

NEW MEXICO EMERGING INFECTIONS PROGRAM LABORATORY ACTIVITIES

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New Mexico Scientific Laboratories



1101 Camino de Salud, NE
Albuquerque, NM 87102

New Mexico Scientific Laboratories

Scientific Laboratory Division
SLD



Office of the Medical Investigator
OMI



Veterinary Diagnostic Services
VDS - NMSU



NM EIP Laboratory Activities

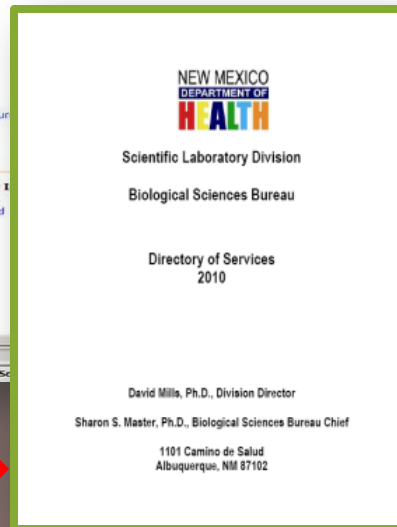
- ▣ Website Information
- ▣ Submission of specimens
 - Why
 - How
- ▣ What is done at SLD ? (EIP lab activities)
 - Virology
 - General Microbiology
 - Environmental Microbiology

Where does one locate information?

Directory of Services

- Contact numbers
- Link to packaging and shipping information
- Test information, collection and handling
- Link to Notifiable Conditions

The screenshot shows the Scientific Laboratory Division website. The navigation menu includes: Biology Bureau, Chemistry Bureau, Toxicology Bureau, Program Support, and Testing (LIMS) results. A sidebar on the left contains links for: Map to SLD, Lab fee schedule, Bio. request forms, Chem. request forms, Submitter codes, CAP Certificate, and CLIA Certificate. The main content area features a headline "SLD Serving New Mexico citizens for 90 years!" and a "LAB NEWS" section with links to various newsletters and schedules. A "Laboratory Publications" section is highlighted with a red circle, containing links to "Old Laboratory Newsletters", "Lab Assessment Report", "SLD Org. Chart", and "BSB directory of service". A red arrow points from this section to a separate document image.



A close-up of the "Laboratory Publications" section from the website screenshot. It includes a red arrow pointing from the website to this list. The list contains: "Click (+) to expand", "Old Laboratory Newsletters", "Lab Assessment Report", "SLD Org. Chart", and "BSB directory of service". A red arrow points from this list to the document image.

SLD webpage: <http://sld.state.nm.us/index.aspx>

What is a notifiable condition?

- ▣ 7.4.3.12 New Mexico Administrative Code, (Emerging Infections Program Specific isolates):
 - Emergency Reporting, requires immediate reporting to Epidemiology and Response Division (ERD) at 505-827-0006.
 - ▣ Invasive Meningococcal disease*
 - ▣ Invasive *Haemophilus influenzae* infections*
 - ▣ Suspected foodborne or water borne infections involving 2 or more unrelated persons*
 - Routine reporting...

*Required to be sent to the Scientific Laboratory Division(SLD)

7.4.3.12 New Mexico Administrative Code, (Emerging Infections Program Specific isolates):

Routine reporting requires reporting within 24 hours
of identification to ERD.

- Campylobacter infections*
 - E.coli O157:H7*
 - Shiga-Toxin producing E.coli (STEC)*
 - Salmonella*
 - Shigella*
 - Vibrio infections*
 - Yersinia infections*
 - Group A streptococcus, Group B streptococcus
Streptococcus pneumoniae invasive , infections.*
 - Listeriosis*
 - Legionella
 - Influenza, laboratory confirmed hospitalization only
- *Required to be sent to the Scientific Laboratory Division (SLD)

General clinical request forms

The screenshot shows the Scientific Laboratory Division website in a Windows Internet Explorer browser. The page features a blue header with the New Mexico Department of Health logo and the text 'Scientific Laboratory Division'. Below the header, there are navigation links for 'Biology Bureau', 'Chemistry Bureau', 'Toxicology Bureau', and 'Program Support'. The main content area includes a 'SLD Serving New Mexico citizens for 90 years' section with a map and a 'LAB NEWS' section. A green box highlights a sidebar menu with the following items: 'Map to SLD', 'Lab fee schedule', 'Bio. request forms' (highlighted in yellow), 'Chem request forms', 'Submitter codes', 'CAP Certificate', and 'CLIA Certificate'. To the right of this menu, there are links for 'General Clinical Request Form', 'Animal Specimen Submission Form', 'Pack & Ship instructions for Rabies', and 'Water Sample Submission Form'. A blue arrow points from the 'Bio. request forms' link in the sidebar to the 'General Clinical Request Form' link in the main content area. The browser's address bar shows the URL 'http://sld.state.nm.us/index.aspx'. The taskbar at the bottom shows several open applications, including 'Inbox - Microsoft...', 'BSBGeneral', 'DNSPresentation', 'Scientific Labora...', 'directory.pdf', and 'bsbform.pdf'. The system clock shows '1:31 PM'.

SLD webpage: <http://sld.state.nm.us/index.aspx>

General clinical request form

Submitter Code & Name

Clinician Name & Phone

Specimen Source

Date/Time of Collection

Patient name, gender, DOB

Patient ID

Analysis requested

2 forms of ID on both form and specimen

NEW MEXICO DEPARTMENT OF HEALTH
GENERAL CLINICAL REQUEST FORM
 Scientific Laboratory Division
 1101 Camino de Salud N.E.
 Albuquerque, NM 87102

SLD LAB NO. ONLY
 ONE FORM PER SPECIMEN

PLEASE PRINT LEGIBLY

SLD Form 101 v1.0, 11Mar2011 USER CODES >>> 51000 (Epidemiology) 52325 (PHD-Adult Hepatitis) 51006 (EIP)
 52200 (PHD-Employ. Test) 52310 (PHD-HIV) Other
 52110 (PHD-Prenatal) 52120 (PHD-Family Plan)
 USE >>> DATE <<<TIME 52320 (PHD-STD) 52330 (PHD-TB Program)
 ONLY STAMP 52340 (PHD-Refugee) 52350 (PHD-HB Immun.)

