











## APHIS/CDC Form 4 Request to Transfer Select Agents and Toxins

Form 4 Team
Federal Select Agent Program

Multi-Agency Informational Meeting to Discuss Select Agent and Toxin Reporting Requirements

**September 23, 2020** 

# APHIS/CDC Form 4A – Reporting the Identification of a Select Agent or Toxin from a Clinical/Diagnostic Specimen

- APHIS/CDC Form 4 Purpose
- Statistics
- APHIS/CDC Form 4A Overview
- Reporting Requirements
- International sample providers
- Communication
- Disposition
- Common Concerns
- Scenarios, Questions and Answers

#### **Purpose of the APHIS/CDC Form 4**

The purpose of this form is to report select agents or toxins contained in specimens presented for diagnosis, verification, or proficiency testing and seizure of select agents or toxins by federal law enforcement agencies.

- Diagnostic/Verification (4A)
- Proficiency Testing (4B)
- Law Enforcement (4C)

#### Select Agent Regulations Exemptions (Sections 5 and 6)

- Diagnostic, verification, or proficiency testing
- Cleared, approved, licensed, or registered products
- Investigational product
- Domestic or foreign public health or agricultural emergency

## **APHIS/CDC Form 4A Overview – Regulatory Requirements**

- Report within 7 calendar days
- Report Tier 1 select agents/toxins immediately
- Transfer per Section 16 or destroy on site by a recognized sterilization or inactivation process
- Secure agents against theft, loss, or release between identification and final disposition
- Proper reporting to appropriate authorities when required
- Maintain form for 3 years

NOTE: Reporting requirements may be made less stringent in times of extraordinary circumstances (i.e., outbreak)

## **APHIS/CDC Form 4A Overview – Immediate Notification of Tier 1 Select Agents**

#### HHS select agents and toxins:

- Bacillus cereus Biovar anthracis
- Botulinum neurotoxin
- Botulinum neurotoxin producing species of Clostridium
- Ebola virus
- Francisella tularensis
- Marburg virus
- Variola major virus (Smallpox virus)
- Variola minor virus (Alastrim)
- Yersinia pestis

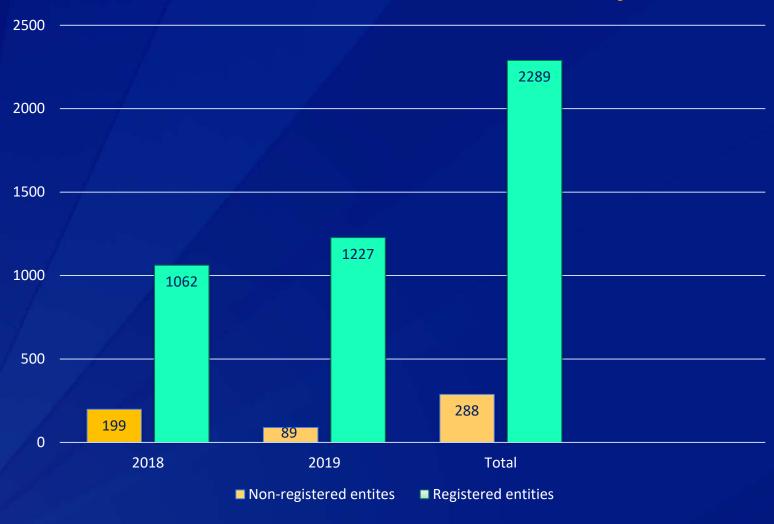
#### Overlap select agents:

- Bacillus anthracis
- Burkholderia mallei
- Burkholderia pseudomallei

#### **USDA** select agents:

- Foot-and-mouth disease virus
- Rinderpest virus

## APHIS/CDC Form 4A — Total Form 4A Sections A and B Reported



## APHIS/CDC Form 4A — Total Form 4A Sections C and D Reported



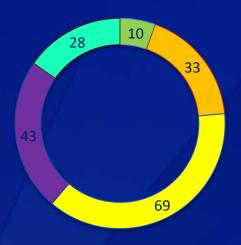
## APHIS/CDC Form 4A – Sample Types Reported

