Pertussis-specific training in Orpheus – Juventila Liko, 9/2/2015

• Creating a case from ELR

Juventila created fake pertussis case Kitty A. Koffer starting with an ELR.

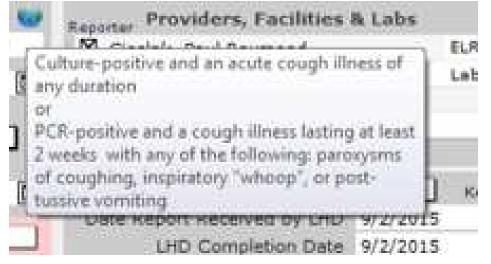
Kitty A Koffer DOB:05/07/15 0 F	Jackson C	Pertussis		Onset	9/1/15	SP ID 4472	73
Basics Labs ¹ Clinical Risks Followup Epilin	nks Contacts	4 Note	s Vaccine	More			
+ Specimen							
ELR - Electronic Lab Reports		Collectio	n			-	pecimen
Laboratory Providence Health and Services	Laboratory	Date	Specimen	Test Type	Result	OSPHL	1.1
Collection Date 08/15/2015 Species							-
Result Date							
Specimen Type NP Swab In Range							
Test Type PCR							
Result Positive							
Acc. 000002015112233 OSPHL							
List of Results ABC-State Only Create Manual Lab				(
Specimen Date: 08/15/2015 Lag: 5 days				If PCI	R confirm	ned,	
Specimen Source/Site: Resp					art with m		
Test:				the cas	se confir	med.	
Results: Test: Bordetella pertussis PCR Result: Positive							
est: Bordetella pertussis PCK Result: Positive				_			
Other Details							
Patient Name: Koffer, Kitty A DOB: 01/07/2014 Sex: F							
Address: 1234 MAIN STREET							
BLACK CITY, OR 97503							
Phone: 541-555-5555							Ψ.
Provider: Cieslak, Paul	ELR	Collection					
	Laboratory	Date	SpecimenType			Result	
Sending Facility: Providence Health and Services Laboratory	Providence	8/15/15	NP Swab	PCR		Positive	© ^
Laboratory							
Ordering Facility: Providence Health Systems							
Providence Health System1235 NE 47th Suite 102 Portland Portland 97213							
Accession: 0000020151122333							

Do your best to fill out as much as possible on the basics tab, especially occupation and worksite.

Case Entry	De
itty A Koffer DOB:05/07/	15 0 F Jackson C Pertussis Onset 9/1/15 SP ID 447273
Basics Labs ¹ Clinical Risks Fi	Ilowup Epilinks Contacts 4 Notes Vaccine More
Identifiers (first. middle, list) Per Kitty A Koffer 1234 Main St White City OR 97503 JACKSON Special Housing Type 541-555-5555 9/2/15 Type Phone Number Email or alternate contact info	Pertussis Confirmed Onset (Any cough) 9/1/2015 Interviewed @ Yes O No Providence Health and Services Reason OK to contact Patient Final Interview Date 9/9/2015 MAPS CDC Case Status Confirmed Use Report Received by LHD Doctor Visits Antibiotic Tested for Pert. State Completion Date
aail or alternate contact info	Doctor Visits Antibiotic Tested for Pert. # Date Y N U Y N U O O O O O O O Note History Orpheus Users Thu, Sept 10, 2015, 10:47 am • (35 days ago) Juventila Liko [OPHD] Lab Testing Done? O Yes
Occ. Attends daycare	

() 1 0 2 / 67355 Records Found (Sorted)	The show All New Record Delete Record Find Sort Share		
out: CaseEntry + View As:	Preview		Aa) Edit L
Case Entry		Development Version	kitty a koffer
itty A Koffer DOB:05/07/15	OF Jackson C Pertussis Onset 9/1/15 SP 1	D 447273	
Basics Labs 1 Clinical Risks Follow	up Epilinks Contacts 4 Notes Vaccine More		
Identifiers (first_middle_last) Image: Person Kitty A Koffer 1234 Main St OR 97503 JACKSON Special Housing Type 541-555-5555 9/2/15 Type Phone Number Phone Number	Culture-positive and an acute cough illness of	H Provider	
Demographics Race DOB 5/7/2015 White Black Black ge 27 years 3 months Back Sex © F O M Alaran Language Refused Born Country of Birth Refugee Work Workste / School Yes Occ. Attends daycare Subrace Subrace	O O O O O O • Image: Construction of the second		
			Record 1 of 2 (67,355 total
Browse			Kecord 1 of 2 (67,355 total