SUBMITTER INFORMATION
 SUBMITTER CODE
 SUBMITTER NAME
 ADDRESS
 PHONE ()

PATIENT INFORMATION
 PATIENT NAME
 GENDER MALE FEMALE TRANSGENDER
 DATE OF BIRTH MM/DD/YYYY
 PATIENT ID (MRN#)
 SOCIAL SECURITY #
 OTHER ID (HIV#)

ATTENTION:
 CLINICIAN NAME
 PHONE # ()

RACE: Check all that apply.
 American Indian/Alaskan Native Asian Black/African American
 Native Hawaiian/Pacific Islander White Other

ETHNICITY: Hispanic Non-Hispanic

SPECIMEN INFORMATION

S Abscess	Bronchial Biopsy	Fluid (site)	Oral Fluid	Sputum, nebulized
P Ascites fluid	Liver	Liver	Pericardial fluid	Throat swab
E Blood, femoral	Bronchoalveolar lavage	Lymph node	Peritoneal fluid	Throat wash
C Blood, heart	Cervix	Lung, left	Pleural fluid	Tissue (site)
I Blood, plasma	CSF	Lung, right	Pleural Biopsy	Tracheal aspirate
M Blood, serum	Ear	Nail (site)	Rectum	Urine
E Blood, whole	Endocervix	Nasopharyngeal swab	Rectum/Vagina	Urethra
N Bone	Eye	Nasopharyngeal wash	Skin (site)	Vagina
Bone marrow	Feces/Stool	Nasal swab	Spleen	Wound (site)
Brain	Hair	Nasal wash	Sputum, natural	Water

SPECIMEN COLLECTION
 Date/Time Collected MM/DD/YYYY Military Time
 End of Quantiferon Incubation MM/DD/YYYY Military Time

SPECIMEN TYPE
 Clinical Asymptomatic
 Reference Symptomatic: Date of onset: MM/DD/YYYY

ANALYSIS REQUESTED
 For Details: <http://www.sld.state.nm.us/documents/directory.pdf>

G B. anthracis	GC - Meninge	Singalix antibody	Mumps Immune Status
E B. cereus/S. aureus	H. influenzae typing	CDC referral (attach form 50.34)	Plague/Tularemia antibody
N CDC referral (attach form 50.34)	ID of Bacteria (specy)	HIV-1 antibody	Rubella Immune status
C Culture, OMI	- Anaerobe	HIV Rapid Test Confirmation	Rubella diagnosis (call first)
R Culture, OMI anaerobic	- Gram negative	Hepatitis A Diagnosis (IgM Only)	Rubeola Immune status
A Culture, Fecal (enteric)	- Gram positive	Hepatitis A Immune Status	Rubeola diagnosis (call first)
L (check all that apply)	Legionella culture	Hepatitis B Pre-Vaccination	Syphilis Antibody
- Campylobacter species:	N. meningitidis typing	Hepatitis B Prenatal Screen	TB Quantiferon
- E. coli O157:H7	Pertussis (Bordetella sp.)	Hepatitis B Post-Vaccination	VZV Immune status
B - Salmonella, serotype:	Plague FA	Hepatitis B High Risk (Contact to HBV positive)	Other:
C - Shigella, serotype:	Plague FA and culture	Hepatitis C High Risk and HCV	
A - Shiga Toxin test/Isolation	Strep, Group B, Isolation	Hepatitis C Antibody (Anti-HCV)	
E - Yersinia enterocolitica:	Tularemia culture	Hepatitis A, B and C Diagnostic Panel (Acute)	<input type="checkbox"/> VIRUS ISOLATION
R Diphtheria	Vibrio		Agent(s) suspected:
O EIP Isolate:	Other		Influenza
L MYCOLOGY			Rapid Test: Pos Neg
Aerobic actinomyces <input type="checkbox"/> Yeast/Mold Culture			Not Performed
O Cooidioides <input type="checkbox"/>			HSV
			Other Specify:

AFB/TUBERCULOSIS with Drug susceptibility, if TB
 Culture ID Isolate

General Clinical Request Form - Version: 1.0, Index: SLD Form 101, Printed: 30-Mar-2011 07:42
 Authorized on: 30-Mar-2011. Authorized by: Gary Coy. Document Unique Reference: 582-9770898. No review required.
 Author(s): Adam Aragon
 Page 1 of 1

Scientific Laboratory Division EIP Laboratory Activities

- ▣ Analysis Requested:

Clinical isolates or samples for

FluSurvNet

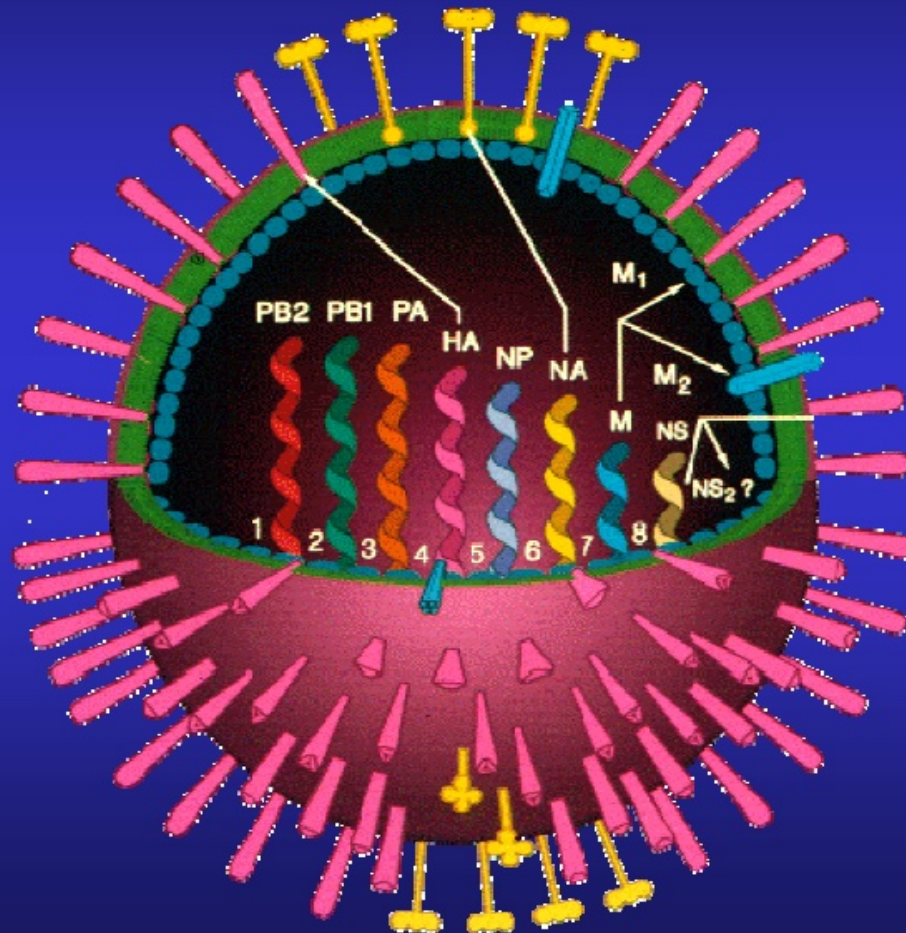
ABCS

FOODNET (NARMS)

