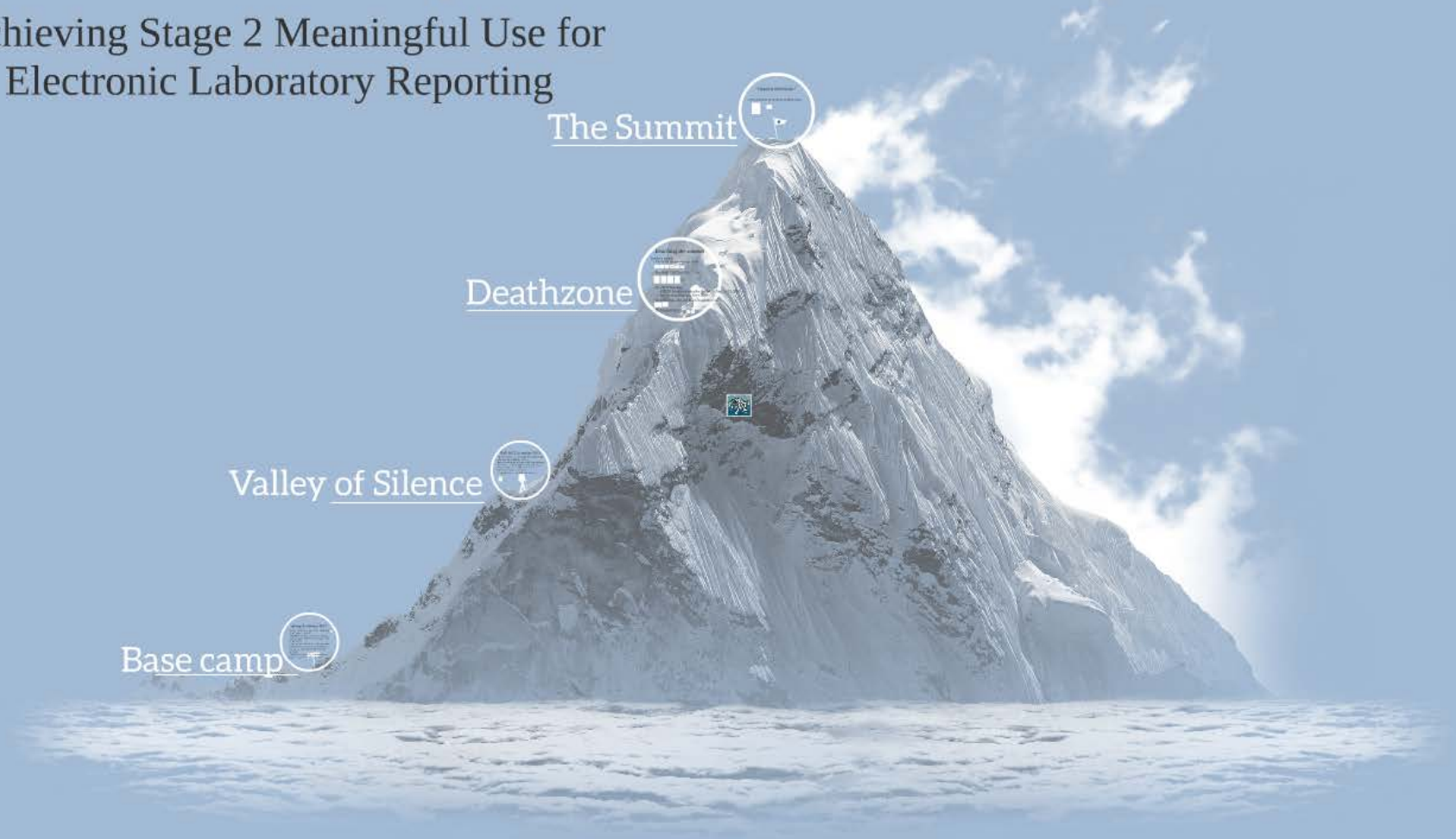
REACHING THE SUMMIT

Statewide ELR Implementation: Status Update June 2014

Achieving Stage 2 Meaningful Use for Electronic Laboratory Reporting



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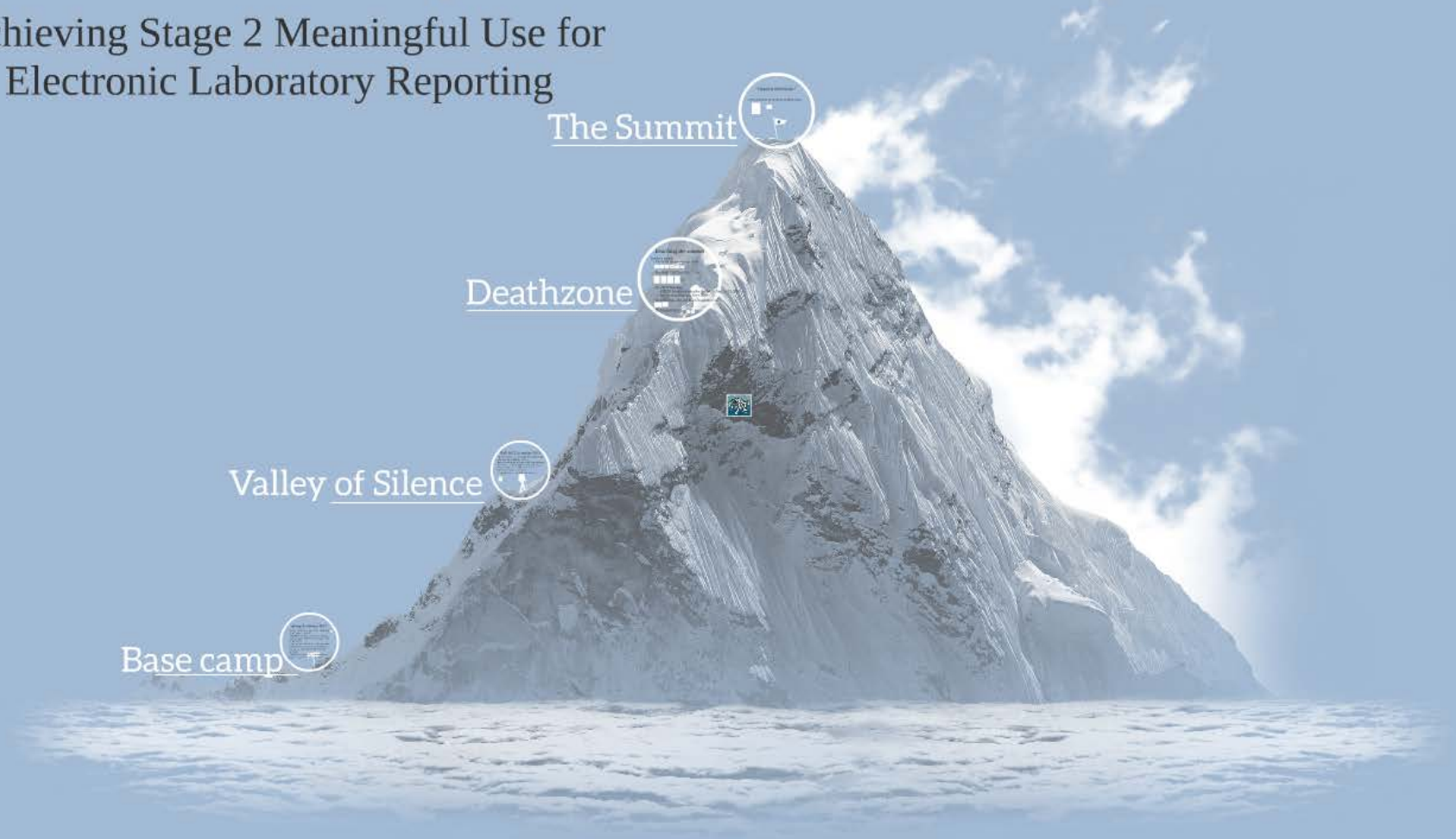
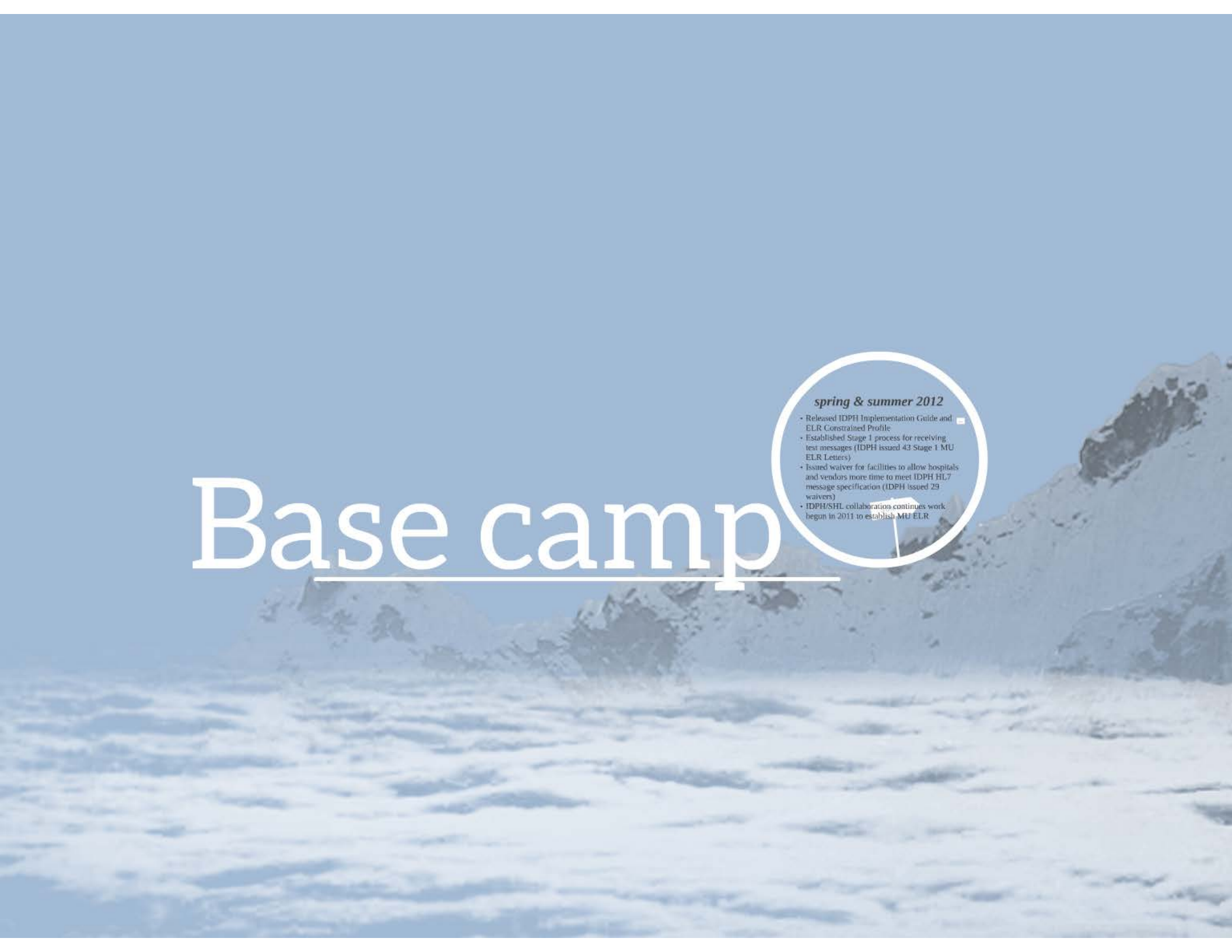


Base camp


spring & summer 2012
• Released IDPH Implementation Guide and ELR Constrained Profile
• Established Stage 1 process for receiving test messages (IDPH issued 43 Stage 1 MU ELR Letters)
• Issued waiver for facilities to allow hospitals and vendors more time to meet IDPH HL7 message specification (IDPH issued 29 waivers)
• IDPH/SHL collaboration continues work begun in 2011 to establish MU ELR

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Iowa Department of Public Health

Implementation Guide and ELR Constrained profile

for the ELR 2.5.1 HL7 Version 2.5.1 Implementation Guide: Electronic Laboratory Reporting to Public Health, Release 1 (US Realm)

This publication was supported by collaboration between IDPH and the Laboratory Technical Implementation Assistance for Public Health (LTIAPH) under Cooperative Agreement Number 1U50HK000105 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC.

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Valley of Silence

Fall 2012 to winter 2013

- IDPH Introduced the smartLab and spent months prepping and testing the interface
- hospitals continued to submit stage 1 test messages
- Iowa Administrative Rule 641 change 7/3/2013
- smartLab becomes available late 10/1/2013
- MU Stage 2 process introduced
- On-going consultation with Iowa hospitals

641—1.4 (135,139A) Reporting of reportable communicable and infectious diseases. Each case of a reportable disease is required to be reported to the Iowa Department of Public Health, Lucas State Office Building, 321 E. 12th Street, Des Moines, Iowa 50319-0075, in a manner specified by this chapter.

