

CDC Unknown Infectious Disease Case Surveillance Report



State Case No: 320 CSID No: 1215 Case No: 14-259

Patient name (last, first): Calhoun, Alan	Sex:
Date of symptom onset of this attack: (mm/dd/yyyy): 11/10	Date of Birth: 01/13/1972 Female Is patient pregnant? Y N Unknown
Physician name (last, first): Ferguson, C.	Height: 5 ft. and 4 in. Weight: 158 lbs.
State reporting case: Bakersfield, CA	
, ,	tted to hospital: Yes 🗖 No 🔲 Unknown
Hospital: San Joaquin Community Hosptial	Date: 11/15
Has patient traveled or lived outside the U.S. during t	he past 2 years? Yes No
Country: 1.	2. 3.
Date returned/arrived in U.S.:	
Duration in country:	
Did the patient reside in U.S. prior to most recent travel?	Principle reason for travel for most recent trip:
■Yes	☐ Tourism ☐ Visiting friends/relatives
■ No, (specify country):	■ Military ■ Airline/ship crew ■ Business ■ Missionary/dependent ■ Peace Corps ■ Refugee/immigrant ■ Unknown ■ Student/teacher ■ Other: Hunting
	Other. numbing
Blood transfusion/organ transplant within last 12 mo	nths: Yes No Unknown
If yes, Date:	





Alan Calhoun, was the sole owner and employee of Calhoun's Market in Bakersfield, a fruit and vegetable stand that specialized in seasonal produce from surrounding fields. He focused on selling to tourists, locals, and passersby looking for recently harvested produce. He worked with many of the local farmers to bring in the freshest stuff, and sold his products for a good profit.

Alan worked seven days a week during harvest season. He would start before sun up, meeting various farmers and workers at his stand to buy produce, which he would then place to sell. He would then spend some time visiting a local farm or two to see what they had harvested and make them offers on their product. He opened his stand by 9:00 AM, and tended to do a brisk business throughout the day. He would close the stand around 2:00 for his lunch, and spent it on a small patio behind his shop. He would reopen the stand at 3:00, and keep it open until sundown. On busy days, he never left the stand. On slow days, he had a bell at the counter that customers could ring, and he would work in the back yard of the shop. The shop backed up to undeveloped land covered in chaparral, and he was required by the city to maintain a 100' clearing around his business as fire prevention. The chaparral grew quickly, and he had to constantly remove the plants to be in compliance.

Alan's work with farmers and in the outdoors brought him in near constant contact with various pest species. The monoculture of the farms, and the wild nature of the chaparral led to a large number of biting insects during different times of the year. Whenever it was warm, Alan tried to remember to wear proper clothing and insect repellant, but sometimes forgot. If he noticed insects biting him, he did his best to collect and identify them, just in case one of his customers asked. He has had several insect bites over the past year.

Alan kept a small apartment near the vegetable stand, but seldom spent time there. His office in the stand and his yard had everything he needed. His near constant time in the sun meant he had some issues with precancerous moles, but his doctor wasn't too worried at the early state of the skin spots. Overall, Alan was very healthy.

On November 10 of last year Alan became very ill. There was a nasty flu bug going around, and despite his vaccinations he seemed to have caught it. Since he couldn't afford to close the stand for too long, he decided to go to the doctor immediately. He was presenting with a high fever and chills, and the doctor noticed his blood pressure was very low, and Alan was looking very pale. A quick blood test indicated

the presence of an unknown pathogen in his blood. Alan was admitted to the hospital, and treated for the unknown infection. Doctors were unable to break his fever and on 11/15 Alan began to

hallucinate. He slipped into a coma on 11/21, and succumbed to an unknown infection on 11/30 of last year. Blood and tissue samples were kept for future testing.





Betty Copeland was a widow and grandmother living in San Francisco. She had grown up in the city, and got married at a very young age. Her husband built the house Grand View Ave house during their first year of marriage in 1939, and she had lived there ever since. Over the years she had become more and more house bound, but she had a group of close friends that visited at least once a week, a few care takers that came in to help with cooking and the heavier house work, and lots of close family that came by as often as possible.

Her main hobbies involved gardening. She had a large multi-level garden that she loved. She had loved plants and animals all her life, and she enjoyed making a refuge for those animals in her yard. She staunchly refused to use any pesticides or even natural pest control sprays, insisting that she grew her plants for all the living things. She enjoyed keeping track of the birds and animals that came into her yard, and had a notebook by the back door where she wrote down everything she saw. Over the past year, she saw many scrub jays, house sparrows, squirrels, pigeons, hummingbirds, hawks, opossums, raccoons, and skunks. She had recently taken to feeding a small group of feral cats that like to hunt birds in her yard.

A typical day involved an early morning walk around her yard, picking the odd weed and doing some light gardening. She usually was back inside for breakfast at 8, and then back in the garden until lunch. Lunch time saw one of her many visitors show up, and she would spend a few hours puttering around the house and visiting with friends and family. In the evening she enjoyed drinking bourbon on the back porch and recording the animals she had seen during the day.

Due to her advanced age, Betty had some general maladies, but nothing too seriously wrong with her health. She got tired very easily, and was careful about bacteria and viruses, since her immune system simply wasn't up to dealing with even a simple cold. She had gotten a nasty bout of the flu in January of 2014, and it had settled into pneumonia. She spent three weeks in the hospital before she was able to come home, and she was determined not to repeat that again.

On November 1, 2014 Betty started to experience some body aches and a fever. Due to her history, her doctor insisted on admitting her to the hospital immediately. Her fever spiked on the evening of 11/1 of last year. She slipped into a coma and succumbed to an unknown infection on 11/2 of last year. Blood and tissue samples were kept for future testing.