- Review case definitions -- We understand the ease with which you should want to make a PCR-positive case with 12 days of cough a confirmed case, but we are using CDC's case definition and for PCR-positives, the confirmed case must have a cough illness lasting at least 2 weeks with any of the following: Paroxysms of coughing, inspiratory "whoop", or post-tussive vomiting.
- This highlights the importance of getting cough follow up data.

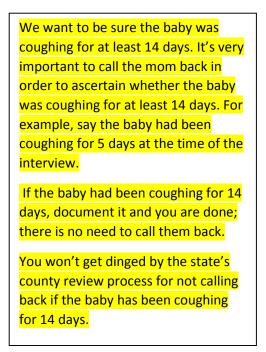


• Do your best to fill out collection date, Specimen Type, Test Type, and Result because we transmit these fields to CDC.

	Specimen			
E	LR - Electronic L	ab Reports		
	Laboratory	Providence Health	and Services	Lab
	Collection Date	08/15/2015 📰	Species	
	Result Date			
	Specimen Type	NP Swab	In Range 🗆	
	Test Type	PCR		
	Result	Positive		
4	Acc. 00000201511	2233 OSPHL		
I	List of Results	ABC-State Only	Create Manual Lab	
	Specimen Date: 08	/15/2015 Lag: 5 d	days	
:	Specimen Source/S	lite: Resp		
	Test:	_		

• Do your best to fill out the clinical symptoms and treatment data

y A Koffer	DOB:05/	07/15 0	F Ja	ckson C Pertu	Issis			Onset	9/1/15	SP ID 447273	
sics Labs 1 Clinica	al Risks	Followup	Epilinks	Contacts 4	Notes	Vaccine	More				
Ask about exposures from Wedi						Deceased Cause		No No	Date		
Onset Inde Symptomatic? O Yes O	sterminate [No O R O	? par	st cough 9/1 oxysmal Da sis Date Da	te 🔲	ßeta	Hospitalize Hospital Ad			O Unknown Dates	+ Admission	
Symptom Any cough	Answer Yes		Notes	Ask Clinical Qu	or co						
Paroxysmal/spasmodic	No										
Whoop	No										
Apnea	Yes					2					*
Cyanosis	Yes					Add a Qu	ick Note			(A	ZA
Cold-like symptoms	2					-					31
Post-tussive vomiting						Note Hist			. (
Cough at last interview	1								n • (55 day: about the co		
Cough Duration (#days) at	7					Corchard C		-1 -011			
CXR for pneumonia	5				8						
Seizures											
Acute encephalopathy	1										
Treatment Drug Name / Comments Azithromycin		/Frequency		Dates 9/1/2015 5 9/5/2015	eatment	1					



After you enter the data, and you are not planning on calling the family back, you can complete the case, being sure to enter the final interview date.

You don't need to complete this section unless you are in the Portland Tri-County area:

MAPS CDC	Case Statu	IS Confirm	ned							
Doctor Visits # Date	Antibiotic Y N U O O O	Tested YNU OOO								
			-							
Lab Testing Done? OYes ONo OUnk Is a laboratory sample available? OYes, isolate OYes, specimen/DNA OYes, isolate and specimen/DNA ONo										
Isolate shi	ip date									
Vaccinated? OYes ONo OUnk Number of Vax. doses Number of contacts AB rec. Number of people in HH										
Pregnancy	Status									

Risk questions: Fill out as much information as possible on all risk questions. If the case had a travel exposure, be sure to fill out the travel info to the best of your knowledge, and be aware of pertussis hot spots and whether the person had a plausible exposure to such an area, e.g., Clark County, Washington.