Retail Meat

Influenza surveillance

Influenza Virus



Sentinel Surveillance Testing

- ▣ Reference Testing for Hospitalized Patients
- ▣ Screen With Influenza A/B RT-PCR
- ▣ Subtyping of Influenza A Positives by RT-PCR
- ▣ Viral culture for CDC send outs
- ▣ Influenza B subtyping and specimens not acceptable for RT-PCR
- ▣ RT-PCR results in 3-5 days

Specimens Acceptable for RT-PCR

Nasopharyngeal Swabs

Nasal Swabs

Additional acceptable sources in the future

Specimens must be placed into
2-3 ml viral transport media (VTM)

Testing Platforms

- ▣ CDC Human Influenza Virus Real-time RT-PCR Detection and Characterization Panel
 - ▣ CDC Influenza 2009 A(H1N1)pdm
 - ▣ Real-time RT-PCR Detection Panel
 - ▣ Roche MagNA Pure LC
 - ▣ Qiagen Viral RNA Mini Kit
 - ▣ ABI 7500 DX
 - ▣ Viral Culture

Storage and Transport

Specimens stored refrigerated must be tested within
72 hours of collection

Transport on cold packs to maintain refrigerated
temperatures

Specimens may be frozen at $\leq -70^{\circ}\text{C}$ if submission
will be delayed

Transport on dry ice





The primary container, with parafilm and absorbent material, being placed into a zip-lock bag (the secondary container).

Each specimen should be placed in a separate bag in case of leakage.

Influenza Testing

Virus Isolation

List Agent Suspected as Influenza

Include rapid test results if performed

NEW MEXICO DEPARTMENT OF HEALTH
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Scientific Laboratory Division
1101 Camino de Salud N.E.
Albuquerque, NM 87102
SLD LAB NO. ONLY
ONE FORM PER SPECIMEN
PLEASE PRINT LEGIBLY

SLD Form 101 v1.0, 11Mar2011 USER CODES -->> S1000 (Epidemiology) S2325 (PHD-Adult Hepatitis) S1006 (EIP)
SLD DATE S2200 (PHD:Employ. Test) S2310 (PHD:HIV) S2120 (PHD:Family Plan) Other
USE >>> <<<TIME S2110 (PHD:Prenatal) S2320 (PHD:STD) S2330 (PHD:TB Program) S2350 (PHD:HB Immun.)
ONLY STAMP S2340 (PHD:Refugee)

SUBMITTER INFORMATION **PATIENT INFORMATION**

SUBMITTER CODE [] [] [] PATIENT NAME [] [] []
SUBMITTER NAME [] GENDER MALE FEMALE TRANSGENDER
ADDRESS [] [] [] DATE OF BIRTH MM/DD/YYYY []/[]/[]
City State Zip Code City State Zip Code
PHONE () () PATIENT ID (MRN#) [] [] [] []
SOCIAL SECURITY # [] [] [] [] [] []
OTHER ID (HIV#) [] [] [] [] [] []
CLINICIAN NAME [] [] [] RACE: Check all that apply.
PHONE # () () Last First American Indian/Alaskan Native Asian Black/African American
 Native Hawaiian/Pacific Islander White Other
ETHNICITY: Hispanic Non-Hispanic

SPECIMEN INFORMATION

S Abscess Bronchial Biopsy Fluid (site): Oral Fluid Sputum, nebulized
P S Abscess fluid Bronchial Wash Liver Pericardial fluid Throat swab
E O Blood, femoral Bronchoalveolar lavage Lymph node Peritoneal fluid Throat wash
C U Blood, heart Cervix Lung, left Pleural fluid Tissue (site):
I R Blood, plasma CSF Lung, right Pleural Biopsy Tracheal aspirate
M C Blood, serum Ear Nail (site) Rectum Urine
E E Blood, whole Endocervix Nasopharyngeal swab Rectum/Vagina Urethra
N Bone Eye Nasopharyngeal wash Skin (site) Vagina
Bone marrow Feces/Stool Nasal swab Spleen Wound (site):
Brain Hair Nasal wash Sputum, natural Other:

SPECIMEN COLLECTION SPECIMEN TYPE CLINICAL SYMPTOMS
Date/Time Collected MM/DD/YYYY Military Time Clinical Asymptomatic
End of Quantiferon MM/DD/YYYY Military Time Reference Symptomatic: Date of onset: MM/DD/YYYY
Incubation MM/DD/YYYY Military Time

ANALYSIS REQUESTED For Details: <http://www.sld.state.nm.us/documents/directory.pdf>

G B. anthracis GC culture Bacterial antibody Mumps Immune Status
E B. cereus/S. aureus H. influenzae typing CDC referral (attach form 50.34) Plague/Tularemia antibody
N CDC referral (attach form 50.34) ID of Bacteria (specify) HIV-1 antibody Rubella Immune status
E Culture, OMI Aerobe HIV Rapid Test Confirmation Rubella diagnosis (call first)
R Culture, OMI anaerobic -Gram negative Hepatitis A Diagnosis (IgM Only) Rubella Immune status
A Culture, Fecal (enteric) -Gram positive Hepatitis A Immune Status Rubella diagnosis (call first)
L (check all that apply) -Campylobacter species: Legionella culture Hepatitis B Pre-Vaccination Syphilis Antibody
 -E. coli O157:H7 N. meningitidis typing Hepatitis B Prenatal Screen TB Quantiferon
B -Salmonella, serotype: Pertussis (Bordetella sp.) Hepatitis B Post-Vaccination YZV Immune status
C -Shigella, serotype: Plague FA and culture Hepatitis B High Risk (Contact to Other:
T -Shiga Toxin test/isolation Strep. Group B, isolation Hepatitis B High Risk (Contact to Other:
E -Yersinia enterocolitica: Tularemia culture HBV positive) Other:
I Diphtheria Vibrio Hepatitis B High Risk (Anti-HCV Other:
O EIP Isolate: Other Hepatitis C Antibody (Anti-HCV Other:
L **MYCOLOGY** Yeast/Mold Culture AFB1/TUBERCULOSIS With drug susceptibility, if TB **VIRUS ISOLATION**
O Aerobic actinomycetes Culture ID Isolate Agent(s) suspected:
Y Coccidioides Culture ID Isolate Influenza
Rapid Test: Pos ___ Neg ___
Not Performed ___
HSV ___
Other Specify: _____

