Instructions for the Dialysis Event Surveillance Form
(CDC 57.502)

Complete a Dialysis Event form for IV antimicrobial starts, positive blood cultures, and/or onsets of pus, redness, or increased swelling at vascular access sites, according to definitions and reporting instructions in the Dialysis Event Surveillance Protocol.

* = required field when reporting in-plan
^ = conditionally required field when reporting in-plan

Patient Data	
Data Fields	**Instructions for Completion**
Facility ID #	NHSN-assigned facility ID will auto-populate in this field.
Event ID #	Event ID# will auto-populate in this field.
*Patient ID #	**Required**. Enter the alphanumeric patient ID number. This is the patient identifier assigned by the healthcare facility and may consist of any combination of numbers and/or letters.
Social Security #	Optional. Enter the 9-digit numeric patient Social Security Number.
Secondary ID #	Optional. Enter the alphanumeric ID number assigned by the facility.
Medicare #	Optional. Enter the patient's Medicare number.
Patient Name	Optional. Enter last, first and middle name of the patient.
*Gender	**Required.** Select "Female," "Male," or "Other" to indicate the patient's gender.
*Date of Birth	**Required.** Enter the patient's date of birth (format: MM/DD/YYYY).
Ethnicity (specify)	Optional. Specify whether the patient is "Hispanic or Latino," or "Not Hispanic or Not Latino."
Race (specify)	Optional. Specify all of the following that identify the patient's race: American Indian/Alaska Native; Asian; Black or African American; Native Hawaiian/Other Pacific Islander; and White.

General Event Information	
Data Fields	**Instructions for Completion**
*Event Type	**Required.** Select "DE – Dialysis Event."
*Date of Event	**Required.** Date (format: MM/DD/YYYY) depends on event type: • For IV antimicrobial starts, enter the date the outpatient IV antimicrobial administration was started. • For positive blood cultures, enter the date the blood specimen was collected. • For pus, redness, or increased swelling at the vascular access site, enter the onset date. • If reporting more than one type of dialysis event, use the above criteria and select the earliest event date.
*Location	**Required.** Enter the location code of the "outpatient hemodialysis clinic" that is collecting Dialysis Event information.

*Was the patient admitted/readmitted to the dialysis facility on this dialysis event date?	**Required.** Select "Yes" if the dialysis event occurred on the same date the patient was admitted or readmitted to your facility (e.g., upon admission or immediately following a hospital discharge).
*Transient Patient	**Required.** Select "Yes" if this patient was temporarily admitted for treatment at your facility for a short time at the time of the event (fewer than 30 days or 13 treatments) due to vacation, emergency, or other short-term displacement. Select "No" if this patient is part of your regular patient census.

Risk Factors	
Data Fields	**Instructions for Completion**
*Vascular accesses	**Required.** Select *all* vascular accesses that the patient had present at the time of the dialysis event, even if they are not used for dialysis and even if they are abandoned/non-functional.
Fistula	Indicate if the patient has a surgically-created direct connection between an artery and a vein for hemodialysis.
^Buttonhole	**Conditionally required** for patients with fistulas. Select "yes" if the patient's fistula is primarily accessed via buttonhole cannulation technique (i.e., a procedure in which a blunt needle (cannula) is inserted into the fistula at the same location each time using an established track). Select "no" if the patient's fistula is primarily accessed by conventional or rope ladder method.
Graft	Indicate if the patient has a connection between an artery and a vein created with surgically implanted material (typically synthetic tubing) for hemodialysis.
Tunneled central line	Indicate if the patient has a central venous catheter that travels a distance under the skin from the point of insertion before entering a vein, and terminates at or close to the heart or one of the great vessels.
Nontunneled central line	Indicate if the patient has a central venous catheter that is fixed in place at the point of insertion and travels directly from the skin entry site to a vein and terminates close to the heart or one of the great vessels.
Other vascular access device	Indicate if the patient has a hybrid vascular access device (e.g., HeRO® vascular access device[1]), port, or any other vascular access device that does not meet the above definitions. Do not use this field to report vascular accesses that are grafts, central venous catheters, or fistulas. Do not use this field to report peritoneal dialysis accesses.