nase Entry номе				
Kitty A Koffer DOB: 05/	07/15 0F Jackson C Pertus	ssis	Onset 9/1/15 SP ID 4	47273
Basics Labs 1 Clinical Risks	Followup Epilinks Contacts 4	Notes Vaccine More		
Ask about exposures from Wednesday, 8/12/20 through Tuesday, 8/25/2015 Risk Contact of possible case Place where exposed Travel outside home area Other risk		Provide informatic Details Au Provide in Provide in And trav		you say yes to much as possible an Europe Africe Middle East Ails Oceania Travel Node(s) Companion(s) Buto Data

Follow up: These are important data, not only for the case investigation, but also for our submissions to CDC. Our pertussis investigative guideline focuses on protecting high risk individuals – infants women in their 3rd trimester.

a Case Entry	
ty A Koffer DOB:05/07/15	OF Jackson C Pertussis Onset 9/1/15 SP ID 447273
sics Labs 1 Clinical Risks Followu	p Epilinks Contacts 4 Notes Vaccine More
Question Answer	Combined Notes Ask Followup Questions
Contact with infants Yes Contact pregnant in 3rd trimester Yes HH contacts where infant or Yes Daycare contacts where infant or Other contacts ruicher spread of disease Case Education MAPS USE ONLY	Contact with infants: Yes Contact pregnant in 3rd trimester: Yes Hel contacts where infant or pregnant woman: Yes Daycare contacts: NA Other contacts: NA Which settings the case might have exposed other people?: NA Case Education: NA MAPS USE: Infants <1 year: NA MAPS USE: Previous Infection: NA MAPS USE: Infants <1 year: NA MAPS USE
MAPS USE: Previous Infection MAPS USE: Previous Infection	MAPS USE: Fever. N/A RISK INDIVIDUALS.
MAPS USE: Previous Infection MAPS USE: Previous Infection	MAPS USE: Fever. N/A MAPS USE: Gestational Age or Week of Pregnancy: N/A
MAPS USE: Fever MAPS USE: Fever	MAPS USE: Due Date: N/A MAPS USE: Hospitalized infants: N/A
MAPS USE: Fever	MAPS USE: Hospitalized infants: NA MAPS USE: Hospitalized infants: NA
MAPS USE: Gestational Age or	MAPS USE: Hospitalized infants: N/A

Kitty A Koffe	r	0	F	Jackson	С	C Pertussis		9/1/15	SP	4472			
	egan on 9/1/ Iday, 6 Septe		out comm	unicability (ro	om Tuesday, 1 Sept	ember 2015	Jump to	Question				
								Contac	t with infar	nts			
	Previous:	Contact pregr	ant in 3r	d trimester				Contac	t pregnant	in 3rd trimester			
		are contacts			na	ant woman		HH con	HH contacts where infant or				
	_							Daycare	e contacts w	here infant or			
	HH contac	ts where in	fant or	pregnan	t v	woman		Other c	ontacts				
\frown								Which s	ettings the c	ase might have			
	All househol	Case Ed	lucation										
	V trimester									s <1 year			
_								MAPS	SE: Infant	s <1 year			
								MAPS	ISE: Infant	s <1 year			
								MAPS	ISE: Infant	s <1 year			
								MAPS L	JSE: Infant	s <1 year			
							YN YN List Nm Tx Dt Tr	MAPS	JSE: Infant	s <1 year			
	• Yes	O No	OR	fused	1		clear	MAPS	JSE: Previo	us Infection			
		de more deta		luscu		O UNKNOWN		MAPS	ISE: Fever				
	ricuse provi	de more deta						MAPS	ISE: Gestat	tional Age or Week			
								MAPS	ISE: Due Da	ate			
								MAPS L	JSE: Hospit	alized infants			
								MAPS U	ISE: Hospit	alized infants			
								MAPS U	ISE: Hospit	alized infants			
		1						MAPS U	ISE: Hospit	alized infants			
Notes	Baby sitter i	n her 3rd trim	ester					MAPS	JSE: Hospit	alized infants			
								MADEL	ICE: Hocnit	alizad infante			

NB. Other HH contacts are important to investigate, e.g., babysitter in her 3rd trimester, as you might have to decide about prophylaxis.