1.4(1) *Who is required to report communicable and infectious diseases.*

a. Health care providers, hospitals, clinical laboratories, and other health care facilities are required to report cases of reportable communicable and infectious diseases. Health care providers and hospitals are exempted from reporting communicable and infectious disease laboratory results if the health care provider or hospital ensures that the laboratory performing the analysis provides a report containing the required information to the department.

b. School nurses are required to report suspected cases of reportable diseases occurring among the children supervised.

c. School officials, through the principal or superintendent as appropriate, are required to report when there is no school nurse.

d. Laboratories are required to report cases of reportable diseases and results obtained in the examination of all specimens which yield evidence of or are reactive for sexually transmitted diseases.

e. Poison control and poison information centers are required to report inquiries about cases of reportable diseases received by them.

f. Medical examiners are required to report their investigatory findings of any death which was caused by or otherwise involved a reportable disease.

g. Occupational nurses are required to report cases of reportable diseases.

h. Hospitals, health care providers and clinical laboratories outside the state of Iowa shall immediately report any confirmed or suspect case of a reportable disease, poisoning or condition in an Iowa resident.

1.4(2) *What to report.* Each report shall contain all of the following information:

a. The patient's name.
b. The patient's address.
c. The patient's date of birth.
d. The sex of the patient.
e. The race and ethnicity of the patient.
f. The patient's marital status.
g. The patient's telephone number.
h. The name and address of the laboratory.
i. The date the test was found to be positive and the collection date.
j. The name and address of the health care provider who performed the test
k. If the patient is female, whether the patient is pregnant

Reference laboratories can only comply with this if the ordering hospital passes this information to the reference lab.

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The Summit

Deathzone

Reaching the summit

Resource updates

- The IDPH Implementation Guide

- The IDPH ELR Checklist

- The VPN Transport
  - XEROX is beginning to pilot this week June 16-20, 2014
  - Go-live in production July 1, 2014
- Heavy metals, CO, and Methemoglobinemia

- TB Susceptibility

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Revision History

Date	Document Version	Profile Version	Release Status	Description
03-06-2012	1.00	1	Production	Published version 1.01
06-5-2012	1.00	2	Production	Published version 1.02
08-07-2012	1.00	3	Production	Published version 1.03
02-28-2013	1.00	4	Production	Published version 1.04
03-06-2013	1.00	4.01	Production	Published version 1.04.01
05-06-2014	1.00	4.02	Production	Published version 1.04.02

Changes and Corrections		
Section	Original content/description of change	change
Page 27 Obtaining OIDS and OID Registry	Addition to original content	See information related to CDC OID registry
Table 13, OBR.4	Use the same LOINC as in OBX.3.	~~Use the same LOINC as in OBX.3.~~ (removed)
Table 13, OBR4.7; Table 14, OBX3.7	Recommended if a LN is identified in component 3. This can be Hardcoded	Recommended if a LN is identified in component 3. This can be Hardcoded

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Version 1.04.02changes		
Section	Original content/description of change	change
Reportable conditions versus laboratory results	Table 1: **Reportable Communicable and Infectious Diseases** contained a table of communicable and infectious diseases.	The table was replaced with a hyperlink to the CADE web page listing the same information which is updated more frequently than this guide: http://www.idph.state.ia.us/Cade/ReportableDiseases.aspx
Reportable conditions versus laboratory results	Table 2: **Environmental and Occupational Surveillance Reportable Poisonings, Injuries, Diseases, Conditions, and Exposures** contained a table of most of the laboratory result-based environmental health conditions, but blood lead testing was not included.	Added blood lead testing information to the list of items that should be included in electronic laboratory reporting.
Transport Methods opening paragraph	**IDPH supports only DIRECT™ messaging through the IHIN.**	**IDPH supports the transport methods in the table below.**
Transport Methods table	Originally listed a variety of potential transport methods	Reduced list to only those ELR transport methods supported by IDPH.
Transport Methods, Option: VPN, Notes		Added note: 1. Supported as of July 1, 2014.
Transport Methods		Added cross-reference to "IHIN" in the table of Acronyms and Definitions.
Table 14 (OBX segment), OBX.5, IDPH comments	The Data type Varies: see the section "[missing section title and page number cross reference]	The Data type Varies: see the section "CWE - Coded with Exceptions" on page 68.
How to implement additional epidemiologically important information	Added clarification for how to provide the additional epidemiologically important information when two (2) OBR segments are included in a single message associated with the same person.	If there are multiple OBR segments associated with the same person in a single message, additional epidemiologically important information should be provided as a separate OBX segment associated with each OBR.

performed by a laboratorian.

For these reasons, there are a couple of concepts that must be made clear:

1. Specific laboratory results can be, and in the realm of public health reporting are always, associated with a ***suspected condition*** or disease. The laboratory result is not generally diagnostic by itself and must be considered with other clinical information related to the patient. An effective public health response does not necessarily depend on and in some situations cannot wait for a physician diagnosis. **Laboratory result reporting should not be deterred or delayed over the concept of diagnosis.** If a specific laboratory result is possibly associated with a reportable condition, it should be reported.
2. Since the performing laboratory is most equipped to interpret its own laboratory results, **the burden of making the link between a specific result and a *suspected condition* rests with the laboratory.** This decision has always rested on the laboratory side of the information exchange and is not affected by the transition from paper-based or manual electronic reporting to system-to-system automated electronic laboratory reporting.

The following two tables provide the list of reportable conditions with the associate reporting requirements required by Iowa Administrative Code [641] Chapter 1.

