires that the breath alcohol is combined with the drug screen and the combined results are available when the later reaches a complete status.
- 2. Non-Regulated Scenario. Alcohol cut-off level for positive results may vary from .02 and can be specified by the employer.



UC002B - Non-preordered Alcohol Test

Summary. This use case articulates the workflow of a Standard Regulated Drug test, with Alcohol test, from the time of collection to the time the result is reported to the consumer. Italics in business narrative denote HR-XML transactions.



Business Narrative. Jonathan Donor was selected for a D.O.T. Regulated random alcohol screen (accompanied by a random drug screen as discussed in UC001A). His employer sent him directly to collection site, XYZ Collection Facility in Denver, Co. Jonathan showed up at XYZ Collection Facility an hour later. Jane Doe created an order in her system for Jonathan Donor. *A notification was sent to the consumer electronically notifying them that the patient had shown up for his collection and the collection had begun.* Jane Doe began the screening for the alcohol test and created the ATF for the D.O.T. Regulated random alcohol screen Jonathan Donor provided a valid breath alcohol specimen, retained his copy of the CCF and was sent on his way. (In the event Jonathan Donor provided a "positive" screen on

HR-XML Drug Test 28 January 2013 Page 13



his initial breath alcohol specimen, the collector would have performed a confirmation alcohol test). A notification was sent to the consumer electronically notifying them that the results were confirmed and available for review. Jane Doe electronically sent the alcohol results (along with the specimen information from the drug screen collection) to the laboratory and then shipped the specimen to the local lab for testing.

Technical Narrative

- 1. Donor presents at collection site
- 2. Donor Arrival and/or Collection suspension status sent to Employer; Alcohol Test Form Created (ProcessDrugTest/AcknowledgeDrugTest)
- 3. Alcohol Screening test performed (collection may occur with breath machine or D.O.T. approved oral device)
- 4. If Negative, Alcohol Testing Form completed. Screen test results sent to Employer (ProcessDrugTest/AcknowledgeDrugTest)
- 5. If Non-negative, Alcohol confirmation test performed (donor may be sent to an alternate collection facility)
- 6. Test results sent to Employer (ProcessDrugTest/AcknowledgeDrugTest)

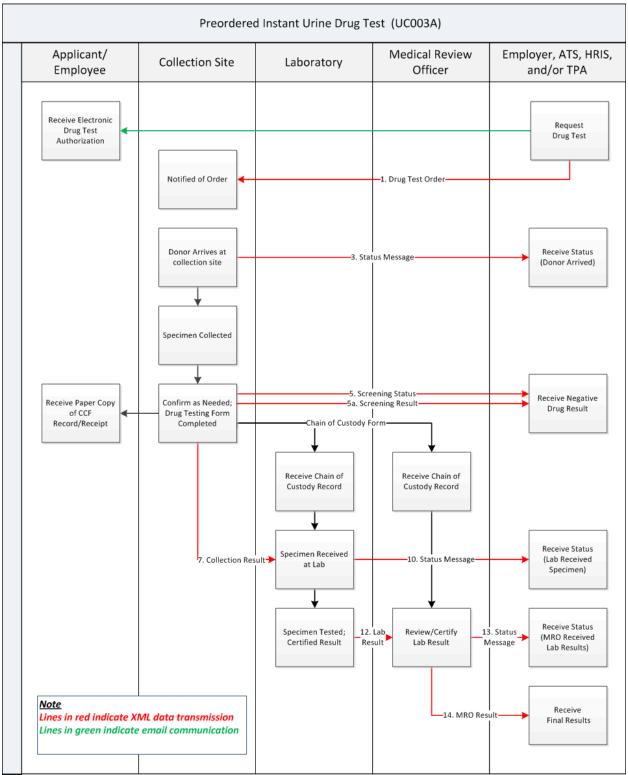
Alternate Scenarios

Non-Regulated Scenario. Alcohol cut-off level for positive results may vary from .02 and can be specified by the employer.



UC003A - Preordered Instant Drug Test

Summary. This use case describes a Standard Instant Drug test, without Alcohol test, from the time of pre-order/collection to the time the result is reported to the consumer. The test shows a positive result. Alternate scenarios are available for negative results.