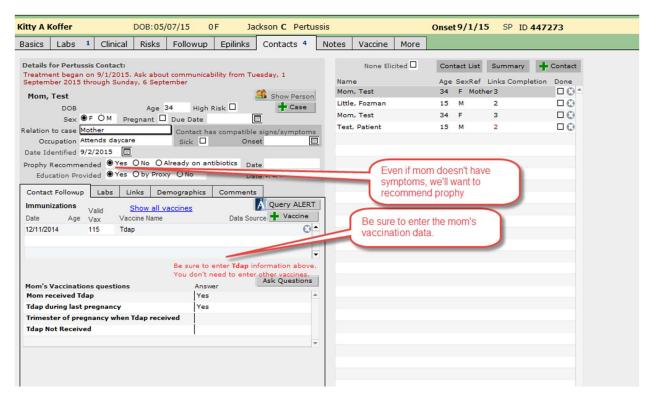
Epi Links: In this scenario, this is a sporadic case with not HH contacts or Epi Links with similar illness, but be sure to enter an Outbreak Number, e.g., 2015-1234, into the Outbreak ID field on the Epilinks tab. This assures that you will be able to see all the outbreak-related cases on your home screen.

Номе	Case E	ntry										
Kitty A	Koffer		DOB:05/	07/15 0	F Ja	ckson C Pertu	ssis			Onset 9/1/15	SP ID 447273	
Basics	Labs 1	Clinical	Risks	Followup	Epilinks	Contacts 4	Notes	Vaccine	More			
Case a	ciated with a close contac las above ca:	t of another N	case? C lature:	BE S CAS		ENTER THE C OCIATED WIT				Lot ases Onset	County	
Epi Lin	re Type ikage Notes reak Info Generati Outbreak	on O1 O			7					Unset	County	

Working with contacts: According to the investigative guidelines, contacts are people that are in the same household that share the same room (pretty much), or lots of hours together, or sharing a space of <6 feet for >1 hour. Our new guidelines say that you should enter infants' moms as contacts, and complete the vaccination history for the mother.

A couple of years ago, ACIP recommended Tdap for pregnant women, and we want to track this information in our database to get a sense for how helpful this has been.

So we enter data on the mom, which is the only contact for whom were asking for detailed follow up.



It pretty unlikely that the mom will know her vaccination data off the top of her head. If she can get a summary from her doctor, then let her obtain that and call her back.

If you don't have any documentation for her Tdap (since Tdap was licensed in 2005), then go to the Alert Immunization Registry. If you can't find anything in Alert, then ask the provider. It's important to get the information.

If the mom says she's sure she got it, but there's nothing in Alert, and there's no information from the provider, but that she remembers that she got it at Rite-Aid, for example, then call the pharmacy.

Be sure to enter the Tdap information.

Manula Vassinationa avastiana	Answer	Ask Questions
Mom's Vaccinations questions		-
Mom received Tdap	Yes	
Tdap during last pregnancy	Yes	
Trimester of pregnancy when Tdap receiv	ed	
Tdap Not Received		

The Vaccine Tab: These are really important data, and the state will be contacting you if they're not filled out. ^(C) If you don't have any information from a trustworthy source, e.g., Alert, provider, yellow card, etc., then mark it unknown.