Table 1: **Reportable Communicable and Infectious Diseases**

Changes to the list of Reportable Communicable and Infectious Diseases are possible and likely over time. For this reason, please refer to the following link to find the most up to date information about disease reporting: http://www.idph.state.ia.us/Cade/ReportableDiseases.aspx

Table 2: **Environmental and Occupational Surveillance Reportable Poisonings, Injuries, Diseases, Conditions, and Exposures**

The following table contains a partial list of the reportable environmental and occupational conditions. This partial list includes those conditions for which there is a reportable laboratory result component. For the complete list of reportable environmental and occupational conditions, see Iowa Administrative Code [641] Chapter 1 and the EH Reporting Poster available at the following web location: http://www.idph.state.ia.us/eh/reportable_diseases.asp

POISONING OR CONDITION	CASES TO REPORT	WHEN TO REPORT	HOW TO REPORT
Arsenic poisoning	Blood arsenic values equal to or greater than 70 µg/L Urine arsenic values equal to or greater than 100 µg/L of urinary creatinine	Weekly	Routine reporting See EH Div Web page http://www.idph.state.ia.us/eh/reportable_diseases.asp
Cadmium poisoning	Blood cadmium values equal to or greater than 5 µg/L Urine cadmium values equal to or greater than 3 µg/g	Weekly	Routine reporting See EH Div Web page http://www.idph.state.ia.us/eh/reportable_diseases.asp
Carbon monoxide (CO) poisoning	Blood carbon monoxide level equal to or greater than 10% carboxyhemoglobin or its equivalent with a breath analyzer test, or a clinical diagnosis of CO poisoning regardless of any test result	Daily	Phone: 800-972-2026 See EH Div Web page Or: Iowa Statewide Poison Control Center 800-222-1222 for 24 hour consultation followed by fax to IDPH EH.
Blood Lead Testing	All analytical results greater than or equal to 20 micrograms per deciliter (µg/dL) in a child under the age of 6 years or a pregnant woman --- All other analytical values for all blood lead analyses	Daily --- Weekly	Phone: 800-972-2026 --- Electronic format specified by the department
Mercury poisoning	Blood mercury values equal to or greater than 2.8 µg/dL Urine mercury values equal to or greater than 20 µg/L	Weekly	Routine reporting See EH Div Web page http://www.idph.state.ia.us/eh/reportable_diseases.asp
Methemoglobinemia	Blood analyses showing greater than 5% of total hemoglobin present as methemoglobin	Weekly (recommend immediate)	Routine reporting See EH Div Web page http://www.idph.state.ia.us/eh/reportable_diseases.asp

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http://www.hl7.org/oid/index.cfm

Transport Methods

A number of electronic messaging transport methods exist by which the standardized HL7 2.5.1 message can be transferred from a reporting facility to IDPH. Regardless of the message transport, the HL7 2.5.1 message should be the same in both structure and content. Some transport methods facilitate more automated handling of the content than other methods. **IDPH supports the transport methods in the table below.**

Option	Level of complexity	Implementation Cost	Switch-over complexity	Connection	Notes
Web Services through the IHIN	Medium	Medium	Medium	Point-to-point	1. Status: Available and supported 2. Sender side configuration/development necessary to consume web service 3. Long-term cost savings over VPN transport maintenance. 4. May require sender side development resources, but not network staff.
VPN (Virtual Private Network) through the IHIN	Medium	Medium	Low	Point-to-point	1. Supported as of July 1, 2014. 2. Requires additional infrastructure set up on both sides of exchange with network staff. 3. Any network changes on either side of exchange may require maintenance on both sides. 4. May result in higher resource requirements and longer lead times compared to web services option.
Direct Secure Messaging™ through the IHIN	Medium	Medium	Medium	Point-to-point via a third party provider	1. Status: Available and supported 2. A solution akin to secure mail. As of January 1st, 2014, all "certified EHRs" must support the Direct Project protocol. 3. This has not been widely implemented as of January 2014.

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See **IHIN** for more information about the Iowa Health Information Network (IHIN).

Epidemiologically Important Information										
IDPH/ELR Variable ID	Label/Short Name	Data Type	Program Req/Opt	May Repeat	Value Set Name	HL7 Message Context	HL7 Data Type	HL7 Optionality	Cardinality	IDPH Implementation Notes
11449-6	Pregnancy status	Coded	Send if you have it	N	SNOMED value Set: 261665006^Unknown 77386006^ Patient currently pregnant 60001007^Not pregnant	OBX-3 for Order_Observation group for Epidemiologically Important Information. OBX-2=CWE OBX-3=11449-6^Pregnancy status^LN^^^^2.34 OBX-5=SNOMEDCode^SNOMEDName^^SCT^^^^01/31/2011	CWE	RE	[0..1]	For IDPH implementation this element is a common core data element- Need to send it if you have it. () SNOMED value Set: 261665006^Unknown 77386006^ Patient currently pregnant 60001007^Not pregnant

Back to Revision table

How to implement additional epidemiologically important information

Additional epidemiologically important information must be transmitted in a separate OBX segment linked to the OBX result segment using the Sub-ID. The separate OBX segment should use one of the LOINC codes provided in Table 20 above. If there are multiple OBR segments associated with the same person in a single message, additional epidemiologically important information should be provided as a separate OBX segment associated with each OBR.

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Iowa Department of Public Health

Electronic Laboratory Reporting Checklist

√	Action Step	Party that takes this step	How?	IDPH Contact Information
	Enroll with IHIN	Hospital / Laboratory Rep	Complete IHIN Participation Agreement (see link #1 below).	ehealth@idph.iowa.gov
	Register for the smartLab	Hospital / Laboratory Rep	Complete smartLab Registration (see link #2 below)	ELR@idph.iowa.gov John Satre (515)229-0417
	Verification Letter sent	IDPH ELR Team	Meaningful Use verification letter e-mailed from IDPH to Hospital	ELR@idph.iowa.gov John Satre (515)229-0417
	smartLab credentials provided	IDPH ELR Team	smartLab credentials e-mailed to registered smartLab users, respectively	ELR@idph.iowa.gov John Satre (515)229-0417
	Transport Prep	IHIN vendor (through IDPH ELR Team) shortly after credentials provided	IHIN vendor will contact hospital/lab transport contact	ELR@idph.iowa.gov John Satre (515)229-0417
	smartLab Just in Time Training (optional)	IDPH ELR Team & Hospital/Lab ELR team	IDPH ELR Team coordinates webinar	ELR@idph.iowa.gov John Satre (515)229-0417
	Mapping local codes to IDPH smartLab code set	Hospital / Laboratory Rep	Login to smartLab & map hospital/laboratory codes for Tests, Results, and vocabularies (race, ethnicity, specimen type, etc.) to the IDPH code set	ELR@idph.iowa.gov John Satre (515)229-0417
	Message Construction	Hospital/Laboratory/Vendor	Facility-specific	ELR@idph.iowa.gov John Satre (515)229-0417
	Message testing (message structure variation)	Hospital/Laboratory/Vendor	Facility-specific (See link #3 below for message specifications)	ELR@idph.iowa.gov John Satre (515)229-0417
	Engage Request	Hospital/Laboratory/Vendor	Contact IDPH	ELR@idph.iowa.gov John Satre (515)229-0417
	Mapping Review	IDPH ELR Team	Review Mapping	ELR@idph.iowa.gov John Satre (515)229-0417
	Test Message Review	IDPH ELR Team	Review latest Test Message in smartLab	ELR@idph.iowa.gov John Satre (515)229-0417
	End-to-End testing	IDPH ELR Team & Hospital/Lab ELR team	System-to-system test	ELR@idph.iowa.gov John Satre (515)229-0417
	Dual Reporting	Hospital Lab/Infection Prev.	Traditional reporting & ELR for specified # weeks (may vary by facility)	ELR@idph.iowa.gov John Satre (515)229-0417
	Transition to Production	IDPH ELR Team & Hospital/Lab ELR team	Scheduled date/time agreed by both parties	ELR@idph.iowa.gov John Satre (515)229-0417