Sample Types	2018	2019
Animal clinical/diagnostic/isolate	385*	621
Human clinical/diagnostic/isolate	570*	592
Environmental	41*	64
Food	10*	25
Plant clinical/diagnostic	0*	2

\*DSAT only

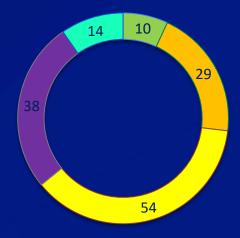
## APHIS/CDC Form 4A – Top 5 Select Agents Reported by NREs on Form 4A A/B

2018



- Bacillus anthracis
- Botulinum neurotoxin producing species of Clostridium
- Coxiella burnetii
- Eastern Equine Encephalitis virus
- Francisella tularensis

2019



- Bacillus anthracis
- Botulinum neurotoxin producing species of Clostridium
- Coxiella burnetii
- Eastern Equine Encephalitis virus
- Francisella tularensis

#### APHIS/CDC Form 4A – Top 3 States Reporting Select Agents on Form 4A A/B for NREs in 2018

Highest reported #	Coxiella burnetii	Eastern Equine Encephalitis virus	Francisella tularensis	Botulinum neurotoxin producing species of Clostridium	Bacillus anthracis
#1	Texas	New Jersey	Wyoming	Pennsylvania	South Dakota
#2	Wisconsin	Louisiana	California/ Washington	Michigan	Texas
#3	Wyoming/ New York	North Carolina	Kansas	North Carolina/ Florida	Wyoming/ Wisconsin

#### APHIS/CDC Form 4A – Top 3 States Reporting Select Agents on Form 4A A/B for NREs in 2019

Highest reported #	Coxiella burnetii	Eastern Equine Encephalitis virus	Botulinum neurotoxin producing species of Clostridium	Francisella tularensis	Bacillus anthracis
#1	Wisconsin	Louisiana	Pennsylvania	California	Texas
#2	Texas	Michigan	Michigan	Wyoming/ Illinois/ South Dakota	North Dakota
#3	Indiana	Wisconsin	N/A	North Dakota/ New Mexico/ Delaware/ Washington	N/A

## APHIS/CDC Form 4A Overview – Sections A and B – Reference Laboratory

- Reference laboratory information
- Identification
- Final disposition
- Exposures
- Provide any sample provider information

SECTION R _ SELECT AGENT OR TOXIN IDENTIFIED FROM CLINICAL/DIAGNOSTIC SPECIMEN(S)							
1. Select Agent or Toxin Identified:			2. Date identified:				
Case/patient/sample ID #(s):     4. # of samples received:     5. Sample type received:			6. Case/patient origin (zip code):				
7. Type of test performed (e.g., PCR, mous	se bioassay, ELISA):						
Dispositions of select agent or toxin by e     Transferred (Provide entity name and		lete all that apply):	Date:	)			
Destroyed (Provide destruction metho		Date:	)	١			
select agent or toxin?	9. Were any of the samples containing a select agent or toxin handled outside of primary containment which may have led to an unintentional release and/or exposure to the select agent or toxin?						
	10. Do you anticipate receiving additional samples/specimens for this case/patient that originate from the initial case (e.g., patient, environmental sample)?  No Yes (If Yes, please refer to the guidance instructions at <a href="https://www.selectagents.gov">www.selectagents.gov</a> for further directions.)						
	11. Has the sender(s) (i.e., sample provider(s)) of the specimen(s) been notified of the identification of the select agent or toxin? \( \sqrt{NOTE}\) No \( \sqrt{Yes} \) \( \sqrt{NOTE}\) Please request completed and signed Sections C & D from each facility that was in possession of the specimen(s)						
12. Sample Provider Entity Name:							
13: Sample Provider Point of Contact: First: MI:	Last	14. Sample Provider E-mail Addres	S:	15. Sample Provider Contact Number:			
16. Comments / Notes:							