CDC Unknown Infection Disease Case Surveillance Report



ate case No:248	סאו עונ	C.	ase No14288	••
Patient name (last, first): Copeland, Bet	ty		Sex	x: Male
Date of symptom onset of this attack:	Date o	f Birth: 04/27/192	 -	
(mm/dd/yyyy): 11/01		ent pregnant? Y		Unknow
(11111) (111) (111)			_	
Physician name (last, first): Kapman, B	Height	t5ft. and _2	in. Weight:91	lbs
Sate reporting case: San Francisco, CA				
County: San Francisco County	Patient adm	itted to hospital:	■Yes □No □Unk	knowr
Hospital: UCSF Medical Center	Dat	e: 11/01		
Has patient traveled or lived outside the	U.S. during the past 2	years? : □ Yes ■	No If yes, specify	/ :
Country: 1.	·	2	3	
Date returned/arrived in U.S.:				
Duration in country:				
Did patient reside in U.S. prior to most r	ecent travel? Princi	pal reason for tra	vel for most recent	trip:
■ Yes	□Tour		ng friends/relatives	·
	☐ Milit	ary 🗆 Airlin	e/ship crew	
☐ No, (specify country):	Busi	ness 🗆 Missi	onary or dependent	<u>.</u>
			gee/immigrant	
	□ Peac	e corps in Kerug	gee/ iiiiiiiigi aiit	
		-	ent/teacher	
	□Unkı	-	ent/teacher	
	□ Unkı □ Othe	nown Stude	ent/teacher	
Blood transfusion/organ transplant with	□ Unkı □ Othe	nown □Stude	ent/teacher	
	□ Unkı □ Othe	nown Stude	ent/teacher	
Blood transfusion/organ transplant with	□ Unkı □ Othe	nown Stude	ent/teacher	



CDC Unknown Infectious Disease Case Surveillance Report



State Case No: 478 CSID No: 307 Case No: 14-937

Patient name (last, first): Klein, Gerald	Sex: ■ Male
Date of symptom onset of this attack: (mm/dd/yyyy): 10/18	Date of Birth: 01/03/1946 Is patient pregnant? Y N Unknown
Physician name (last, first): Kimberaskus, R.	Height: 5 ft. and 10 in. Weight: 180 lbs.
State reporting case: Olympia, WA	
County: Thurston County Patient admi	tted to hospital: Tyes No Unknown
Hospital: Providence Saint Peter Hospital	Date: 10/18
Has patient traveled or lived outside the U.S. during t	he past 2 years? Tyes No
Country: 1.	2. 3.
Date returned/arrived in U.S.:	
Duration in country:	
Did the patient reside in U.S. prior to most recent travel?	Principle reason for travel for most recent trip:
□Yes	☐ Tourism ☐ Visiting friends/relatives
☐ No, (specify country):	☐ Military☐ Business☐ Missionary/dependent
	☐ Peace Corps ☐ Refugee/immigrant ☐ Unknown ☐ Student/teacher
	Other: Hunting
Blood transfusion/organ transplant within last 12 mo	nths:
If yes, Date:	





Gerald Klein, was a retired husband and father that lived in Olympia, Washington with his wife, Gloria Klein. He had two kids, Ronnie Klein and Kathryn Klein. Gerald had retired at age 65 after many years as a high school English teacher. He was enjoying his retirement, and spent much of his time pursuing his hobbies and traveling with his wife. Over the past year, he and his wife had taken a South American cruise tour on Princess Cruises (May 10-30 of last year), and an anniversary trip to Italy from July 1-15, of last year. During the cruise, the couple spent much of their time embarking on excursions, which had them hiking through forests, visiting local towns, and taking long bus rides to see landmarks. Gerald was up-to-date on his vaccines for the trip, and was very careful about washing his hands, since he knew that cruise ships could be hot beds of disease. The Italy trip involved mostly staying within town, visiting local cafés and eating as much as they could. Gerald had had his fill of hiking and wilderness during the cruise, so wanted to spend the Italian trip enjoying museums and other city life.

Every year, the Klein family got together to take a trip to Puget Sound in Washington state. This had been a family tradition since the kids were small, and they continued this tradition even after the kids had moved out. This year, the family trip was from September 25 through October 5. Gerald rented a cabin on Harstine Island in Puget Sound South. This cabin backed up to some great birding sites, and the family had a running tally of the birds they had seen over the years.

Gerald was in charge of keeping track of the family bird observations. Over the past few years, the family had observed Western Grebes, Red-throated loon, Common loon, Marbled murrelets, rhinocerous auklets, Common gull, Bonaparte's gulls, common terns, Parasitic jaegers, brant geese, surfbirds, Ruddy turnstones, black turnstones, sanderlings, American Wigeon, Northern shovelers, hooded mergansers, bufflehead, gadwalls, red-winged blackbirds, green heron, common swallow, yellow-rumped warbler, Purple martins, barred owls, great horned owl, saw-whet owl, hutton's vireos, rufous hummingbirds, pileated woodpeckers, western tanagers, pacific slope flycatchers, towsend's warblers, chestnut chickadee, black-capped chickadee, ruby kinglet, golden-crowned kinglet, downy woodpecker, red-breasted nuthatches, bald eagle, accipiters, olive-sided flycatchers, red-breasted sapsucker, barn owl, savannah sparrow, white-crowned sparrow, fox sparrow, Lincoln sparrow, golden-crowned sparrow, Anna's hummingbirds, loggerhead shrike, lazuli bunting, snow bunting, say's phoebe, and the western scrub jay. Many of these birds were back during the trip this last year, and Gerald kept a detailed list of animals. His interests in wildlife didn't extend beyond birds, however, and while he remembers being bitten by insects, he doesn't know what they were. His wife was more into keeping track of that for the family.