Business Narrative. Jonathan Consumer was selected for a random instant drug and alcohol screen. His employer provided him with a CCF and sent him to XYZ Collection Facility in Denver, Co. His employer pre-registered him for testing electronically and provided him with a registration ID and collection site information. Jonathan showed up at XYZ Collection Facility an hour later and provided the site with the CCF and a copy of his registration ID. The collector, Jane Doe, entered the registration ID in her system and pulled up Jonathan Consumer's patient information. Jane Doe performed the collection for the instant random drug and alcohol screen. Jonathan Consumer provided a valid specimen and retained his copy of the CCF and was sent on his way. Jane Doe reported the instant drug and alcohol testing results to the Consumer. Jane Doe entered the collection information electronically into her system and completed the collection process. Since the screen results are positive for amphetamines, PCP, the consumer requests additional lab testing. Jane electronically sent confirmation back to the employer that the collection occurred and that either the instant drug tests results were negative or that the sample was positive.

The employer or consumer may elect to send the positive urine sample to the local lab for confirmation; if not elected, the process is completed. If elected, Jane Doe will have electronically sent the specimen information to the laboratory and then shipped the specimen to the local lab for confirmation testing.

Once the laboratory received the specimen and copy of CCF they sent the specimen into testing and entered the specimen information electronically into their database. A status update was sent to the consumer providing confirmation that the specimen was received and was in testing. 24 hours later the specimen testing process was completed and the results were verified as negative. The laboratory electronically transmitted the results to the MRO for review. The MRO reviewed the negative results and electronically transmitted the results back to the consumer. The consumer reviewed the negative results for Jonathan Consumer and offered him a position within their organization.

Technical Narrative

- 1. Employer orders Instant test from collection site (ProcessDrugTest/AcknowledgeDrugTest). The employer provides Donor with Authorization (contains ID) and collection site information.
- 2. Donor presents at collection site (using ID)
- Donor Arrival and/or Collection suspension status sent to Employer (ProcessDrugTest/AcknowledgeDrugTest)
- 4. Urine Collection performed
- 5. If Positive result, a status is sent to the employer that additional testing is required. (ProcessDrugTest/AcknowledgeDrugTest)
 - a. If Negative result, the result is sent to the employer and no further testing is required. The process is complete.
- 6. Positive Screen result: Chain of Custody Created/Completed.
- Collection Result and Chain of Custody data sent to laboratory (ProcessDrugTest/AcknowledgeDrugTest)
- 8. Urine Specimen shipped/received at lab for confirmation



- 9. Urine Specimen received at lab for confirmation
- 10. Lab sends Status to account owner/employer (ProcessDrugTest/AcknowledgeDrugTest)
- 11. Urine Specimen analyzed, Lab result determined/certified
- 12. Result sent to MRO for review and MRO determination made (ProcessDrugTest/AcknowledgeDrugTest)
- 13. MRO Status sent to employer (ProcessDrugTest/AcknowledgeDrugTest)
- 14. MRO Result sent to employer (ProcessDrugTest/AcknowledgeDrugTest)

Alternate Scenario

No lab confirmation performed. Some Employers don't require a confirmation process on a positive screen so the full result would be sent to the employer for both positive and negative results.



UC003B - Non-preordered Instant Drug Test

Summary. This use case articulates the workflow of a Standard Instant Drug test, with or without Alcohol test, from the time of collection to the time the result is reported to the consumer.

This business process is similar to UC003A, with the exception of the Order. Refer to the UC003A diagram for details.

Business Narrative. Jonathan Consumer was selected for a random instant drug and alcohol screen. His employer provided him with a CCF and sent him to XYZ Collection Facility in Denver, Co. Jonathan showed up at XYZ Collection Facility an hour later and provided the site with the CCF. The collector, Jane Doe, entered Jonathan Donor's patient information into their system after receiving the information from Jonathan verbally. Jane Doe performed the collection for the instant random drug and alcohol screen. Jonathan Consumer provided a valid specimen and retained his copy of the CCF and was sent on his way. Jane Doe reported the instant drug and alcohol testing results to the Consumer. Jane Doe entered the collection information electronically into her system and completed the collection process. She electronically sent confirmation back to the employer that the collection occurred and that either the instant drug tests results were negative or that the sample was positive.