М НОМЕ	Case	e Entr	y							Develo	opment Version	LIST		9	ŝ
Kitty A H	Coffer		C	OB:05/07/15	0 F	Jackson C Pert	ussis		Onse	et 9/1/15	SP ID 447273				
Basics	Labs	1 Clir	nical	Risks Follow	up Epilin	ks Contacts 4	Notes	Vaccine	More						
Immuniz	ations	ALERT	Dev]											
	Up to		rtussis iy Not?	●Yes ○No ○I	Unknown	Received Tda	p OYes (ONo OUnkno	wn						
Req Date		Status		ery Result				Creator							
9/2/15 1	0:46	Error	Th	ere was an error o	onnecting to	ALERT - query not	performed	or01532	80 -						
									-						
Immun	ization	History Valid	(filtered	for Pertussis)		Show all	vaccines					Å	Query ALERT	+ Vaccine	🛞 Delete All
Date	A	ge Vax	Vax	Vaccine Name (ex			Source		Lot Number	Mfg	Dose and Series				
		-				ERT Provider Ve	bal (shot card)	+ More Sourc	es						© ^
07/22/15	0	.2	20	DTaP		ERT Provider 🗌 Ve	bal (shot card)	+ More Sourc	es						e
		this bal	by is 3	m old and cons	sidered va	ccinated with 1	DTaP								

At this point we're pretty much done with this case, but be sure to put in a note to remind yourself to call about the cough if you don't know whether the baby has been coughing for 14 days.

Basics	s Labs	1 Clinical	Risks Fol	lowup Epilin	ks Contacts 4 Notes Vaccine More	
Case Done	Note History Date	Туре	Assigned To	Created by	Note	Users Print All Note:
_	11/24/15 1:39 PM		Juventila Liko OPHD	Stephen OPHD	Changed 'Epi Known Outbreak' from Yes to No	
_	11/24/15		Juventila Liko	Stephen	Changed 'Epi Known Outbreak' from No to Yes	
	09/10/15 10:47 AM	Note	Juventila Liko OPHD	Juventila Liko OPHD	call about the cough	

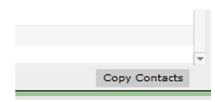
After calling back about the cough, enter the final interview date here:

	0 F	Ja	ckson (C Pe	rtuss	is		
wu	IP	Epilinks	Conta	acts '	4	Notes	V	accine
-	Pe	e rtussis ertussis Onset (Any	Cough)	9/1/2	2015	irmed		Report C C
			Reason	Parer	ot		_	ОК
1	Fi	nal Intervi	ew Date	9/9/2	2015			Loc
	MA	PS CDC	Case Sta	atus	Confi	rmed]	Dat

Scenario – We discover that the sibling has symptoms – contact duper demonstration: In the course of the investigation, we hear that the sibling has pertussis-like symptoms.

The Contact Duper works as follows:

1. Copy contacts



2. Find the case, select it, and click on the Duplicate Contacts button

uplicate Coi	ntacts	Copy contac	ts from one ca	ase to anothe	r, like magi			
Disease 50 Address 12	PERTUSSIS	County J	ACKSON		Case ID 447273		Dupli	cate Contacts
Onset 9/ LHD Report Date 9/2	1/2015 2/2015	LHD Completion						Cancel
Cases for Contacts	1	Any Case					Dupe	Contacts Beta
List of contacts curr Name	ently associated w Age Sex Ix Dat			copied to ca		above County	Place	_
Mom, Test	34 F 9/2/2					ackson	Flace	A
Little, Fozman	15 M					Benton		
Mom, Test	34 F				1	Benton		
Test, Patient	15 M					Benton		

Note: Because the case was also a contact, you'll have to remove it from the duplicated contact list.

HOME								Version			Q 447271	¢.
Patient	Test		DOB:01/	01/00 15	M Clack	amas C Pertu	ssis			Onset~8/	25/15 SP I	D 447271
Basics	Labs	Clinical	Risks	Followup	Epilinks	Contacts 3	Notes	Vaccine	More			
								None Eli	cited 🛛	Contact	List Summar	y 🕂 Contact
-							Nam	ne		Age Sex	Ref Links Com	pletion Done
C							Littl	e, Fozman		15 M	2	
No	tice how the	e red font	Indicate	es a case			Mor	n, Test		34 F	Co-wor 3	
-					~		Koff	er, Kitty A		0.3 F	2	