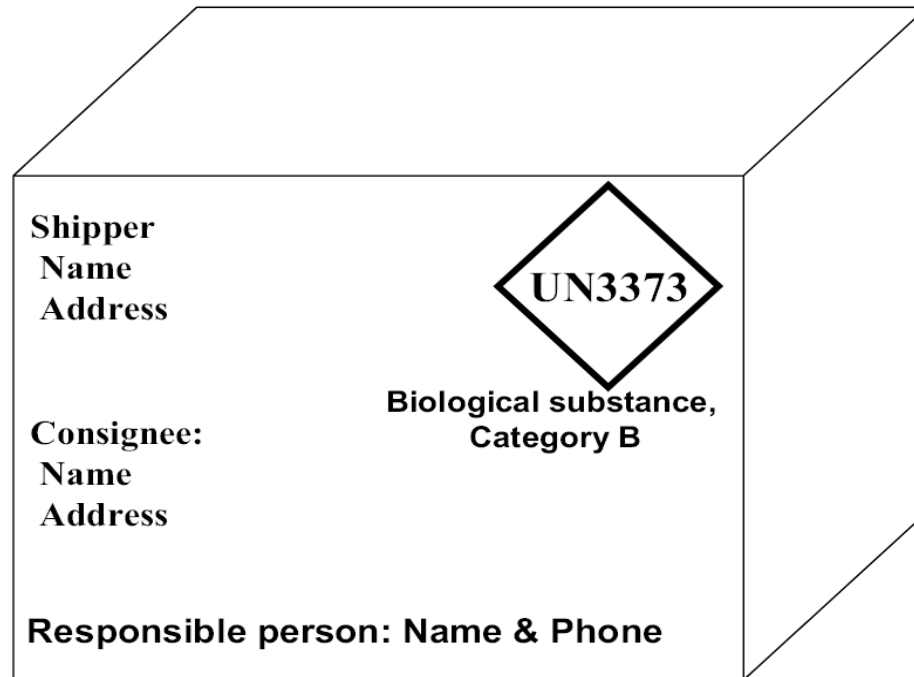
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Authorized on: 30-Mar-2011. Authorized by: Gary City, Document Unique Reference: 582-9770895. No review required.
Authority: Adam Aragon
Page 1 of 1

- Place form in outer sleeve of zip-lock bag to separate it from specimen in case of leakage.







Category B



Outer markings for DOT, IATA and US mail

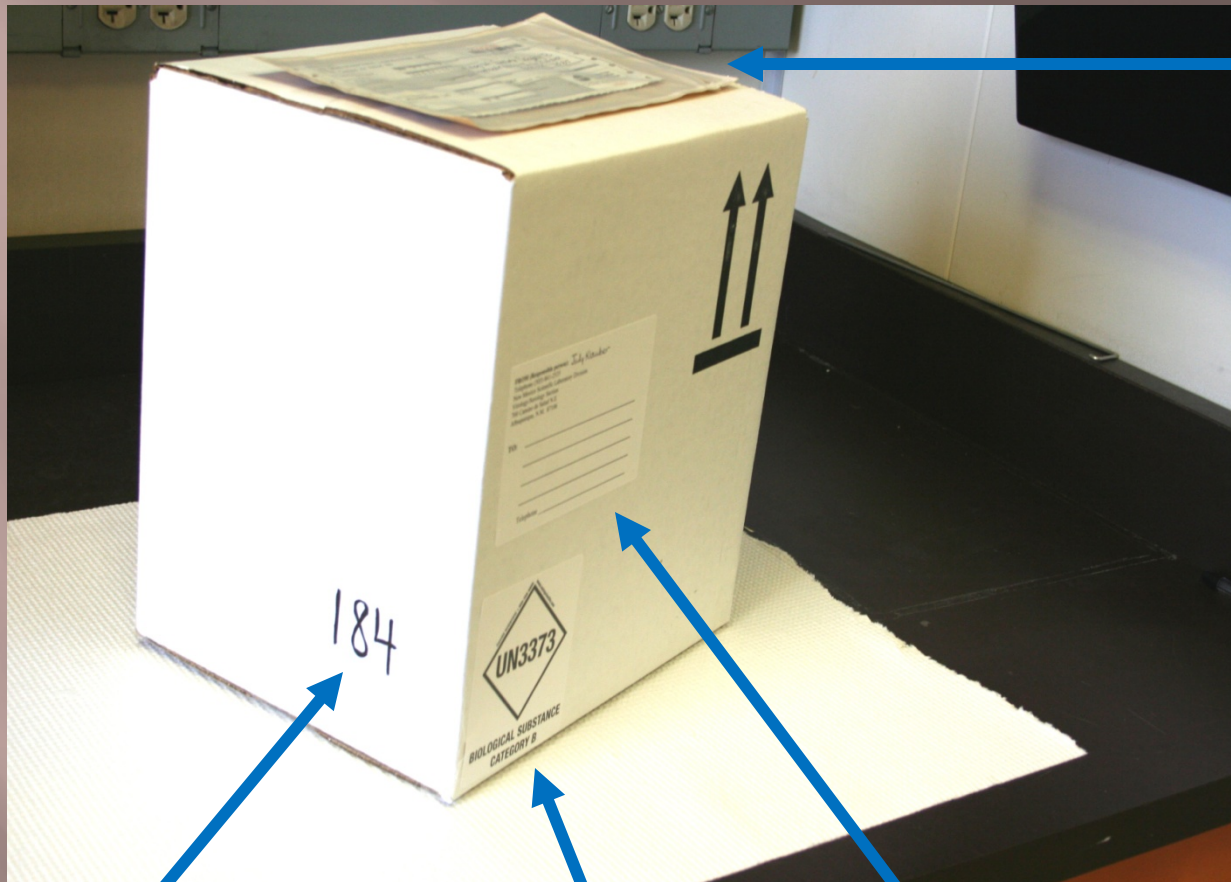
PLEASE TYPE OR PRINT

FROM (Company) NM DOH/SCIENTIFIC LABORATORY DIV.		Hub Destination		2535648	
Street 700 Camino de Salud NE				 2535648	
City Albuquerque,	State NM	ZIP CODE (Required) 87106	Date Shipped	No. of Pieces	Weight
Sent by (Print Name) Pam Morden	Phone (Required) 5058412511	Special Instructions Biological Substance Category B			
Signature (Sender)		Responsible person: Judy Klamber			
DMC Signature		(505) 841-2535			
TO (Company) PLEASE PRINT NEATLY		Account Number		Service	Quick Key No.
Attention (Name/Dept.) Microbiology Lab	Phone (Required) 505	PAYMENT <input checked="" type="checkbox"/> BILL SENDER <input type="checkbox"/> BILL RECIPIENT		Amount	
Street	Date of Delivery		\$		
City	State NM	ZIP CODE (Required)	Date of Delivery	 DISTRIBUTION MANAGEMENT CORPORATION	
Consignee (Print Name)	Signature (Consignee)		4921 CHAPPELL RD., NE • ALBUQUERQUE, NM 87107 (505) 344-9898 • 1-800-825-7274 • Fax: (505) 344-9811		

The shipper is subject to terms and conditions on the reverse side of this document.