Gerald began to feel sick on the morning of October 7, just a few days after returning from the latest trip. He attributed it to having traveled so much over the past few months, and resolved to take it easy. His fever and body aches lessened over the next few days, and he went back to his usual puttering around the house and reading. On 10/18 of last year, he woke up with a very high fever, and complained of dizziness. His wife had been sick as well, and he decided he should visit the doctor just in case he had the same thing. The doctor noticed the same symptoms that Gloria wife had, and immediately admitted Gerald to the hospital. His fever spiked on the evening of 10/22 of last year, and Gerald slipped into a coma. He was given supportive treatment, IV antibiotics and antivirals, and a blood test indicated the presence of an unknown pathogen. He was unable to be roused, and he succumbed to an unknown infection on the morning of 10/28 of last year. Blood and tissue samples were kept for future testing.



CDC Unknown Infection Disease Case Surveillance Report



State Case No:334 CSID No293	33	Case No:14	856
Patient name (last, first): Klein, Gloria			Sex:
Date of symptom onset of this attack:	Date of Birth: 02/05/	/1949	■ Female
(mm/dd/yyyy): 10/16	Is patient pregnant		Unknown
Physician name (last, first): Kimberaskus, R.	Height5ft. and	オ_7in. Weight	t:121lbs
Sate reporting case: Olympia, WA			
County: Thurston County Patient	admitted to hospital:	■Yes □No □U	nknown
Hospital: Providence Saint Peter Hospital Da	ate: 10/16		
Has patient traveled or lived outside the U.S. during the	ne past 2 years? : ☐ Ye	s ■ No If yes,	specify:
Country: 1	2	3	
Date returned/arrived in U.S.:			
Duration in country:			
Did patient reside in U.S. prior to most recent travel?	Principal reason fo	r travel for most r	ecent trip:
■Yes		isiting friends/rela	atives
	•	irline/ship crew	
☐ No, (specify country):		Aissionary or depe	
	☐ Peace Corps ☐ R ☐ Unknown ☐ S	.erugee/immigran tudent/teacher	τ
	Other		
Blood transfusion/organ transplant within last 12 mon	iths: ☐ Yes ■ No	□Unknown	
15			
If yes, Date:/			





Gloria Klein was a retired wife and mother that lived in Olympia, Washington with his husband, Gerald Klein. She had two kids, Ronnie Klein and Kathryn Klein. Gloria had retired at the beginning of last year after many years as a high school principal. Since her husband had retired a few years before, they decided to spend their first year together without work traveling as much as possible. They began with a South American cruise tour on Princess Cruises (May 10-30, of last year), and an anniversary trip to Italy from July 1-15. During the cruise, the couple spent much of their time embarking on excursions, which had them hiking through forests, visiting local towns, and taking long bus rides to see landmarks. Gloria was up-to-date on her vaccines for the trip, but wasn't as careful as her husband about washing her hands on ship. As a result, she caught a mild case of noro virus near the end of the trip, and spent a few days with the stomach bug. She recovered quickly, however, and was able to enjoy her last day on ship. The Italy trip involved mostly staying within town, visiting local cafés and eating as much as they could. Gloria enjoyed hiking and other outdoor activities, but since she had gotten to plan most of the excursions on their cruise, allowed Gerald to plan their time in Italy. As a consequence, she saw very little of the countryside that trip.

Every year, the Klein family got together to take a trip to Puget Sound in Washington state. This had been a family tradition since the kids were small, and they continued this tradition even after the kids had moved out. This year, the family trip was from September 25 through October 5. The family had rented a cabin on Harstine Island in Puget Sound South. This cabin backed up to some great birding sites, and the family had a running tally of the birds they had seen over the years.

Gloria enjoyed bird watching, but not as much as her husband. He was in charge of keeping the running list of observed birds, and Gloria participated but often forgot what they had seen. She was more interested in hiking the area, and often awoke early in the morning to hike around and just enjoy the wilderness. She was very interested in vector borne diseases, however, since a few of her teachers from work had come down with West Nile virus over the years. She kept careful records of the types of insects that bit the family during their trip. She noticed that this year was especially bad for ticks and small biting flies, and spent a lot of time pulling ticks off of her kids and husband, and treating insect bites. She was happy to get home and not have to worry quite as much about doing the daily "tick check."

Gloria began to feel near the end of the trip. She had general malaise, a mild headache, and a slight fever. She figured she was coming down with another stomach bug, and stayed indoors for the duration of the vacation. She maintained the mild symptoms for a couple of weeks, and when she got home spent her time with her feet up watching old movies and drinking tea. Her symptoms slowly worsened,

and on the evening of 10/16, she fainted while trying to take a shower. Gerald rushed her to the hospital, where she was given supportive treatment for extreme dehydration. The doctor thought she would be released the next day or so, so she insisted that Gerald go home and get some rest himself. She got worse the next day, however, and her fever spiked on 10/18. She slipped into a coma and was unable to be roused. She was given supportive treatment, IV antibiotics and antivirals, and a blood test indicated the presence of an unknown pathogen. She succumbed to an unknown infection on the morning of 10/29 of last year. Blood and tissue samples were kept for future testing.