Hyperlinks associated with the ELR Checklist on next page

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1. IHIN Participation Agreement
   http://www.iowaehealth.org/documents/cms/docs/Enrollment_Documents/Standard_IHIN_Participation_Agreement.pdf

2. Register for the smartLab
   a. PDF version of smartLab registration questions:
      http://www.idph.state.ia.us/adper/common/pdf/idss/smartlab_questions.pdf
   b. Actual smartLab registration:
      https://www.surveymonkey.com/s/SmartLab_Registration

3. The IDPH Implementation Guide and ELR Constrained Profile (one-stop document for ELR):
   http://www.idph.state.ia.us/adper/common/pdf/idss/elr_constrained_profile.pdf

4. All Meaningful Use – ELR – related information (updates, workshop content, recorded webinars, etc.) is posted to the IDSS page on the IDPH web site:
   http://www.idph.state.ia.us/adper/idss.asp

5. The Meaningful Use page on the IDPH web site is a gateway with links to all other locations related to the Meaningful Use public health objectives:
   http://www.idph.state.ia.us/meaningful_use.asp

A more detailed list of ELR on-boarding steps begins on next page.

IHIN Participation
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Ready for **Phase II**
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Ready for **Phase II**
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2. Xerox on-bo
3. Facility subr
4. IHIN passes
5. Facility and

IDSS ELR On-boarding Steps

IHIN Participation Agreement

1. Provider organization signs an IHIN Participation Agreement
2. IDPH eHealth team forwards the Participation Agreement to Xerox
3. IDPH eHealth team adds the provider organization and its lab facilities to the Accounting dbase
4. IDPH ELR team adds the provider organization and its lab facilities to the MU dbase

Register/Enroll the Facility

1. IDPH ELR Team enrolls the facility in smartLab (in both UAT and Production)
   - Ensures that a business email address is entered for failed files communication
   - Selects Provider/Facility Preferences for message format (SMF, HL7 2.3.1, etc.)
   - Ensures that the unique Provider Code in smartLab matches the Facility code/ID within the message being submitted to smartLab
2. IDPH ELR Team gives credentials to the facility
3. IDPH ELR Team communicates with facility to establish target one-on-one engage date (verify from smartLab registration)
4. IDPH ELR Team notifies Xerox that the facility is set up on smartLab
5. IDPH ELR Team provides 'Just in Time' smartLab training to new facility (webinar / recorded on-line training)

Mapping

1. Facility enters their mapping in smartLab
2. The facility self-tests directly with smartLab by uploading their files manually
3. Facility notifies IDPH ELR Team that it is ready to engage
4. IDPH ELR Team QA's their mapping

Facility Ready for **Phase I Testing** (initial smartLab testing)

1. IDPH ELR Team contacts facility to schedule specific date to begin one-on-one engagement
2. The facility tests directly with smartLab by uploading their files manually
3. The facility and IDPH ELR Team review reports in smartLab
4. IDPH ELR Team pulls these files to their test system for analysis
5. Facility and IDPH ELR Team communicate to discuss errors

Ready for **Phase II Testing** (UAT End-to-end) (Direct)

1. IDPH ELR Team notifies Xerox that the facility is ready for Direct UAT
2. Xerox on-boards the facility to Direct UAT – gives credentials, URL, etc
3. Facility submits reportable disease data to ELR mailbox as an attachment using Direct
4. Facility and IDPH ELR Team review their reports in smartLab
5. IDPH ELR Team pulls these messages to their test system
6. Facility and IDPH ELR Team communicate to discuss errors
   Note: if the file does not even make it to smartLab because of incorrect file format, Xerox will contact the facility to discuss. Once the message is accepted and processed in smartLab, email is sent to the Facility for any processing errors. Email does not contain details about the errors or the Patient data (PHI) and the Facility personnel can login to smartLab to view the error details.

Ready for **Phase II Testing** (UAT End-to-end) (VPN)

1. IDPH ELR Team notifies Xerox that the facility is ready for VPN UAT
2. Xerox on-boards the facility to VPN UAT – sets up the connection with the facility
3. Facility submits reportable disease data through the VPN to IHIN
4. IHIN passes data to smartLab
5. Facility and IDPH ELR Team review their reports in smartLab

6. IDPH ELR Team pulls these messages to their test system
7. Facility and IDPH ELR Team communicate to discuss errors
   Note: if the file does not even make it to smartLab because of incorrect file format, Xerox will contact the facility to discuss. Once the message is accepted and processed in smartLab, email is sent to the Facility for any processing errors. Email does not contain details about the errors or the Patient data (PHI) and the Facility personnel can login to smartLab to view the error details.

Ready for **Phase II Testing** (UAT End-to-end) (Web Services)

1. IDPH ELR Team notifies Xerox that the facility is ready for Web Services UAT
2. Xerox on-boards the facility to Web Service UAT – sets up the connection with the facility
3. Facility submits reportable disease data through the Web Service
4. Facility and IDPH ELR Team review their reports in smartLab
5. IDPH ELR Team pulls these messages to their test system
6. Facility and IDPH ELR Team communicate to discuss errors

Note: Once the message is accepted and processed in smartLab, email is sent to the Facility for any processing errors. Email does not contain details about the errors or the Patient data (PHI) and the Facility personnel can login to smartLab to view the error details.

