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Table of Instructions for the Dialysis Event Surveillance Form (CDC 57.502)

Complete a Dialysis Event Surveillance 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 according to the Dialysis Event Surveillance Protocol
^ = conditionally required field when reporting according to the Dialysis Event Protocol

Data Fields	Instructions for Completion
Patient Information	
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 patient's Medical Record Number (may be alphanumeric) as the 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 #.
Patient Name	Optional. Enter last, first and middle name of the patient.
*Sex	**Required**. Select **F** – Female or **M –** Male.
*Date of Birth	**Required.** Enter the patient's date of birth (format: MM/DD/YYYY).
Race (specify)	**Optional.** Specify all of the following that identify the patient's race: American Indian or Alaska Native; Asian; Black or African American; Middle Eastern or North African, Native Hawaiian or Pacific Islander, White, Unknown, or Declined to Respond.
Ethnicity (specify)	**Optional.** Specify whether the patient is "Hispanic or Latino," or "Not Hispanic or Not Latino" or if patient's ethnicity is Unknown or Declined to Respond.
Event Information	
*Event Type	**Required.** Select "DE – Dialysis Event."

Data Fields	Instructions for Completion
*Date of Event	**Required.** Date (format: MM/DD/YYYY). Enter the date the first Event occurred. • 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. Note: The overall "Date of Event" is always the date that the first Event occurred. Note: For Events with event dates beginning January 1, 2021 or later, the overall "Date of Event" will auto-populate in this field. Note: For Events with event dates prior to January 1, 2021, the overall "Date of Event" should be manually entered.
*Location	**Required.** Select one of the following location codes to report Dialysis Event data: • Outpatient Hemodialysis Clinic (OUT: NONACUTE: CLINIC: DIAL) • Outpatient Hemodialysis Clinic-Acute Kidney Injury (OUT: NONACUTE: CLINIC: DIAL_AKI) The Acute Kidney Injury (AKI) Location should be used to report Dialysis Events for patients who meet the following criteria: 1. No diagnosis of "End Stage Renal Disease' or "ESRD" in the patient medical record, or through the ESRD Medical Evidence Form (Form CMS-2728-U3), <u>AND</u> 2. Physician-diagnosis of "Acute Kidney Injury" or "AKI" listed in the patient medical record (e.g., nephrologist consult or referral form," <u>AND</u> 3. The event date is not more than 6 months after the date the patient-initiated outpatient hemodialysis.
*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 newly admitted to your facility or readmitted from a different healthcare facility after missing ≥1 dialysis treatment in your facility. Select "No" if the dialysis event did not occur on the same date as when the patient was newly admitted to your facility or readmitted from a different healthcare facility.

Data Fields	Instructions for Completion
*Transient Patient	**Required.** Select "Yes" if this patient was temporarily admitted for treatment at your facility during the onset 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	
*All Vascular Access Types Present (check all that apply)	**Required.** Select all vascular accesses that the patient had in place at the time of the dialysis event. Include vascular accesses that are not used for dialysis, abandoned, and/or non-functional.
Fistula	Indicate if the patient has an arteriovenous fistula: a surgically created direct connection between an artery and a vein for hemodialysis.
^Buttonhole	Conditionally required for patients with fistulas using buttonhole cannulation: a cannulation technique where a blunt needle (cannula) is inserted into the fistula at the same location each time using an established track. Report the way in which a patient is primarily cannulated.
Graft	Indicate if the patient has an arteriovenous graft: 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 tunneled central line: 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 and used to perform hemodialysis
Non-tunneled central line	Indicate if the patient has a non-tunneled central line: 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 and is used to perform hemodialysis.
Other dialysis vascular access device	Indicate if the patient has a hybrid vascular access device (e.g., HeRO® vascular access device[1]), port, or any other <u>vascular access</u> device that does not meet the above definitions. Note: 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 catheters.
^Is this a catheter-graft hybrid?	Conditionally optional for patients with an "other vascular access device." Catheter-graft hybrid: 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[2]). Select "yes" if the patient has a catheter-graft hybrid, select "no" if patient does not have a catheter-graft hybrid.