CDC Unknown Infectious Disease Case Surveillance Report



State Case No: 265 CSID No: 726 Case No: 14-1530

Patient name (last, first): Nicholson, Hayes	Sex:
Date of symptom onset of this attack: (mm/dd/yyyy): 12/01	Date of Birth: 06/16/1963 Is patient pregnant? Y N Unknown
Physician name (last, first): Aaberg, A.	Height: 5 ft. and 11 in. Weight: 163 lbs.
State reporting case: Pismo Beach, CA County: San Luis Obispo County Patient admir	tted to hospital: Yes No Unknown
Hospital: Arroyo Grande Community Hosptial	Date: 12/10
Has patient traveled or lived outside the U.S. during t	he past 2 years? Yes No
Country: 1.	2. 3.
Date returned/arrived in U.S.:	
Duration in country:	
Did the patient reside in U.S. prior to most recent travel?	Principle reason for travel for most recent trip:
☐ Yes	■ Tourism □ Visiting friends/relatives □ Military □ Airline/ship crew
■ No, (specify country):	Military Airline/ship crew Business Missionary/dependent Peace Corps Refugee/immigrant Unknown Student/teacher
Blood transfusion/organ transplant within last 12 mo	nths: Yes No Unknown
If yes, Date:	





Hayes Nicholson was a preschool teacher at a private school in Pismo Beach, California. He had spent most of his adult life teaching young children, and loved his job. He had been at this particular school for 10 years, and had worked his way up to a senior position. He liked working at a private school, since this allowed him to use new teaching techniques, and he was often able to teach the gifted classes.

A typical work day for Mr. Nicholson lasted from 6:30 AM until 6:00 PM. He would wake up early and walk to the school. He would spend an hour or so getting the classroom ready, preparing last minute lesson plans, and making sure the toys and other equipment was clean and tidy. The children would begin to arrive around 7:30, and he supervised the playground until 8:15 when class started. Throughout the day, Hayes would alternate between indoor and outdoor activities, often allowing his students to run around when they became restless. Nap time began at 10, and Mr. Nicholson used this time to clean up the classroom and get ready for lunch. Lunch time was outside in a covered area, and the kids had time to play afterwards. The afternoon session ran until 3:00, when the students were picked up by their parents. Mr. Nicholson spent the afternoon cleaning up the playground, tidying his room, and preparing lessons for the next day. He would walk home around 6:00, and usually took his time, since his walk took him past the ocean and through a nice park near his house. On the weekends, Mr. Nicholson spent time running fund raisers for the school, attending school functions, helping the children in their various sports, and prepping lessons for the next week. If he had a spare moment, he was an avid hiker, and enjoyed hiking around Pismo Lake, through the Monarch butterfly grove near the beach, and through Meadow Creek Park. He liked to keep track of all of the birds and animals he saw along the way, and go over them with his students during the week.

The school closed during the summer months, from around May through August. Hayes spent this time doing continuing education, planning for the next school year, helping the staff on campus upgrade the classrooms, and taking some time for himself. He had a time share in Mexico, where he would often go once his duties were finished for the year. He took a lot of online course work, and found that he enjoyed taking these classes at the time share, where he could hike in new areas and visit the beach on a regular basis. This past year, he spent nearly 3 months in Mexico, and was able to take six continuing education courses. He also had a large number of animal and bird photos he was excited to show to his students.

When the fall semester began, Mr. Nicholson went back to his normal routine. He had decided to start talking to his student about insects this year, so kept an eye out for any bugs he happened to notice on his walks to and from work. Sometimes he would show the kids insect bites and teach them how to avoid being bitten. Hayes never took a sick day, and if he felt under the weather would just pretend he

felt fine and try to go to bed early. He began to feel ill at the end of November, but started taking lots of cold medicine so he could keep teaching. He got gravely ill on 12/01 of last year, and had to ask for a substitute teacher to take over his class. He went home and sat down to watch some TV and try to feel better. Later that evening a neighbor noticed the front door open to Hayes' house, and checked on him. Hayes was unconscious and not breathing, so an ambulance was called. Hayes was given supportive treatment and fluids, IV antibiotics and IV antivirals, and a blood test indicated the presence of an unknown pathogen. He was placed on life support, and succumbed to an unknown infection on the morning of 12/21 of last year. Blood and tissue samples were kept for future testing.



CDC Unknown Infectious Disease Case Surveillance Report



State Case No: 820 CSID No: 1859 Case No: 14-669

Patient name (last, first): (Unknown), Jimmy	Age: Unknown Sex:
Date of symptom onset of this attack: (mm/dd/yyyy): Unknown	Date of Birth: Unknown Is patient pregnant? Y N Unknown
	Height: 5 ft. and 09 in. Weight: 119 lbs.
Physician name (last, first): None	Tieight. 5 ft. and 65 in. Weight. 115 ibs.
State reporting case: Los Angeles, CA	
	tted to hospital: Tyes No III Unknown
Hospital: Los Angeles County Medical Examiner's offic	ce Date: 04/18
Has patient traveled or lived outside the U.S. during t	he past 2 years? Yes No
Country: 1.	2. 3.
Date returned/arrived in U.S.:	
Duration in country:	
Did the patient reside in U.S. prior to most recent travel?	Principle reason for travel for most recent trip:
■Yes	☐ Tourism ☐ Visiting friends/relatives ☐ Military ☐ Airline/ship crew
☐ No, (specify country):	Business Missionary/dependent
ino, (specify country).	Peace Corps Refugee/immigrant
	☐ Unknown ☐ Student/teacher☐ Other:
Blood transfusion/organ transplant within last 12 mor	nths: Yes No Unknown
If yes, Date:	



Georgia Bureau of Investigation Office of the Medical Examiner



Decedent: "Jimmy" Doe

Address: None

Cause of death: Unknown disease

Manner of death: Natural

Notes: "Jimmy" was a homeless man, approximately 35 years of age. He was discovered in a known homeless camp located in the Baldwin Hills area of Los Angeles, California. He was discovered lying in his blankets by volunteers at a local homeless shelter who were assisting people in this camp. The volunteers then called police. Several witnesses remained when the police arrived, and gave statements. It appears the decedent has been dead for at least three days.