atient	Test		DC	0B:01/0	01/00 15	M Clack	amas C Pertu	ssis			Onset	8/25	15 SP ID	447271
Basics	Labs	Clin	ical F	Risks	Followup	Epilinks	Contacts 3	Notes	Vaccine	More				
The ons August : Little, Relation Occ Date Id Prophy I	Fozman DOB 1 Sex (to case upation entified	only est ugh Tues /7/2000)F M nded O	imated. iday, 15	Age 1	ber 5 High f Contact ba Sick ready on ant	s compatible Onse	Show Person Case signs/symptoms at	Mo Ko	None Eli me de, Fozman m, Test feature re occupation education to minimiz	quest: ir n, proph i in the c	Age 15 34 nclude ny, and ontact	M F Co-	Links Comple 2	+ Contact ation Done
Immun Date 11/28/20	t Followup izations Age 112 12 Date O Ye	Valid Vax 20	Vaccine DTaP	w all va Name	nographics <u>ccines</u>	Comments Data Sou ALERT	Query ALERT	Ĩ	_			_		

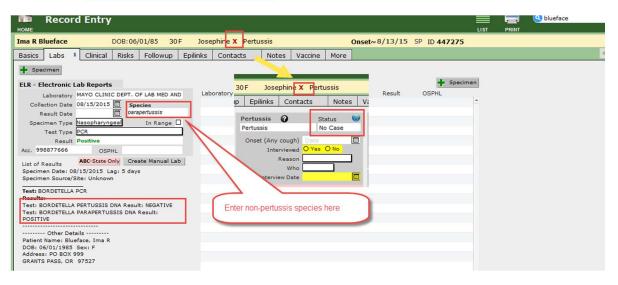
Contact duper is a tool that crosses all diseases. It makes sense to duplicate occupation, but because a same person can be a contact of several different cases with several different exposure dates, we decided not to duplicate prophy and education information.

Other Bordatella species- ELR with B. parapertussis positive, but pertussis negative:

3.5 Non-pertussis Bordetella species

Reports of *parapertussis*, *holmesii* and *bronchiseptica* infection should not be investigated further. However, if one of these species shows up in the Orpheus ELR queue, create a pertussis case, make it "No Case" and enter the species in the lab section. This will allow us to learn the frequency with which infection by these species is reported.

If, through culture or PCR testing, it is determined that a case-patient is infected with both *B. pertussis* and another *Bordetella* species (e.g., *B. parapertussis*, *B. holmesii*, *B. bronchiseptica*), assign status of the pertussis case based on the investigative guideline case definition, and enter the name of the non-*pertussis* species in the lab section for each *Bordetella* lab report.



Exporting data:

Ала Ном		s											
6	General Exports	CDC Exports	Hepatitis	Special Projects	Admin Exports	Utilities							
	NETSS HL7	(TB) Per	tussis MAPS	HIV Partner Servic	es HIV Car	eWare CIN	Lead						
			Pe	rtussis MAPS									
			F	rom 1/1/2012	To 12/31/201	4							
			P	ertussis MAPS Pe	rtussis Statewide]							
				ertussis NETSS 20		10 study) ata to export							
	Alt Case List	Export: Ad Hoc	Deceased NETSS	PRINT Q		State Only Set EIP Flu	HL7 Orbug Vax	sis Group MAPS Case C	ompleteness	Record 809 of	830		HepB(a) HepB(c)
isis	Subtype Na	me lin, Vesta	Age Sex County	Attends school 11/	3 Status EIP ID	Preg Dead Hosp 0		Onset Onset 1			Interview MMWR 01/30/14 01/18/14	Wk Year Created	Modified

To Dos State:

- Include occupation in the Contact Duper.
- Juventila to ask Michelle to import lot numbers from Alert
- Add Worksite information as a new column in a different export layout.

Dem	ographics	Race
DOB	5/4/1990	Black
Age	2 years	Asian
Sex	●F OM	Pacific Is.
Preg	OYes ONo OU	AI/AN
Lang	Language	Refused
Born	Country of Birth	Other
	Refugee	
Work	other pertinent work site info	Hispanic O Yes
Occ.	Attends daycare at Miss Muffett's	O No O Unknown O Declined

To Dos Counties:

- Provide feedback with regard to the reports on vaccination status, i.e., whether the case's vaccination is up-to-date; state to include age.