## APHIS/CDC Form 4A Overview – Section C – Sample Provider

Sample Provider Information

Submit completed form only once by either e-mail, fax, or mail							
SECTION C – SAMPLE PROVIDER INFORMATION							
1. Name of individual completing Sections C and D:				E-mail address: 3. Te		lephone #:	
First: MI: Last:							
4. Registered Entity (APHIS or CDC R	egistration #:		)	9. Entity name:			
☐ Clinical or Diagnostic Laboratory [non-registered entity (NRE)]							
(NRE # (provided by APHIS or CDC):)							
5. Responsible Official or Laboratory Supervisor name (if same as field 1 then skip to field 9):			9):	10. Address (NOT a post office address):			
First: MI: Last:							
6. E-mail address: 7. Telephone #: 8. Fax #:				11. City:	12. State:	13. Zip Code:	

## APHIS/CDC Form 4A Overview – Section D – Sample Provider

- Case-specific information
- Final disposition
- Exposures
- Additional sample provider information

SECTION D - SPECIMEN(S) CONTAINING SELECT AGENT OR TOXIN PROVIDED TO REFERENCE LABORATORY						
1. Select Agent or Toxin Identified:			2. Date no	2. Date notified of select agent or toxin identification:		
3. Case/patient/sample ID #(s):	4. # of samples shipped:	5. Sample type provided:	6. Case/pa	6. Case/patient/sample origin (zip code):		
7.0 ( ) ( ) ( )						
7. Date sample(s) shipped to Reference La	aboratory:	8. Name of Reference Laboratory:				
Disposition of any remaining select ager	nt or toxin by entity listed in Bl	lock C9:			Н	
☐ Destroyed (Provide destruction metho		Date:		)	ı	
☐ Retained (Provide name of Principal I	Investigator retaining sample.	Name:		)	ı	
☐ Not applicable, the entire specimen w	as transferred to the Referen	ce Laboratory.			_	
	select agent or toxin handled	outside of primary containment which may ha	ive led to an	unintentional release and/or exposure	e t	
the select agent or toxin?	under 7 CED 8231 10 0 CED	8 8121.19, and 42 CFR 873.19 to complete an	d submit an	ADHIS/CDC Earm 3/		
			u submit and	ALTHORODO FORM 31		
	11. Was your entity the source of the sample(s)? ☐ No ☐ Yes (If Yes, skip to field 18)  12. Do you anticipate receiving additional samples/specimens for this case/patient that originate from the initial case (e.g., patient, environmental sample)?					
		at <u>www.selectagents.gov</u> for further directions		ommonimoniai oampio):		
13. Has the sender(s) (i.e., sample provider(s)) of the specimen(s) been notified of the identification of the select agent or toxin?						
NOTE: Please request completed and signed Sections C & D from each facility that was in possession of the specimen(s).						
14. Sample Provider Entity Name:						
15: Sample Provider Point of Contact: 16. Sample Provider E-mail Address: 17. Sample Provider Contact Number					er:	
First: MI: Last:						
18. Comments / Notes:						

## APHIS/CDC Form 4A – Reporting Requirements

- APHIS/CDC Form 4A
  - Immediate notification (Tier 1 agents)
  - Report identification within 7 days
  - Non-registered entities (NRE)
    - Fillable form and email
  - Registered entities (RE)
    - eFSAP
- Who completes and when are Sections A/B and C/D completed?
  - Sections A/B Reference Laboratory
  - Sections C/D Sample Provider(s)

## **APHIS/CDC Form 4A – Reporting Requirements**

- International sample providers
  - International entities do NOT need to report
  - Reference laboratory completes sample provider questions (#B12-16)

NOTE. I lease request completed and signed Sections O & D from each racility that was in possession of the speciments).						
12. Sample Provider Entity Name:						
13: Sample Provider Poir	nt of Contact:		14. Sample Provider E-mail Address:	15. Sample Provider Contact		
First:	MI:	Last:		Number:		
16. Comments / Notes:						

### APHIS/CDC Form 4A – Communication

- Use general discussion box (if registered)
  - eFSAP
- Use email (if not registered)
  - cdcform4@cdc.gov
  - AgSAS@usda.gov
- Use case/patient/ID number NOT the CID-F4
  - Numbers are used when following up about cases
- Split samples
  - List all laboratories that were in possession of the samples
  - All laboratories must submit Sections C/D