Officers visited local homeless shelters, and found residents and staff that recognized the decedent and identified him as Jimmy (last name unknown). He often sought shelter at the Salvation Army Homeless shelter, the Union Mission shelter, and the Inner City Night shelter, all located in Los Angeles, CA.

Staff indicated that Jimmy was often ill, and a chronic abuser of drugs. This habit got him kicked out of various shelters that did not tolerate drug use. He was last seen alive at the Inner City Night Shelter on the evening of January 10 of this year. Staff noticed he was obviously ill, showing signs of fever, chills, and presenting with a rash over most of his body. The staff told him to visit the emergency room, fearing an infectious disease. Jimmy left, promising to visit the ER. Interviews at local emergency rooms and clinics indicate that Jimmy did not go to any facility that evening.

Autopsy indicates Jimmy had an enlarged heart, cirrhosis of the liver, and damaged kidneys, likely due to chronic drug use. He was also covered in festering

sores, and had one sore presenting with third instar maggots of unknown species. A rash covered 80% of his body. Blood tests indicated an unknown pathogen. Tissue and fluid samples have been saved for further testing.



CDC Unknown Infection Disease Case Surveillance Report



State Case No:110	CSID No526	Case No:14-356
Patient name (last, first): Klein, Kathryn Date of symptom onset of this attack: (mm/dd/yyyy): _10_/_08_ Physician name (last, first): Connor, J.	Date of Birth:10/_ Is patient pregnant Height5_ft. and	-
Sate reporting case: _La Grande, Or_ County:Union County_ Hospital:Grande Ronde Hospital	Patient admitted to hospital: Date:10_/_08_	■Yes □No □Unknown
Has patient traveled or lived outside the U.S	during the past 2 years? : ■ Ye	s 🗆 No If yes, specify:
Country: 1. Chir	a 2.	3.
Date returned/arrived in U.S.: 09/15		
Duration in country: 30 Days		
Did patient reside in U.S. prior to most recer ■ Yes	□Tourism □V	or travel for most recent trip: /isiting friends/relatives Airline/ship crew
□ No, (specify country):	■ Business □ N □ Peace Corps □ R	Missionary or dependent
Blood transfusion/organ transplant within la	st 12 months: ☐ Yes ■ No	□Unknown
If yes, Date:/		



CDC Unknown Infectious Disease Patient Medical History



Name:Kathr	yn Klein	Phone	#N/A	
D.O.B10/12/19	75 Heig	tht5'08" Weig	ht138 Date of Visit	_10/08
Address: 1105 D Ave,	La Grande,	OR, 97850		
Reason for visit: High	fever, chills	s, body aches, malaise	2	
		Personal Medi	cal History	
Medication allergies	:	None	Reaction:	None
Latex Sensitivity	□ Yes ■	No	Pregnant	☐ Yes ■ No
Heart Problem	☐ Yes ■	No	Breast Feeding	☐ Yes ■ No
High blood pressure	☐ Yes ■	No	Smoker	☐ Yes ■ No
Valve replacement	☐ Yes ■	No	Breathing problems	☐ Yes ■ No
Pacemaker/AICD	☐ Yes ■	No	If Yes, explain	
Stroke	☐ Yes ■	No	Sleep Apnea	☐ Yes ■ No
Diabetes	☐ Yes ■	No	Alcohol Use:	☐ Yes ■ No
Kidney Problems	☐ Yes ■	No	Cancer:	☐ Yes ■ No
Seizures	□ Yes ■	No	If Yes, type:	
Liver Problems	□ Yes ■	No		



CDC Unknown Infectious Disease Patient Medical History



Family History of illness:
Patient previously in good health.

Recent travel (local and abroad):

Traveled to Puget Sound, September 25-October 5 last year Traveled to Fengfen, Handan, Hebei China, August 15-September 15 last year

Treatment: Visited ER on 10/8 and was admitted to the hospital. Treated with fluids, oxygen, IV antibiotics and IV antivirals. There was an unknown agent present in her blood. She did not respond to treatments and succumbed to an unknown disease on 10/10 of last year





Kathryn Klein was an archeology assistant, employed through Oregon State University. Her area of expertise was cultural practices in ancient China, and she worked with several archeology professors out of the university. Her job duties included research and publication in her area, assistance with field research, and presentation of results to the scientific community. She took a few trips a year to various conferences, dig sites, and to visit other scientists. She was working on a long-term job at an archeological site near Xiangtan Mountain Grottoes in Fengfeng, Handan, Hebei China. Over the past five years she had traveled to this site twice a year for about a month at a time. She routinely traveled in early January (January 2-30), and mid-August through September (August 15-September 15). Kathryn spent her time on site working with the head archeologist, digging up artifacts. She was in charge of cataloging those artifacts and working on literature searches regarding the items found. Over the years she had become quite fond of the area, and knew many people who lived around there. She now stayed with a local family near the dig site, and was able to walk to the site every day. Her research group was very strict about dress code. All researchers were required to wear long sleeves and pants, high boots with socks, and a hat while on site. During the winter months this outfit worked well, but the heat in the summer caused some problems. Kathryn would often take breaks where she would shed the hot outer clothing and spend some time in the shade just outside of the dig site in a simple t-shirt and shorts. Every once in a while she would have a problem with insects, but for the most part they didn't bother her (at least not that she noticed).