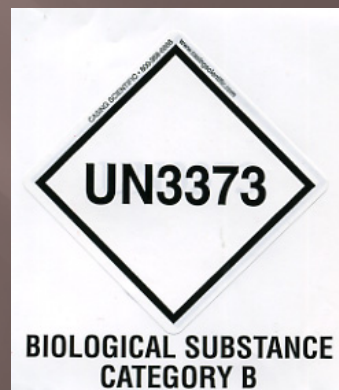
MAJESTIC FORMS & SPECIARTIES, INC. ALBUQUERQUE, NM (505) 292-9898

ORIGINAL



Courier form

Submitter number will ensure return of box



To/From address label (can include responsible person information)



For dry ice shipments: Add **dry ice label** and the words:

Dry Ice

UN 1845

___ kg

(Maximum quantity of dry ice is 2.3kg)



2539857

(Required)

Date Shipped

No. of Pieces

Weight

1 0 6

Special Instructions

Biological Substance Category B
Responsible Person: Judy KLAUBER
(505) 841-2535

KUP

Time

Dry ice UN1845 3 kg

Account Number

Service

Quick Key No.

SLDABQ01

Routed

PAYMENT

Amount

BILL SENDER

BILL RECIPIENT

\$

Active Bacterial Core Surveillance

- EIP Isolate: _____
(for GAS, GBS, SPN only)
- H.influenzae typing
- N.meningitidis typing

Invasive bacterial disease, isolated from normally sterile clinical samples.

NEW MEXICO DEPARTMENT OF HEALTH
GENERAL CLINICAL REQUEST FORM
 Scientific Laboratory Division
 1101 Camino de Salud N.E.
 Albuquerque, NM 87102
HEALTH

SLD LAB NO. ONLY
 ONE FORM PER SPECIMEN
 PLEASE PRINT LEGIBLY

SLD Form 101 v1.0, 11Mar2011 USER CODES -->

SLD	DATE	51000 (Epidemiology)	52325 (PHD-Adult Hepatitis)
USE >>>	<<<TIME	52200 (PHD:Employ. Test)	52310 (PHD:HIV)
ONLY	STAMP	52110 (PHD:Prenatal)	52120 (PHD:Family Plan)
		52320 (PHD:STD)	52330 (PHD:TB Program)
		52340 (PHD:Refugee)	52350 (PHD:HB Immun.)

SUBMITTER INFORMATION **PATIENT INFORMATION**

SUBMITTER CODE: [] [] [] PATIENT NAME: _____
 SUBMITTER NAME: _____ GENDER: MALE FEMALE TRANSGENDER
 ADDRESS: _____ DATE OF BIRTH: MM/DD/YYYY ____/____/____
 _____ _____
 _____ _____
 City State Zip Code City State Zip Code
 PHONE () PATIENT ID (MRN#) _____
 _____ SOCIAL SECURITY # _____
 _____ OTHER ID (HIV#) _____

CLINICIAN NAME: _____ RACE: Check all that apply.
 PHONE # () Last First American Indian/Alaskan Native Asian Black/African American
 _____ _____ Native Hawaiian/Pacific Islander White Other
 _____ _____ ETHNICITY: Hispanic Non-Hispanic

SPECIMEN INFORMATION

S Abscess P S Ascites fluid E O Blood, femoral C U Blood, heart I R Blood, plasma M C Blood, serum E E Blood, whole N Bone Bone marrow Brain	Bronchial Biopsy Bronchial Wash Bronchoalveolar lavage Cervix CSF Ear Endocervix Eye Feeces/Stool Hair	Fluid (site): Liver Lymph node Lung, left Lung, right Nail (site) Nasopharyngeal swab Nasopharyngeal wash Nasal swab Nasal wash	Oral Fluid Pericardial fluid Peritoneal fluid Pleural fluid Pleural Biopsy Rectum Rectum/Vagina Skin (site) Spleen Sputum, natural Sputum, nebulized Throat swab Throat wash Tissue (site): Tracheal aspirate Urine Urethra Vagina Wound (site): Other:
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SPECIMEN COLLECTION **SPECIMEN TYPE** **CLINICAL SYMPTOMS**

Date/Time Collected: ____/____/____ Military Time: _____
 End of Quantiferon: ____/____/____ Incubation: ____/____/____ Military Time: _____

Asymptomatic
 Symptomatic: Date of onset: MM / DD / YYYY

ANALYSIS REQUESTED For Details: <http://www.sld.state.nm.us/documents/directory.pdf>

G B. anthracis B B. cereus/S. aureus N CDC referral (attach form 50.34) E Culture, OMI S Culture, OMI anaerobic A Culture, Fecal (enteric) L Culture, Fecal (enteric) (check all that apply) -Campylobacter species: -E. coli O157:H7 -Salmonella, serotype: -Shigella, serotype: -Shiga Toxin test/isolation -Yersinia enterocolitica: D Diphtheria O EIP Isolate: L MYCOLOGY Aerobic actinomycetes <input type="checkbox"/> Yeast/Mold Culture Coccidioides	G C culture H. Influenzae typing ID of Bacteria (specify) -Anaerobe -Gram negative -Gram positive L Legionella culture N. meningitidis typing P Pertussis (Bordetella sp.) P Plague FA and culture S Strep. Group B, isolation T Tularemia culture V Vibrio O Other	B Bacteroides antibody C CDC referral (attach form 50.34) H HIV-1 antibody H HIV Rapid Test Confirmation H Hepatitis A Diagnosis (IgM Only) H Hepatitis A Immune Status H Hepatitis B Pre-Vaccination H Hepatitis B Prenatal Screen H Hepatitis B Post-Vaccination H Hepatitis B High Risk (Contact to HBV positive) H Hepatitis B High Risk and HCV H Hepatitis C Antibody (Anti-HCV) H Hepatitis A, B and C Diagnostic Panel (Acute)	M Mumps Immune Status P Plague/Tularemia antibody R Rubella Immune Status R Rubella diagnosis (call first) R Rubella Immune Status R Rubella diagnosis (call first) S Syphilis Antibody T TB Quantiferon V YZV Immune Status O Other: _____ VIRUS ISOLATION A Agent(s) suspected: Influenza Rapid Test: Pos ____ Neg ____ Not Performed _____ HSV _____ Other Specify: _____
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General Clinical Request Form - Version: 1.0, Index: SLD Form 101, Printed: 30-Mar-2011 07:42
 Authorized on: 30-Mar-2011. Authorized by: Gary Cley. Document Unique Reference: 582-9770898. No review required.
 Authority: Adam Aragon
 Page 1 of 1

What is done at SLD?