[1] Use of trade names and commercial sources is for identification only and does not imply endorsement.

Risk Factors	
^Is this a catheter-graft hybrid?	**Conditionally required** for patients with an "other vascular access device." Select "yes" if the patient has a catheter-graft hybrid access device: a subcutaneous surgical implant with both a catheter and a graft component that provides blood flow directly from the target artery to the heart, bypassing the patient's central venous system (e.g., HeRO® vascular access device[1]). Select "no" if the patient's other access device is not a catheter-graft hybrid.
*Access Placement Date	**Required.** For each vascular access type present, indicate the date (MM/YYYY) the access was placed or check the box if placement date is unknown. If the patient has more than one access of the same type (e.g., two grafts), indicate the access placement date of the access in use, or most recently in use, at the time of the event.
Vascular access comment	Optional. Use this field to add any additional information about the patient's vascular access(es) at the time of the event that would help you to interpret your surveillance data, such as recent surgical revisions. CDC typically does not analyze these data.
Is this patient's dialyzer reused?	Optional. Select "yes" if this patient's dialyzer is reprocessed for reuse (i.e., patient participates in reuse program). Select "no" if a new dialyzer is used for each hemodialysis treatment.

Event Details	
Data Fields	**Instructions for Completion**
*Specify Dialysis Event	**Required.** Select all that apply:
IV antimicrobial start	Report **any** starts of intravenous (IV) antibiotics or antifungals administered in an outpatient setting, regardless of the reason for administration and regardless of the duration of treatment. Do **not** report IV antiviral starts. Report outpatient starts that are continuations of inpatient antimicrobial treatment. A start is defined as a single outpatient dose or first outpatient dose of a course. 21 day rule: There must be 21 or more days from the **end** of one IV antimicrobial course to the **beginning** of a second IV antimicrobial start for both starts to be reported as separate dialysis events, even if different antimicrobials are used. If IV antimicrobials are stopped and restarted within 21 days of each other, then the second IV antimicrobial start is NOT considered a new dialysis event and should not be reported. For outpatient IV antimicrobial starts that are continuations of inpatient antimicrobial treatment, consider the start day to be the first day of outpatient administration.
^Was vancomycin the antimicrobial used for this start?	**Conditionally required** for IV antimicrobial start dialysis events. Indicate whether IV vancomycin was started by selecting "Yes" or "No." If multiple IV antimicrobials were used, select "Yes" if one of them was vancomycin.

Event Details	
Was this a new outpatient start or a continuation of an inpatient course?	Optional. Select "New antimicrobial start" if the first dose in a course of treatment was administered in the dialysis facility. Select "Continuation of antimicrobial" if the patient is continuing a course of IV antimicrobials that were initiated in an inpatient setting.
Positive blood culture	Report **any** positive blood cultures from specimens collected as an outpatient or collected within one calendar day after a hospital admission. Positive blood cultures meeting this definition should be reported regardless of whether or not the patient was determined to have a bloodstream infection. 21 day rule: There must be 21 or more days between positive blood cultures for each positive blood culture to be considered a separate dialysis event, even if organisms are different. If positive blood cultures occur less than 21 days apart, the second positive blood culture is NOT considered a new dialysis event and therefore, should not be reported. However, if different organisms grow from these subsequent positive blood cultures, add the new organisms to the first dialysis event.
^Specify pathogen(s) and antimicrobial susceptibilities	**Conditionally required** for a positive blood culture. See the following section for additional instructions.