Kathryn's off time in China was taken up by bird watching. She had grown up in a family that loved to record the birds they saw, and she continued the tradition no matter where she was. During her trips over the past year, she noticed a few new birds that she hadn't seen before. Local people mentioned that these birds only showed up during especially warm years. They resembled the scrub jays that were common to her home town, and she excitedly wrote letters to her father about the birds (he was an avid bird watcher back home).

Back in her home state, Kathryn would spend much of her time in the lab, but would always go for a jog in the early morning or evening. She kept to some well-maintained trails around her home. This year she noticed that some of the trails were blocked off because of the unusually high tick populations. She hated this, but didn't want to risk a tick bite.

Every year, Kathryn's family rented a cabin in Washington. She made sure to plan any of her work trips around this family vacation, which she had been taking since she was a little girl. This year, the trip happened just over a week after she returned from China. She was still a little jet lagged, and had spent a great deal of time in the lab before going on vacation. When she arrived at the cabin she was more

tired than usual, and spent a lot of the first few days sleeping. She also noticed that her younger brother was under the weather. He had started a new job, and was spending too many hours in the office. Their mom took great care of them, however, and she was up and around in no time. She still didn't feel 100%, but it was better than it had been. She spent the usual time with her family hiking around the island, bird watching, and reading books. Her mom spent a lot of time making sure everyone was healthy and wasn't being eaten alive by insects. Kathryn had long since stopped noticing bug bites, a consequence of working in the field so much, but her mom insisted on doing a thorough "tick check" every evening, and treating any mosquito bites that were found.

The vacation ended happily, and Kathryn went back to her lab on October 6 of last year. A few days into her lab work, Kathryn's health went downhill. Her boss found her unconscious on the floor of the lab on the afternoon of 10/8 of last year, and called an ambulance. Kathryn was given supportive treatment, IV antibiotics and IV antivirals, but doctors could not wake her up. A blood test indicated the presence of an unknown pathogen. She succumbed to an unknown infection on the morning of 10/10 of last year. Blood and tissue samples were kept for future testing.



CDC Unknown Infection Disease Case Surveillance Report



State Case No:253..... CSID No.....1935...... Case No: ...14--1462... Patient name (last, first): Poole, Megan Sex: ☐ Male Date of Birth: 07/18/1994 Female Date of symptom onset of **this** attack: Is patient pregnant? Y N Unknown (mm/dd/yyyy): 11/20 Height __5__ft. and _3___in. Weight: __116__lbs Physician name (last, first): Baker, J Sate reporting case: San Luis Obispo, CA County: San Luis Obispo County Patient admitted to hospital: ■ Yes □ No □ Unknown Hospital: Sierra Vista Regional Medical Center Date: 11/20 Has patient traveled or lived outside the U.S. during the past 2 years? : ☐ Yes ■ No If yes, specify: 1. _____ 2. ___ 3. ____ Country: Date returned/arrived in U.S.: Duration in country: Did patient reside in U.S. prior to most recent travel? Principal reason for travel for most recent trip: Yes □Tourism ☐ Visiting friends/relatives ■ Military ☐ Airline/ship crew ■ Business □ No, (specify country): _____ ☐ Missionary or dependent ☐ Peace Corps ☐ Refugee/immigrant □ Unknown ☐ Student/teacher □Other Blood transfusion/organ transplant within last 12 months: ☐ Yes ■ No ☐ Unknown If yes, Date: ____/___





Megan Poole was an undergraduate architecture student, attending Cal Poly, San Luis Obispo. Megan was a junior, and was taking the major design course as required by her major. Architecture students at Cal Poly have notoriously difficult courses, and spend much of their time in their design studios on campus. Megan was no different—she spent nearly 12 hours every day working on her course work, designing her projects, and just trying to make it through school. Every once in a while she would get some time off, and she spent that time with friends enjoying the San Luis Obispo area.

Megan loved the outdoors, and San Luis Obispo had many great hiking trails. Her favorite hike was walking up Madonna Mountain, which involved lots of trekking off the beaten path until she and her friends were able to reach the summit. She was able to make the trip many times during the spring and summer quarters, but fall last year was especially difficult, and she had only been able to make it to the top of the mountain once during late September.

The reason this particular quarter was so hard was she was in the final design course of her major. This course involved the design and production of a large architectural installation in Poly Canyon. Poly Canyon is a meandering canyon that sits behind the campus, and is marked by a well-worn trial. Architecture students have used the canyon to showcase their work for years, and it is common to see students out in the canyon installing their work. There were only a few students in the design course during the fall quarter (most preferred to take it during the spring), and Megan was the only one who chose to do a large scale installation in the canyon. The project involved designing something that showed off a particular architectural element. Megan chose to use natural materials and showcase arches. Her choice meant she had to spend many, many hours out in the canyon gathering branches, rocks, and anything else she could find, and then assemble these pieces into sweeping archways across the trail. She finished her plan during the first week of October, and then spent the next 6 weeks outdoors, gathering and building. Her piece was finished in time for the architecture open house on November 18th of last year.

Megan began to feel sick on 11/20. She figured that it was simply the end of the quarter illness she always seemed to get, and since she had worked especially hard this year, she wasn't surprised when she woke up with a fever. She visited the on campus clinic on 11/20, and ended up fainting in the waiting room. The on call doctor had her admitted to the local hospital for tests. A blood smear revealed an unknown pathogen in her blood, and she was given supportive treatment along with IV antibiotics and antivirals. The pathogen did not respond to any of the treatments, and Megan's fever spiked on the evening of 11/24. She slipped into a coma and succumbed to an unknown infection on 11/25 of last year. Blood and tissue samples were collected for further testing.