- ▣ ABCs
 - GAS, GBS, SPN
 - ▣ Viability check, logged, frozen, feedback, shipped
 - *H. influenzae*, *N.meningitidis*
 - ▣ Serotype, confirmation if non-typable, logged, frozen, feedback, shipped



Haemophilus influenzae serotyping
photo by Kim Reiten, SLD

□ NARMS/FOODNET (Clinical, General Bacteriology)

- Campylobacter species_____
- E. Coli O157:H7
- Salmonella, serotype
- Shigella, serotype
- Shiga Toxin test/isolation
- Yersinia enterocolitica
- Gram Positive LISTERIA
- Vibrio

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ONLY STAMP S2320 (PHD:STD) S2330 (PHD:TB Program) S2330 (PHD:HB Immun.)

SUBMITTER INFORMATION		PATIENT INFORMATION	
SUBMITTER CODE		PATIENT NAME	
SUBMITTER NAME		GENDER <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE <input type="checkbox"/> TRANSGENDER	
ADDRESS		DATE OF BIRTH MM/ DD/ YYYY	
City State Zip Code		ADDRESS	
PHONE ()		City State Zip Code	
ATTENTION:		PATIENT ID (MRN#)	
CLINICIAN NAME		SOCIAL SECURITY #	
PHONE # ()		OTHER ID (HIV#)	
RACE: Check all that apply.			
<input type="checkbox"/> American Indian/Alaskan Native <input type="checkbox"/> Asian <input type="checkbox"/> Black/African American <input type="checkbox"/> Native Hawaiian/Pacific Islander <input type="checkbox"/> White <input type="checkbox"/> Other			
ETHNICITY: <input type="checkbox"/> Hispanic <input type="checkbox"/> Non-Hispanic			
SPECIMEN INFORMATION			
S Abscess P S Ascites fluid E O Blood, femoral C U Blood, heart I R Blood, plasma M C Blood, serum E E Blood, whole N Bone Bone marrow Brain		Bronchial Biopsy Bronchial Wash Bronchoalveolar lavage Cervix CSF Ear Endocervix Eye Feces/Stool Hair	
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Sputum, nebulized Throat swab Throat wash Tissue (site): Tracheal aspirate Urine Urethra Vagina Wound (site): Other:			
SPECIMEN COLLECTION Date/Time Collected MM/ DD/ YYYY Military Time End of Quantiferon Incubation MM/ DD/ YYYY Military Time		SPECIMEN TYPE <input type="checkbox"/> Clinical <input type="checkbox"/> Reference	
CLINICAL SYMPTOMS <input type="checkbox"/> Asymptomatic <input type="checkbox"/> Symptomatic: Date of onset: MM / DD / YYYY			
ANALYSIS REQUESTED For Details: http://www.sld.state.nm.us/documents/directory.pdf			
G B. anthracis B B. cereus/S. aureus N CDC referral (attach form 50.34) E Culture, OMI R Culture, OMI anaerobic A Culture, Fecal (enteric) L (Check all that apply) <input type="checkbox"/> -Campylobacter species: <input type="checkbox"/> -E. coli O157:H7 <input type="checkbox"/> -Salmonella, serotype: <input type="checkbox"/> -Shigella, serotype: <input type="checkbox"/> -Shiga Toxin test/isolation <input type="checkbox"/> -Yersinia enterocolitica: I Diphtheria O EIP Isolate: L MYCOLOGY <input type="checkbox"/> Aerobic actinomycetes <input type="checkbox"/> Yeast/Mold Culture G Coccidioides		GC culture <input type="checkbox"/> H. influenzae typing ID of Bacteria (specify) <input type="checkbox"/> -Anaerobe <input type="checkbox"/> -Gram negative <input type="checkbox"/> -Gram positive Legionella culture <input type="checkbox"/> N. meningitidis typing Pertussis (Bordetella sp.) Plague FA and culture Strep. Group B, isolation Tularemia culture Vibrio Other	
Bleeders antibody CDC referral (attach form 50.34) HIV-1 antibody HIV Rapid Test Confirmation Hepatitis A Diagnosis (IgM Only) Hepatitis A Immune Status Hepatitis B Pre-Vaccination Hepatitis B Prenatal Screen Hepatitis B Post-Vaccination Hepatitis B High Risk (Contact to HBV positive) Hepatitis B High Risk and HCV Hepatitis C Antibody (Anti-HCV) Hepatitis A,B and C Diagnostic Panel (Acute)		Mumps Immune Status Plague/Tularemia antibody Rubella Immune Status Rubella diagnosis (call first) Rubeola Immune Status Rubeola diagnosis (call first) Syphilis Antibody TB Quantiferon YVZV Immune Status Other:	
VIRUS ISOLATION Agent(s) suspected: Influenza Rapid Test: Pos ___ Neg ___ Not Performed ___ HSV ___ Other Specify:			
AFB/TUBERCULOSIS With drug susceptibility, if TB <input type="checkbox"/> Culture <input type="checkbox"/> ID Isolate			

General Clinical Request Form - Version: 1.0, Index: SLD Form 101, Printed: 30-Mar-2011 07:42
 Authorized on: 30-Mar-2011. Authorized by: Gary Cley. Document Unique Reference: 582-9770985. No review required.
 Authority: Adam Aragon
 Page 1 of 1

What is done at SLD?

Campylobacter

- Confirmation by combined culture and molecular methods, feedback, logged, shipped
- Challenges



Campylobacter jejuni
photo by Kim Reiten, SLD

More EIP at SLD

▣ Salmonella and Shigella

- ▣ Confirmation by culture, serotype,
- ▣ PFGE,
- ▣ representative samples shipped to CDC



Salmonella sp
photo by Kim Reiten, SLD

What is done at SLD?