Pathogens and Antimicrobial Susceptibilities	
Data Fields	**Instructions for Completion**
^Pathogens	**Conditionally required.** Select each organism identified in the positive blood culture from the pathogen dropdown menu (up to three organisms can be selected). Microorganisms do not have to be listed in a specific order when positive blood culture events are reported. The species should be entered once it becomes available on the final lab report. Do not report preliminary results (such as Gram stain). If the species is not indicated on the final lab report or is not listed in the NHSN pathogen dropdown list, then select the "spp." choice for the genus (e.g., *Bacillus natto* is not on the list so it would be reported as *Bacillus* spp.). Note that the pathogen dropdown menu opens to display an abbreviated list of the most common pathogens. If the microorganism cannot be found in the NHSN pathogen dropdown list, select "*All Pathogens"* at the top of the menu to search through a more complete list of pathogens.
^Antimicrobial agent and susceptibility results	**Conditionally required** if ≥1 pathogen is identified. • For organisms shown on the back of the event form, susceptibility results are required only for the antimicrobial agents listed. • For organisms that are not listed on the back of an event form, susceptibility results are optional. • (Optional) Report up to a maximum of 20 additional antimicrobials and susceptibility results, per microorganism.

Antimicrobial agent and susceptibility results (continued)	Select the organism's susceptibility result code for each antimicrobial agent. S – Susceptible I – Intermediate R – Resistant N – Not Tested NS- Non-susceptible S-DD- Susceptible-dose dependent For gentamicin and streptomycin high level tests only, use: S – Susceptible/Synergistic R – Resistant/Not Synergistic

Antimicrobial Drug Code Table

AMK = amikacin	COL = colistin	MINO = minocycline
AMP = ampicillin	DAPTO = daptomycin	MOXI = moxifloxacin
AMPSUL = ampicillin/sulbactam	DORI = doripenem	NITRO = nitrofurantoin
AMXCLV = amoxicillin/clavulanic acid	DOXY = doxycycline	OX = oxacillin
ANID = anidulafungin	ERTA = ertapenem	PB = polymyxin B
AZT = aztreonam	ERYTH = erythromycin	PIP = piperacillin
CASPO = caspofungin	FLUCO = fluconazole	PIPTAZ = piperacillin/tazobactam
CEFAZ= cefazolin	FLUCY = flucytosine	QUIDAL = quinupristin/dalfopristin
CEFEP = cefepime	GENT = gentamicin	RIF = rifampin
CEFOT = cefotaxime	GENTHL = gentamicin-high level test	STREPHL = streptomycin-high level test
CEFOX= cefoxitin	IMI = imipenem	TETRA = tetracycline
CEFTAZ = ceftazidime	ITRA = itraconazole	TICLAV = ticarcillin/clavulanic acid
CEFTRX = ceftriaxone	LEVO = levofloxacin	TIG = tigecycline
CEFUR= cefuroxime	LNZ = linezolid	TMZ = trimethoprim/sulfamethoxazole
CTET= cefotetan	MERO = meropenem	TOBRA = tobramycin
CHLOR= chloramphenicol	METH = methicillin	VANC = vancomycin
CIPRO = ciprofloxacin	MICA = micafungin	VORI = voriconazole
CLIND = clindamycin		

Event Details (continued)	
Data Fields	**Instructions for Completion**
^Suspected source of positive blood culture	**Conditionally required** for positive blood culture dialysis events. Select one suspected source of the positive blood culture: • Vascular access: Choose "Vascular access" if there is objective evidence of vascular access infection and the vascular access is thought to be the source of the positive blood culture. • A source other than the vascular access: Choose "A source other than the vascular access" if either (a) or (b) is true: a) a culture from another site (e.g., infected leg wound) shows the same organism found in the blood and is thought to be the source of the positive blood culture. b) there is clinical evidence of infection at another site which is thought to be the source of the positive blood culture, but the site was not sampled for culture. • Contamination: Choose "Contamination" if the organism isolated from the blood culture is thought by the physician, infection preventionist, or nurse manager to be a contaminant. Contamination is more likely if the organism is a common