CDC Unknown Infection Disease Case Surveillance Report



State Case No:356	CSID No	1582	Case No:	14-1070
Patient name (last, first): Rachel Brady				Sex: ☐ Male
Date of symptom onset of this attack:	Di	ate of Birth:08/	/28/1956	Femal
(mm/dd/yyyy): 12/01	Is	patient pregr	nant? Y N	Unknown
		مارهاد 5 ft :	and _7_in. Weigh	nt: 13/1 lbs
Physician name (last, first): Ediss, S.	11	eigiit3_it. 6	and _/_m. Weigi	it154_ibs
Sate reporting case: Santa Maria, CA				
County: Santa Barbra County	Patient admi	itted to hospit	tal:■Yes □No	□Unknown
Hospital:Marian Regional Medical Center		Date: 12/01		
	C. d. d the		TWO DIE IS	
Has patient traveled or lived outside the U.	S. during the pa	st 2 years? :	∎Yes ⊔ No If	yes, specify:
Country: 1. Au	stralia	2.	3.	
Date returned/arrived in U.S.: 10/31/2014				
Duration in country: 28 Days				
Did patient reside in U.S. prior to most rece	ent travel? P	rincipal reaso	n for travel for m	nost recent trip:
■Yes			☐ Visiting friend	
☐ No, (specify country):			☐ Airline/ship cr ☐ Missionary or	
ino, (specify country).			☐ Refugee/imm	
			☐ Student/teach	
		Other		
Blood transfusion/organ transplant within	last 12 months:	□Yes	No 🗆 Unknown	
If yes, Date:/				
,,				





Rachel Brady, was a general manager and buyer for the Santa Maria, California mall. She had worked her way up from a general customer service agent, and now spent her time managing the various store fronts in the mall. The mall was undergoing an expansion during the past year, and she was working overtime to try and coordinate the work. She was also required by the corporate HR personnel to undergo various corporate trainings in an effort to streamline the corporation.

A typical day for Rachel involved driving to her office near the mall early in the morning, and then moving back and forth between the mall location and her office to coordinate the expansion. The full mall expansion took approximately 8 months, and was finished by the end of August of last year. By this time, Rachel had succeeded in filling all of the new storefronts, and the mall had its grand opening on September 1 of last year. As a thank you for her hard work, Rachel's bosses offered to pay her way to a corporate training in Australia, so she could combine the required training with a nice vacation. She took them up on the offer, and traveled to Sydney, Australia for two weeks in October of last year (Oct 1-14). The training only lasted the first three days. Afterwards, she spent her time hiking around the Sydney area, taking day trips to the beach, and generally enjoying her vacation.

While on vacation, Rachel learned about the various animals and insects that are ubiquitous in Australia. She had a bit of a scare when she found a bug biting her leg, but the local doctor assured her it was harmless. She was very careful after that, and returned to the U.S. with a healthy respect for insects. She started paying attention to the various insects in her home town after this, and found that she enjoyed reading up on the different types of things she saw every day.

Since the mall expansion, Rachel was able to take things easy at work. She started to take morning runs in Waller Park, a park right next door to her house, and began to think about going back to school. She knew that a new project would be starting up in the new year, but she was enjoying the end of the year as much as she could.

Rachel began to experience insomnia in late November of last year. She had never had trouble sleeping before, even when she was up to her ears in work, so she visited her doctor for some sleeping pills. He gave her Ambien, and she was able to get to sleep. After a couple of days, however, even the Ambien stopped working, and she returned to her doctor on 12/01. Her doctor found that she had a fever, and was complaining of body aches and chills. A blood smear revealed an unknown pathogen in her blood. She was admitted to the hospital where she was given supportive treatment along with IV antibiotics and antivirals. The pathogen did not respond to any of the treatments, and Rachel's fever spiked on the evening of 12/14. She slipped into a coma and succumbed to an unknown infection on

12/15 of last year. Blood and tissue samples were collected for further testing.



CDC Unknown Infectious Disease Case Surveillance Report



State Case No: 478 CSID No: 307 Case No: 14-937

Patient name (last, first): Klein, Ronnie	Sex:
Date of symptom onset of this attack: (mm/dd/yyyy): 10/21	Date of Birth: 12/04/1978 Is patient pregnant? Y N Unknown
Physician name (last, first): St. John, N.	Height: 5 ft. and 11 in. Weight: 169 lbs.
State reporting case: Eugene, OR	witted to be exitely . We see No The language
County: Lane County Patient adr	nitted to hospital: Yes No Unknown
Hospital: Sacred Heart Medical Center Da	te: 10/23
Has patient traveled or lived outside the U.S. during	the past 2 years? Tyes No
Country: 1.	2. 3.
Date returned/arrived in U.S.:	
Duration in country:	
Did the patient reside in U.S. prior to most recent travel?	Principle reason for travel for most recent trip:
■Yes	☐ Tourism ☐ Visiting friends/relatives
☐ No, (specify country):	☐ Military ☐ Airline/ship crew ☐ Business ☐ Missionary/dependent
No, (Specify country).	Peace Corps Refugee/immigrant
	☐ Unknown ☐ Student/teacher☐ Other: Hunting
Blood transfusion/organ transplant within last 12 m	onths: Yes No Unknown
If yes, Date:	





Ronnie Klein was an accountant out of Eugene, Oregon. He had just finished up a master's degree in accounting, and started the job with his new firm in January of last year. Because of this, he spent many hours working, and didn't often take time off. He lived in a small place in town, but didn't spend much time there. His hobbies had dwindled, and when he did have the odd evening off, he would spend it in front of the TV catching up on whatever television shows he could. His work had caused a decline in health over the past few months, and he found that he easily caught colds and other bugs that were floating around the office.