Ready for **Parallel Testing**

1. Facility submits messages to ELR mailbox through Direct UAT or through VPN
2. In addition, facility manually enters the same reportable disease data in Production IDPH ELR Team
3. IDPH ELR Team does analysis between the two
4. Facility and IDPH ELR Team communicate to discuss any discrepancies

Ready for **Production**

1. IDPH ELR Team notifies Xerox the facility is ready for Production Direct or VPN
2. IDPH ELR Team promotes the facility mapping to Production
3. Xerox on-boards the facility to Direct Prod or VPN Prod
4. Facility submits reportable disease data to ELR mailbox as an attachment using Direct or through VPN
5. Facility and IDPH ELR Team review their reports in smartLab
6. IDPH ELR Team pulls these messages to their Production system
7. Facility and IDPH ELR Team communicate to discuss errors

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Code Management

Organism | LOINC | SNOMED | Vocabulary

List of Organisms

Infectious diseases cause illness, suffering and even death, and place an enormous financial burden on society. State and local public health offi
diseases. Further, reporting is required by Iowa Code Chapter 139A, 141A, Iowa Administrative Code 641: Chapter 1.

View Organism Details | Add New Organism | Export Code Set

Organism - Condition:

What to Report:

Additional Epidemiologic Information -
Bacillus anthracis - Anthrax
Blastomyces dermatitidis - Blastomycosis
Bordetella pertussis - Pertussis
Brucella - Brucellosis
Burkholderia mallei - Glanders
Burkholderia pseudomallei - Melioidosis
Campylobacter - Campylobacteriosis
Carbon Monoxide (CO) - Carbon Monoxide Poisoning
Chlamydia psittaci - Psittacosis
Chlamydia trachomatis - Chlamydia
Clostridium botulinum - Botulism
Clostridium perfringens - Clostridium perfringens
Clostridium tetani - Tetanus
Corynebacterium diphtheriae - Diphtheria
Coxiella burnetii - Q Fever
Cryptosporidium species - Cryptosporidiosis
Cyclospora cayetanensis - Cyclosporiasis
Entamoeba histolytica - Amebiasis
Escherichia coli - E. coli Shgt.
Francisella tularensis - Tularemia

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View Organism Details | Add New Organism | Export Code Set

Organism - Condition: **What t**

Escherichia coli - E. coli Shgt.
Francisella tularensis - Tularemia
Giardia lamblia - Giardiasis
Haemophilus influenzae - Haemophilus influenzae
Hantavirus - Hantavirus
Heavy Metals - - Arsenic - Cadmium - Lead - Mercury
Hepatitis A virus - Hepatitis A
Hepatitis B virus - Hepatitis B
Hepatitis C virus - Hepatitis C
HIV - HIV
Influenza - Influenza (Novel Type A)
Influenza Epidemic - Influenza Outbreak
Legionella - Legionellosis
Leptospira species - Leptospirosis
Listeria monocytogenes - Listeriosis monocytogenes
Methemoglobin - Methemoglobinemia
Mosquito-borne - Bunyavirus serogroup California - Lacrosse encephalitis
Mosquito-borne - California encephalitis virus - California encephalitis
Mosquito-borne - Dengue fever virus - Dengue Fever
Mosquito-borne - Eastern equine encephalitis virus - Eastern equine encephalitis

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  - XEROX is beginning to pilot this week June 16-20, 2014
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- TB Susceptibility

Code Management

Organism | LOINC | SNOMED | Vocabulary

List of Organisms

Infectious diseases cause illness, suffering and even death, and place an enormous financial burden on soc
diseases. Further, reporting is required by Iowa Code Chapter 139A, 141A, Iowa Administrative Code 641:

View Organism Details | Add New Organism | Export Code Set

Organism - Condition:

Ricin toxin - Ricin Poisoning
Rubella virus - Rubella (including congenital)
Rubeola (measles) virus - Measles
Salmonella - Salmonellosis
Salmonella typhi - Typhoid fever
Shigella - Shigellosis
Staphyloccocus aureus enterotoxin producing organisms - S. aureus enterotoxin
STD - STD
Susceptibility - TB Susceptibility
Tick-borne - Anaplasma phagocytophilia - Human granulocytic anaplasmosis
Tick-borne - Babesia species - Babesiosis
Tick-borne - Borrelia burgdorferi - Lyme Disease
Tick-borne - Colorado tick fever virus - Colorado tick fever
Tick-borne - Ehrlichioses - Ehrlichioses
Tick-borne - Rickettsia prowazekii - Typhus fever
Tick-borne - Rickettsia rickettsii - Rocky Mountain Spotted Fever
Treponema pallidum - Syphillis
Trichinella spiralis - Trichinosis
Uncommon viruses - Uncommon viruses
Vancomycin Intermediate Staphylococcus aureus - VISA