The employer or consumer may elect to send the positive urine sample to the local lab for confirmation; if not elected, the process is completed. If elected, Jane Doe will have electronically sent the specimen information to the laboratory and then shipped the specimen to the local lab for confirmation testing.

Once the laboratory received the specimen and copy of CCF they sent the specimen into testing and entered the specimen information electronically into their database. A status update was sent to the consumer providing confirmation that the specimen was received and was in testing. 24 hours later the specimen testing process was completed and the results were verified as negative. The laboratory electronically transmitted the results to the MRO for review. The MRO reviewed the negative results and electronically transmitted the results back to the consumer. The consumer reviewed the negative results for Jonathan Consumer and offered him a position within their organization.

Technical Narrative

- 1. Consumer provides Donor with CCF and collection site information.
- 2. Donor presents at collection site
- Donor Arrival and/or Collection suspension status sent to Employer (ProcessDrugTest/AcknowledgeDrugTest)
- 4. Urine Collection performed
- 5. If Positive result, a status is sent to the employer that additional testing is required. (ProcessDrugTest/AcknowledgeDrugTest)
 - a. If Negative result, the result is sent to the employer and no further testing is required. The process is complete.
- 6. Positive Screen result: Chain of Custody Created/Completed.



- 7. Chain of Custody data sent to laboratory; If non-DOT, electronic CCF may be sent to lab (ProcessDrugTest/AcknowledgeDrugTest)
- 8. Chain of Custody data sent to MRO
- 9. Urine Specimen shipped/received at lab for confirmation
- * Optional Lab sends Status to account owner/ employer (ProcessDrugTest/AcknowledgeDrugTest)
- 11. Urine Specimen analyzed, Lab result determined/certified
- 12. Result sent to MRO for review and MRO determination made (ProcessDrugTest/AcknowledgeDrugTest)
- 13. MRO Status sent to employer (ProcessDrugTest/AcknowledgeDrugTest)
- 14. MRO Result sent to employer (ProcessDrugTest/AcknowledgeDrugTest)

Alternate Scenario

Some Employers don't require a confirmation process on a positive screen so the full result would be sent to the employer for both positive and negative results. No lab confirmation performed.



The following examples relate directly to the technical steps for each use case above. Examples for each of these components can be found in the Instances folder. Note that Process transactions would typically be followed by an Acknowledge transaction.

The document DrugTest_BusinessRules.xls provides additional information on required, best practice, and optional use of elements and attributes. Although the spreadsheet includes the same examples as below, some of the data may be different in the examples.

UC001A - Preordered Drug Test with Negative Result

Preorder

UC001A_ProcessDrugTest_Neg_Step1.xml

Collect Status

UC001A ProcessDrugTest Neg Step4.xml

CCF Status

UC001A_ProcessDrugTest_Neg_Step6.xml

Collection Result

UC001A_ProcessDrugTest_Neg_Step7.xml

Lab Status

UC001A_ProcessDrugTest_Neg_Step10.xml

Lab Result

UC001A_ProcessDrugTest_Neg_Step12.xml

MRO Status

UC001A_ProcessDrugTest_Neg_Step13.xml

MRO Result

UC001A_ProcessDrugTest_Neg_Step14.xml

UC001A - Preordered Drug Test with Positive Result

Step 1, 4, 6, 10, 13 - Refer to examples in Negative Result

Collection Result

UC001A_ProcessDrugTest_Pos_Step7.xml

Lab Result

UC001A_ProcessDrugTest_Pos_Step12.xml

MRO Result

UC001A_ProcessDrugTest_Pos_Step13.xml

UC001A - Preordered Drug Test, Lab Canceled

In this example, the test was canceled due to a broken seal and the MRO received the results. The MRO then cancelled the test and informed the employer.