His one vacation happened from September 25-October 5 of last year. Every year his family rented a cabin in Washington where they would spend time together enjoying nature. He looked forward to this trip every year, since it was the only time he would reliable see his parents and his older sister. This year, he had some virus that he just couldn't shake, and he was worried that he wouldn't be able to enjoy the trip as much as normal.

He arrived at the cabin on the morning of September 25th, and his mom immediately started to treat his cold. He felt better after a day or so of rest and chicken soup, and was able to join the rest of the family in their daily hikes and games outdoors. His mom had always been really careful about insects biting the kids, and he fell into the old patterns of letting her lecture about the dangers of vector borne diseases, and check everyone for ticks and other insects after a day outdoors. She ended up collecting many ticks off of his clothes and skin, and he had to be treated for lots of bug bites, since he was mildly allergic. He never felt 100% the entire trip, but that was nothing new, given his level of stress at the new job.

The trip ended and Ronnie went immediately back to work. His viral symptoms came back pretty quickly, but he had expected it. His mom had loaded him up with cold medicine and tea, and he kept these items stocked at his desk. They helped for the most part, and he continued to spend 16 hours a day working. On the afternoon of 10/21 he began to feel worse than he had for weeks. He had a high fever, was very, very tired, and found that he got dizzy very easily. He left work and went directly to the doctor's office. The doctor insisted on admitting him to the hospital, and treated him for general dehydration, and was given IV antibiotics and antivirals. A blood test indicated the presence of an unknown pathogen. He slipped into a coma later that evening, and was unable to be roused. He succumbed to an unknown infection on the morning of 10/30 of last year. Blood and tissue samples were kept for future testing.



CDC Unknown Infectious Disease Case Surveillance Report



State Case No: 411 CSID No: 1982 Case No: 14-287

Patient name (last, first): Wilcox, Royce	Sex: ■ Male
Date of symptom onset of this attack: (mm/dd/yyyy): 01/15	Date of Birth: 08/12/1985 Is patient pregnant? Y N Unknown
Physician name (last, first): Cancelliere, R.	Height: 5 ft. and 5 in. Weight: 125 lbs.
State reporting case: Los Angeles, CA County: Los Angeles County Patient admi	tted to hospital: Yes No Unknown
Hospital: Cedars-Sinai Medical Center Date	: 01/16
Has patient traveled or lived outside the U.S. during t	he past 2 years? Yes No
Country: 1.	2. 3.
Date returned/arrived in U.S.:	
Duration in country:	
Did the patient reside in U.S. prior to most recent travel?	Principle reason for travel for most recent trip:
☐ Yes☐ No, (specify country):	□ Tourism □ Visiting friends/relatives □ Military □ Airline/ship crew □ Business □ Missionary/dependent □ Peace Corps □ Refugee/immigrant □ Unknown □ Student/teacher □ Other: Hunting
Blood transfusion/organ transplant within last 12 mo	nths:
If yes, Date:	





Royce Wilcox was a social worker at the Salvation Army drug rehab center located in Los Angeles County. He has spent most of his career working with the homeless population in and around Los Angeles, and was well known among the homeless population as someone who wanted to help. Royce lived in a small apartment near one of the downtown Salvation Army centers, and had a very short commute to work every day.

A typical day for Royce involved driving into work and setting about doing some of the endless paperwork the state required from such facilities. He would then meet with clients, make phone calls, and lead a few group sessions. His afternoons sometimes involved tracking down people that had not shown up to appointments, or that had not been seen in a while. Royce had a running list of known homeless people in the area, and like to keep track of each and every one, just to make sure they were safe.

Royce often worked with the local police department. A city law stated that homeless camps were illegal, and the police were required to break up such camps once they had been reported. Since Royce was on good terms with both the police and the homeless population of the area, police officers called him when they were planning a bust. He was allowed an hour or so head start to warn the inhabitants of the camp, help them pack up their things, and get them to a shelter before the police arrived to make arrests.

January was a busy time for police in regards to homeless camps. The local politicians wanted to start the year with clean streets, and decided to step up the policing of various homeless populations. The police called Royce on the morning of 1/15 of this year to inform him that they were going to visit a large and well known homeless camp located in Baldwin Hills. This camp had grown so large it had been observed by various tourists, and the city council didn't want to have it active any longer. Royce traveled to the camp that morning, and spent a few hours assisting the many residents in packing up and leaving. Several of them were well known to him, but there were also many strangers there that day. Just as the police arrived, Royce noticed a small camp set up under a grouping of trees that appeared to be someone sleeping. He went to rouse the person, and found the body of a man simply known as Jimmy wrapped in a sleeping bag. Jimmy had obviously been dead for a while, and Royce immediately informed police. The coroner was called and made a report.

That evening, Royce started to feel dizzy in the shower. He figured it was the stress of the day, and went to bed early. The next morning he did not report to work, and a colleague drove to his home to see what was happening. Royce was found in bed, unconscious, and barely breathing. He was taken to the

hospital where a blood smear revealed an unknown pathogen in his blood. He was given supportive treatment along with IV antibiotics and antivirals. The pathogen did not respond to any of the treatments, and doctors were unable to wake Royce up. He succumbed to an unknown infection on 01/19 of this year. Blood and tissue samples were collected for further testing.