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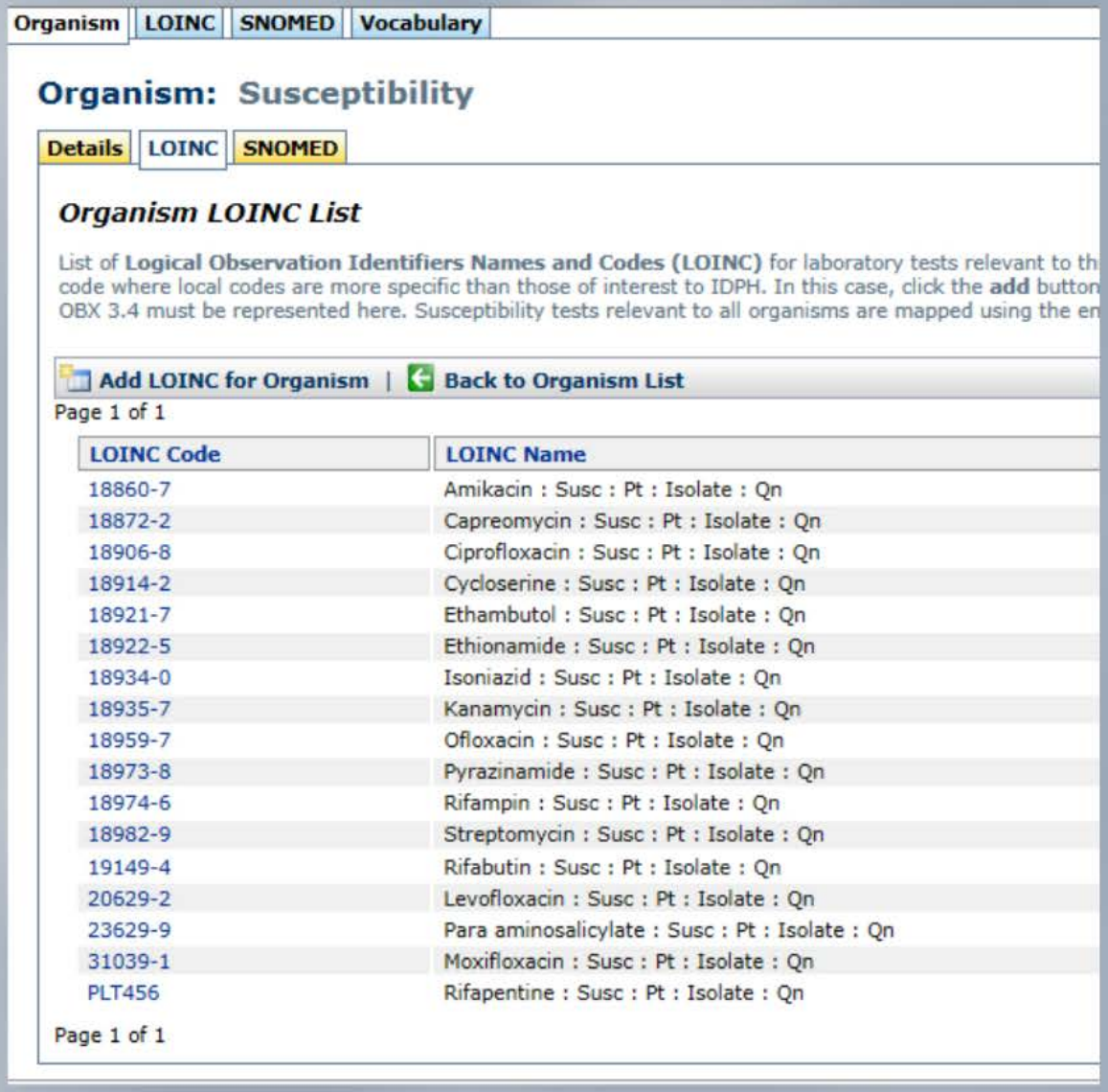


Organism | LOINC | SNOMED | Vocabulary

Organism: Susceptibility

Details | LOINC | SNOMED

Organism LOINC List

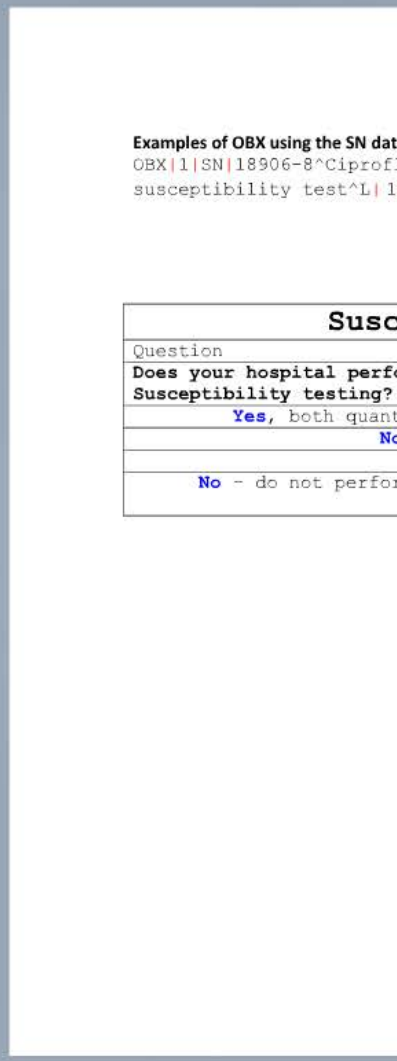
List of **Logical Observation Identifiers Names and Codes (LOINC)** for laboratory tests relevant to th
code where local codes are more specific than those of interest to IDPH. In this case, click the **add** button
OBX 3.4 must be represented here. Susceptibility tests relevant to all organisms are mapped using the en

Add LOINC for Organism | **Back to Organism List**

Page 1 of 1

LOINC Code	LOINC Name
18860-7	Amikacin : Susc : Pt : Isolate : Qn
18872-2	Capreomycin : Susc : Pt : Isolate : Qn
18906-8	Ciprofloxacin : Susc : Pt : Isolate : Qn
18914-2	Cycloserine : Susc : Pt : Isolate : Qn
18921-7	Ethambutol : Susc : Pt : Isolate : Qn
18922-5	Ethionamide : Susc : Pt : Isolate : Qn
18934-0	Isoniazid : Susc : Pt : Isolate : Qn
18935-7	Kanamycin : Susc : Pt : Isolate : Qn
18959-7	Ofloxacin : Susc : Pt : Isolate : Qn
18973-8	Pyrazinamide : Susc : Pt : Isolate : Qn
18974-6	Rifampin : Susc : Pt : Isolate : Qn
18982-9	Streptomycin : Susc : Pt : Isolate : Qn
19149-4	Rifabutin : Susc : Pt : Isolate : Qn
20629-2	Levofloxacin : Susc : Pt : Isolate : Qn
23629-9	Para aminosalicylate : Susc : Pt : Isolate : Qn
31039-1	Moxifloxacin : Susc : Pt : Isolate : Qn
PLT456	Rifapentine : Susc : Pt : Isolate : Qn

Page 1 of 1



Examples of OBX using the SN dat

```
OBX|1|SN|18906-8^Ciprof
susceptibility test^L|1
```

Susc
Question
Does your hospital perf **Susceptibility testing?**
Yes, both quant
No
No - do not perfo

Examples of OBX using the SN datatype and OBX.8- Abnormal flag:

OBX|1|SN|18906-8^Ciprofloxacin : Susc : Pt : Isolate : Qn^LN^Ciprofloxacin_Susc^Ciprofloxacin susceptibility test^L| 1|<=^0.06|ug/mL^micrograms per milliliter^UCUM||^^^ R^Resistant^L|…

Susceptibility Survey Results (so far…)						
Question	Monday	Tuesday	Wednesday	Thursday	Friday	Total
Does your hospital perform TB Susceptibility testing?						
Yes, both quantitative and ordinal	2	0	1	2	1	6
No, quantitative only	0	1	1	1	0	3
No, ordinal only	0	0	0	0	0	0
No – do not perform TB susceptibility tests	15	17	8	12	7	59

zone

Reaching the summit

Resource updates

- The IDPH Implementation Guide

- The IDPH ELR Checklist

- The VPN Transport
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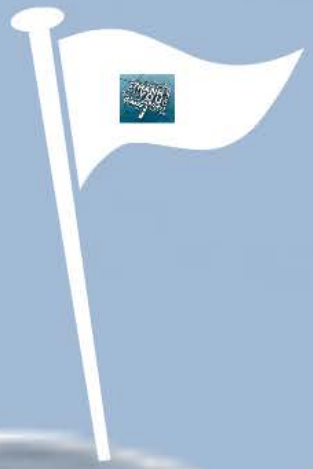
Ongoing Submission!