Step 1, 4, 6, 7, 10, 13 – Refer to examples in Negative Result Lab Result

UC001A_ProcessDrugTest_LabCancel_Step12.xml

MRO Result

UC001A ProcessDrugTest LabCancel Step14.xml

UC001A - Preordered Drug Test, MRO Canceled

In this example, Lab results showed ph out of range, so the lab sent to MRO as invalid. The MRO requested immediate retesting.

Step 1, 4, 6, 7, 10, 13 – Refer to examples in Negative Result Lab Result

UC001A_ProcessDrugTest_MROCancel_Step12.xml

MRO Result

UC001A_ProcessDrugTest_MROCancel_Step14.xml

UC002A - Preordered Alcohol Test with Negative Result

Preorder

UC002A ProcessAlcoholTest Neg Step1.xml

Collection Status

UC002A_ProcessDrugTest_Neg_Step4.xml

Collection Result

UC002A ProcessDrugTest Neg Step6.xml

UC002A - Preordered Alcohol Test with Positive Result

Step 1, 4 - Refer to examples in Negative Result

Collection Result

UC002A_ProcessAlcoholTest_Pos_Step7.xml

Confirmation Result

UC002A_ProcessAlcoholTest_Pos_Step8.xml

UC003A - Instant Drug Test with Positive Result

Preorder

UC003A_ProcessDrugTest_Pos_Step1.xml

Collect Status

UC003A_ProcessDrugTest_Pos_Step3.xml

Screening Status

UC003A_ProcessDrugTest_Pos_Step5.xml

Collection Result

UC003A_ProcessDrugTest_Pos_Step7.xml



Lab Status

UC003A_ProcessDrugTest_Pos_Step10.xml

Lab Result

UC003A_ProcessDrugTest_Pos_Step12.xml

MRO Status

UC001A_ProcessDrugTest_Pos_Step13.xml

MRO Result

UC001A_ProcessDrugTest_Pos_Step14.xml

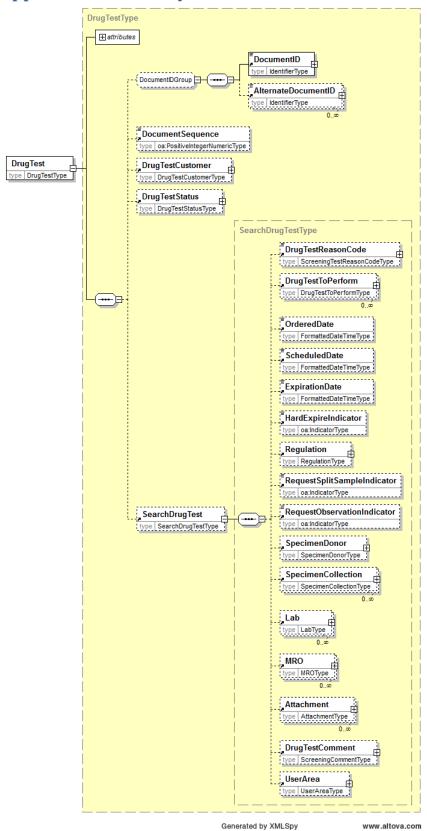
UC003A - Instant Drug Test with Negative Result

Step 1, 3 - Refer to examples in Positive Result Collection Result

UC001A_ProcessDrugTest_Neg_Step5a.xml



Appendix B: Noun Layouts

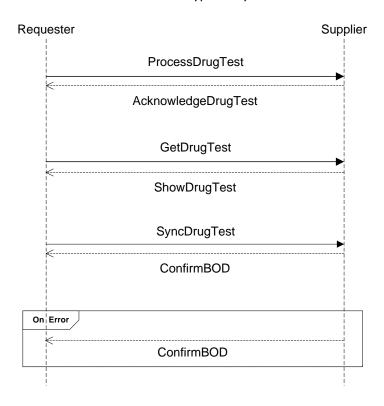


HR-XML Drug Test 28 January 2013 Page 23



Appendix C: Business Object Document Diagrams

The following diagram shows the possible transaction that may occur between the drug testing partners. Note that all transaction types may not be included in the use cases above.



HR-XML Drug Test 28 January 2013 Page 24