## APHIS/CDC Form 4A – Disposition

#### Destruction methods

- Destroy onsite Autoclave, incinerator, chemical, etc.
- Proper disposal can be found in *Biosafety in Microbiological and Biomedical Laboratories* (BMBL), Material Safety Data Sheets (MSDS), and Safety Office

#### Transfer

- Select if part of sample was forwarded to reference laboratory
- After identification has been made

#### Not applicable (Form 4A C/D only)

- Select if entire sample was forwarded to reference laboratory
- No work performed on sample

#### Retaining samples

- Samples only retained if registered with FSAP
  - Must be registered for that BSAT

### **APHIS/CDC Form 4A – Most Common Concerns**

- Missing information
  - Difficult to process forms
- Reporting discrepancies
  - Between reference lab and sample provider
  - Zip code is for patient location, not laboratory location (B6)
- Exposure reporting
  - Form 3 team needs to follow up
- Entity sample retention
  - Cannot retain samples more than 7 days once notified

## **APHIS/CDC Form 4A – Most Common Concerns**

#### Field collection samples

- Reference laboratory lists the sample provider
  - Veterinary clinic/hospital
  - Veterinary laboratory
  - Farm/wildlife center with veterinary staff
- Sample provider reporting
  - Necropsy versus carcass
  - Field collection (soil, water, insects)
  - Mosquito testing

#### Scenario – Split Sample

A hospital laboratory sends a patient sample to two regional laboratories for testing. The regional laboratories are unable to identify the isolate. Regional laboratory A sends the isolate to the state laboratory while Regional laboratory B sends the isolate to the Centers for Disease Control and Prevention (CDC) for identification. The state laboratory and CDC identify a select agent and notify the sending regional laboratories. The notification of the select agent identification was sent to all sample providers. Both the CDC and the state laboratory submitted a Form 4A Sections A/B.

### Which laboratory is required to submit APHIS/CDC Form 4A Sections C/D?

- A) Hospital laboratory only
- B) The two regional laboratories that received the sample
- C) All of the above
- D) No one nothing else to submit

- Scenario Split Sample
- Which laboratory is required to submit APHIS/CDC Form 4A Sections C/D?
  - C) All of the above account for each location that is in possession of the sample containing the select agent/toxin upon identification

#### Scenario – Multiple Sample Locations

A Principal Investigator is conducting a regional project testing for a select agent. Multiple samples types are collected from multiple locations and tested in batches.

#### How are these samples reported to FSAP?

- A) One APHIS/CDC Form 4A report for all samples
- B) Multiple APHIS/CDC Form 4A reports for each sample type
- C) Multiple APHIS/CDC Form 4A reports by location
- D) Samples are not reported

Polls are open...Submit your answer now!

- Scenario Multiple Sample Locations
- How are these samples reported to FSAP?
  - C) Multiple APHIS/CDC Form 4A reports by location

#### Scenario – Clostridium botulinum reporting

Reference laboratory receives a sample from a patient suspected as having Botulism. They run a mouse bioassay and report to FSAP that they have identified Botulinum neurotoxins. They continue testing and later identify Botulinum neurotoxins producing species of *Clostridium*. The sample provider reports Botulinum neurotoxins producing species of *Clostridium*.

#### How should this identification have been reported?

- A) Botulinum neurotoxins
- B) Botulinum neurotoxins producing species of *Clostridium*
- C) Both
- D) Neither

Polls are open...Submit your answer now!

- Scenario Clostridium botulinum reporting
- How should this identification be reported?C) Both

#### Scenario

A non-registered entity (NRE) has a tissue sample and culture isolates that were identified as containing *Brucella melitensis*. The reference laboratory that identified the select agent later requests that the <u>tissue sample</u> be sent to them for further testing.

### ■ How should the NRE indicate the sample disposition on the APHIS/CDC Form 4A Sections C/D?

- A) No need to indicate on the APHIS/CDC Form 4A
- B) Transferred and provide the reference laboratory name and date of the transfer
- C) Not applicable because the entire sample was sent
- D) Transferred and destroyed because the tissue sample will be sent but the culture isolates were destroyed

Polls are open...Submit your answer now!

- How should the NRE indicate the sample disposition on the APHIS/CDC Form 4A?
  - D) Transferred and destroyed because the tissue sample will be sent but the culture isolates were destroyed