▣ E.coli O157

Shiga toxin production

Confirmation

Serotype

PFGE

CDC

▣ STEC

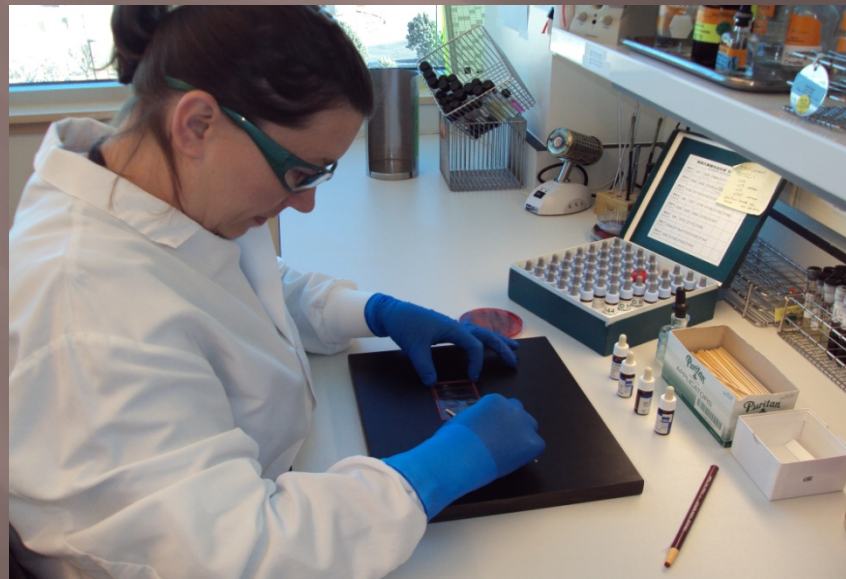
Shiga toxin production

Isolate/identify/confirm

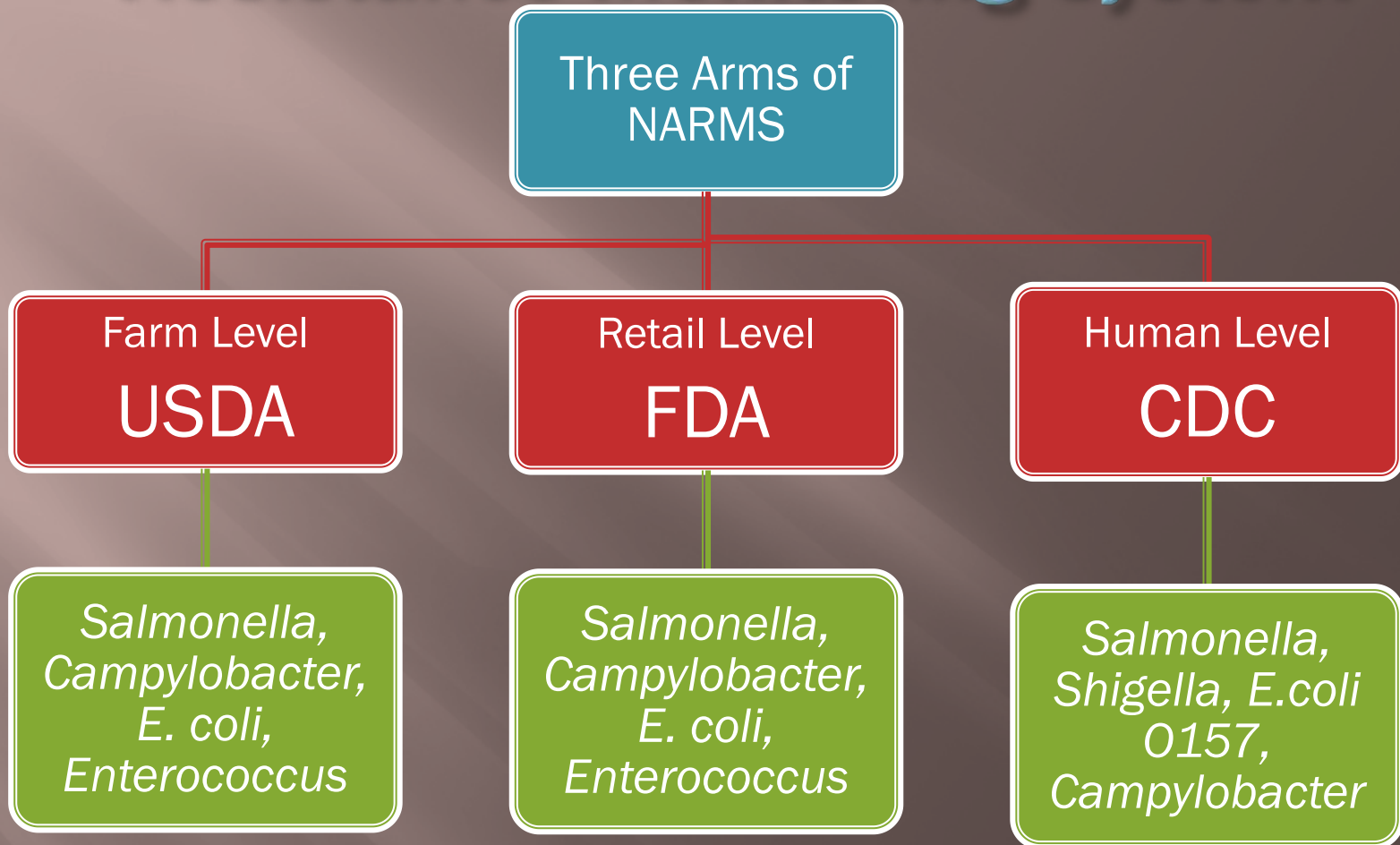
Serotype

PFGE

CDC



National Antimicrobial Resistance Monitoring System



Various states ~ isolates Obtained from various federally inspected slaughter houses / processing plants and farms

11 states

All 50 states

Retail Meat Study

Sampling Scheme

40 samples per month

Ground Beef

Ground Turkey

Pork Chops

Chicken Breasts

Testing

Are currently 11 states now ~ CA, CO, CT, GA, MD, MN, NM, NY, OR, TN, and PA ('08)