	commensal and is isolated from only one of several blood cultures. Examples of some common commensals include: diphtheroids [*Corynebacterium* spp., not C. diphtheriae], *Bacillus* spp. [not *B. anthracis*], *Propionibacterium* spp., coagulase-negative staphylococci [including *S. epidermidis*], viridians group streptococci, *Aerococcus* spp., and *Micrococcus* spp. • Uncertain: Choose "Uncertain" only if there is insufficient evidence to decide among the three previous categories.
^Where was the positive blood culture collected?	**Conditionally required** for positive blood culture dialysis events. Indicate the patient's location when the blood culture was drawn.
Pus, redness, or increased swelling at the vascular access site	Report each new outpatient episode where the patient has one or more symptoms of pus, greater than expected redness or greater than expected swelling at any vascular access site. Pus is always reportable. Cellulitis at the vascular access site is also reportable as a pus, redness, or increased swelling event. Report redness or swelling if it is greater than expected and suspicious for infection. 21 day rule: 21 or more days must pass between the **onset** of one episode and the **onset** of a second episode of pus, redness, or increased swelling at a vascular access site to be considered separate dialysis events. If an episode of pus, redness, or increased swelling at a vascular access site resolves and then recurs within 21 days of the first onset, the recurrence is NOT considered a new dialysis event and therefore, should not be reported.
^Check the access site(s) with pus, redness, or increased swelling:	**Conditionally required** if there is pus, redness, or increased swelling at the vascular access site. Select vascular access site(s) with these findings. Note, the corresponding access should be selected under "Risk Factors." Exception: If reporting pus, redness, or increased swelling of a central line site occurred after the central line was removed, report that central line, even if it was no longer in place at the time of the event.

Event Details (continued)	
*Specify Problem(s)	**Required.** Indicate all problems present at the time of the event.
Fever	Select if a fever of ≥37.8°C (100°F) (tested orally) is present.
Chills or rigors	Select if chills or rigors are present.
Drop in Blood Pressure	Select if abnormal drop in blood pressure occurs.
Wound with pus or increased redness	Select if a wound that is unrelated to the vascular access site has pus or increased redness.
Cellulitis	Select if cellulitis is present at a site other than the vascular access and without open wound.
Pneumonia or respiratory infection	Select if pneumonia or another respiratory tract infection is present.
Urinary Tract Infection	Select if a urinary tract infection is present.
Other Problem	Select if another problem related to the dialysis event (IV antimicrobial start; positive blood culture; and/or pus, redness, or increased swelling at vascular access site) is present. Specify the problem.

Event Details (continued)	
None	Select "none" if there are no related problems.
*Outcome(s)	**Required.**
*Loss of Vascular Access	Select "Yes" if the patient had a complete loss of the vascular access (i.e., the vascular access became unusable and/or had to be removed) and this outcome was either definitely or possibly related to the event(s) or problem(s). Select "No" if this outcome did not occur, or if loss of vascular access occurred, but it was definitely **not** related to the event(s) or problem(s). Also select "No" if there was only a partial loss of the vascular access (i.e., the access needs revision or intervention to gain patency). Select "Unknown" if uncertain about whether or not loss of the vascular access occurred (e.g., patient was lost to follow-up).
*Hospitalization	Select "Yes" if the patient was admitted to a hospital and this outcome was either definitely or possibly related to the event(s) or problem(s). Select "No" if this outcome did not occur, or the patient was hospitalized, but it was definitely **not** related to the event(s) or problem(s). Also select "No" if the patient only visited the emergency department without admission and/or was placed under hospital observation without admission. Select "Unknown" if uncertain about whether or not the patient was hospitalized (e.g., patient was lost to follow-up).
*Death	Select "Yes" if the patient died and this outcome was either definitely or possibly related to the event(s) or problem(s). Select "Yes" if cause of death is unknown. Select "No" if this outcome did not occur, or if the patient did die, but it was definitely **not** related to the event(s) or problem(s). Select "Unknown" if uncertain about whether or not the patient died (e.g., patient was lost to follow-up).

Custom Fields	
Custom fields	Optional. Add up to 50 alphanumeric, numeric, and/or date fields to this form for local use. **NOTE:** Each custom field must be added in advance. Within NHSN, select "Facility," then "Customize Forms," and then follow on-screen instructions. The Form Type is "CDC-Defined – DIAL – Event" and form is "DE – Dialysis Event."

Comments	
Comments	Optional. Use this field to add any additional information about the dialysis event that would help you to interpret your surveillance data. CDC typically does not analyze these data.