On-boarding by the numbers: progress report



Iowa Department of Public Health

Electronic Laboratory Reporting Checklist

√	Action Step	The Numbers
	Enroll with IHIN	39 Iowa facilities pursuing electronic lab reports (representing 107 different Iowa facilities)
	Register for the smartLab	39 different registration (representing 107 different sites)
	Verification Letter sent	Letters sent upon smartLab registration (107 different sites)
	smartLab credentials provided	154 smartLab users
	Transport Prep	9 facilities have active web services clients (representing 34 different sites)
	smartLab Just in Time Training (optional)	19 different training sessions for 36 hospitals/hospital systems (representing 104 different sites)
	Mapping local codes to IDPH smartLab code set	19 facilities have started or finished their mapping – except for new codes (representing 75 different sites)
	Message testing (message structure variation)	12 facilities have started testing messages against the smartLab (representing 55 different sites)
	Dual Reporting	1 facility – Spencer Hospital – has begun the dual reporting period
	Transition to Production	0 facilities have transitioned to ELR production

National Laboratory ELR Update

- IDPH is receiving data from ARUP, LabCorp, and MAYO (pursuing a connection with QUEST-Wood Dale, IL)
- ARUP has finished the dual reporting period and IDPH is presently validating the data for completeness and accuracy…
    - Completeness measure – passed
    - Accuracy measure – pending (no problems identified yet)

Questions should be directed to:

ELR@idph.iowa.gov

(515)229-0417

All ELR-related information is posted at:

http://www.idph.state.ia.us/adper/idss.asp

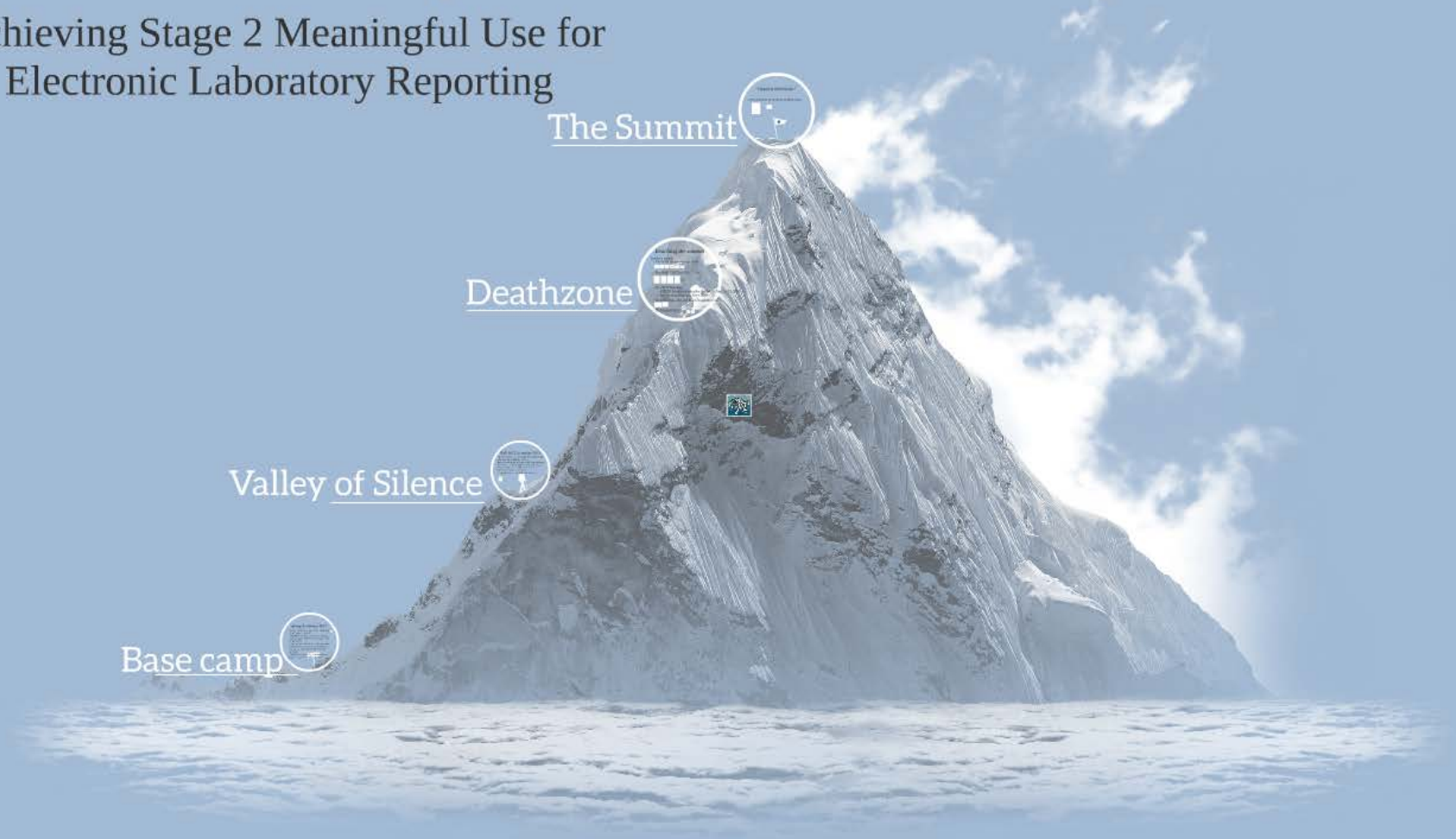
If you download 1 document, it should be the IDPH ELR Checklist:

http://www.idph.state.ia.us/adper/common/pdf/idss/elr_checklist.pdf

REACHING THE SUMMIT

Statewide ELR Implementation: Status Update June 2014

Achieving Stage 2 Meaningful Use for Electronic Laboratory Reporting




THANK YOU
Grazie
Obrigado
Koszonom
Mahalo
arigato
Спасибо
Takk
Рахмет
Prasom
Gracias
Danke
Спасибо
Dziekuje
Merci
Multumesc