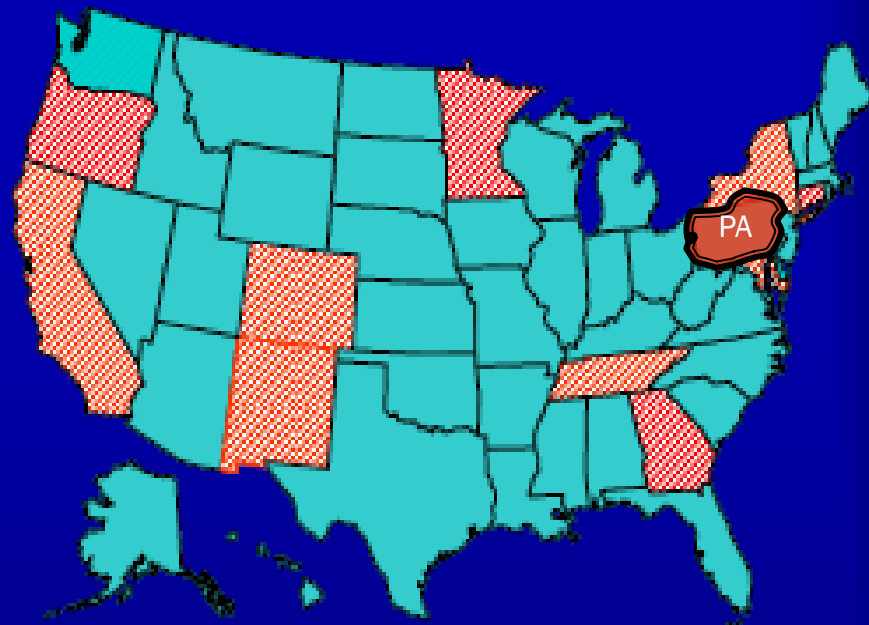
Culture meat and poultry for *Salmonella*


Culture poultry only for *Campylobacter*

In addition there are currently three sites (GA, OR & TN) that also test for *E. coli* and *Enterococcus spp.*,

Isolates obtained are shipped to FDA-CVM-OR Lab for confirmation of identification and antimicrobial sensitivity testing.

*

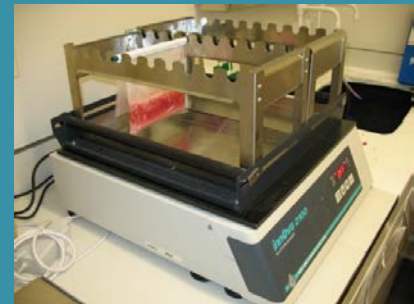


 **Retail Food Study Sites;
FoodNet laboratories**



25-g sample + 225-mL BPW

15 minutes @ 1100rpms



DAY #1

50-mL rinsate

50-mL 2X Bolton Broth

Remaining BPW

DAY #2



35°C, 0/N

0.1-mL to RVR10

42°C, 0/N

42°C, 48-hr w/ Campy gas

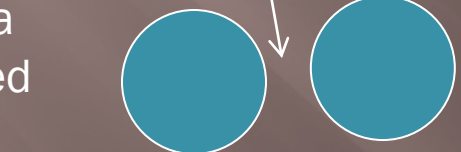
DAY #3

PCR

PCR -

PCR +

Salmonella Not Isolated



XLD and SalCHROM agar

35°C, 0/N

Campy Cefex



42°C, 48-hr w/ Campy gas

Salmonella

Campylobacter

Suspect picks taken from plate

DAY #4



Salmonella

35°C, O/N

DAY #5



Presumptive + picks g-stain/oxidase set up to BAP & H-broths

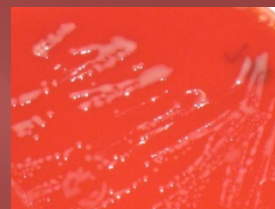
DAYS 6 - 8

Biochemically confirm
Serotyping
PFGE and uploaded to PulseNet

Salmonella

42°C, w/ Campy gas

Examine for typical colonies



cefex

+

-
Sample Negative

42°C, 24-48-hr
w/ Campy gas

Gram stain
Catalase
Oxidase
motility
Dryspot
Hipp
PCR

Campy
BAP

Campylobacter

Shipped out to CVM lab frozen

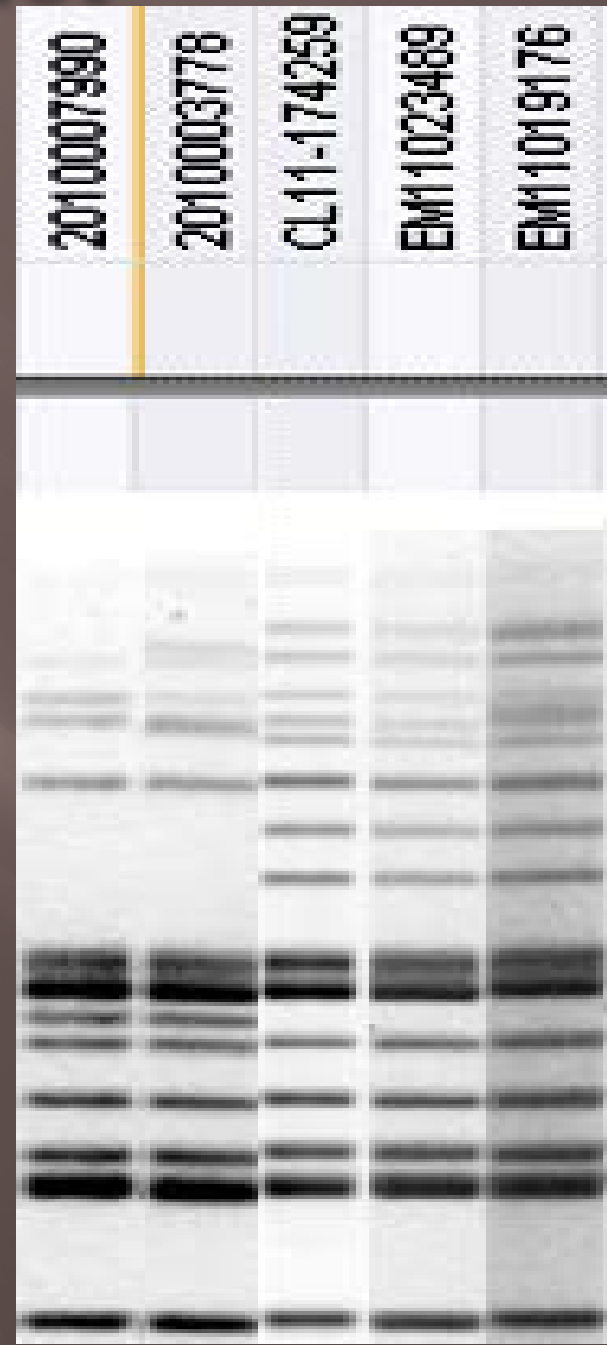
When RMS meets PulseNet

DNA fingerprints of all *Salmonella* isolates at SLD are routinely uploaded to CDC's PulseNet

PulseNet is internet based fingerprinting System that enables labs to rapidly share bacterial DNA fingerprint information thus detecting outbreaks in rapid fashion

Keyed off investigators to emphasize Ground Turkey as the potential source
~ go Epi

Ultimately pinpointed the source of the outbreak in a timely fashion



Communication

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Thank You!