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

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Data Fields	Instructions for Completion
*Access Placement Date	**Required.** For each vascular access type present, indicate the date (MM/YYYY) the access was placed or select "Unknown" 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.
Access used for dialysis at the time of the event	**Optional.** Indicate the access type was used to dialyze patient on the day of the event. **Select only one.** If the patient used more than one access for the hemodialysis treatment (such as one needle of an AV Fistula and one lumen of a catheter), select the applicable access with the higher risk of infection. Note: The access indicated should also be included in "All Vascular Access Types Present".
Fistula	Indicate if an arteriovenous fistula was used to dialyze the patient on the day of the event.
Graft	Indicate if an arteriovenous graft was used to dialyze the patient on the day of the event.
Tunneled central line	Indicate if a tunneled dialysis central line was used to dialyze the patient on the day of the event.
Non-tunneled central line	Indicate if a non-tunneled dialysis central line was used to dialyze the patient on the day of the event.
Other vascular access device	Indicate if the patient has a hybrid vascular access device (e.g., HeRO® vascular access device[2]), port, or any other <u>vascular access</u> 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 catheters.
Catheter-graft hybrid	If Other Vascular Access Device is chosen, select only if the other vascular access device is a catheter-graft hybrid. Catheter-graft hybrid: 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[2]).
Event Details	
*Specify Dialysis Event	**Required.** Select all that apply: Note: Select at least one Dialysis Event type.

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Data Fields	Instructions for Completion
IV antimicrobial start	Report **all** starts of intravenous (IV) antibiotics or antifungals administered in the 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 greater than 21 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. The day after the end of an IV antimicrobial course is Day 1; an IV antimicrobial course that begins on day 22 or later is reportable as a new IV antimicrobial start. 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.
	• **Example**: Patient A begins IV Vancomycin while in the hospital on 1/8. The patient is discharged from the hospital on 1/12 and returns to the dialysis facility on 1/13 and is administered the IV Vancomycin by the dialysis clinic to continue the course. The course ends on 1/22. Patient A later begins a new course of IV Antimicrobials for a different illness on 2/10, administered by the dialysis clinic. Because the end of the first course (1/22) and the beginning of the second course (2/10) are less than 21 days apart, the second course does not need to be reported in NHSN.
	For outpatient IV antimicrobial starts that are continuations of antimicrobial treatment initiated outside of the reporting facility (e.g., during inpatient hospitalization, at home), consider the start day to be the first day of administration at the reporting outpatient facility.
	Inter-facility patient transfers: If a patient at a dialysis facility has an IV antimicrobial start and then transfers to another facility (as a transient or permanent patient) where the antimicrobial is continued, the second facility would report the IV antimicrobial start in their facility as well.
^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.
^Was this a new outpatient dialysis facility start or a continuation of a course initiated outside of the dialysis facility?	Conditionally required for IV antimicrobial start dialysis events. 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 another setting.

Data Fields	Instructions for Completion
^If new antimicrobial start, was a blood sample collected for culture?	Conditionally required. Only answer this question if selected "New antimicrobial start" in the previous question. Select "Yes" if a blood sample was collected for culture before or after the IV antimicrobials were administered. Select "no" if a blood sample was not collected for culture.
^Date of IV antimicrobial Start	Conditionally required. Enter the start date of the IV antimicrobial administration at your dialysis clinic.
Positive blood culture	Report **all** positive blood cultures from specimens collected as an outpatient or collected within one calendar day after a hospital admission. A positive blood culture should be reported if any organism can be isolated from the blood culture. Positive blood cultures meeting this definition should be reported regardless of whether the patient was determined to have a bloodstream infection. 21-day rule: There must be greater than 21 days between positive blood cultures for each positive blood culture to be considered a separate dialysis event, even if organisms are different. The day after the last reported positive blood culture is Day 1 and any other positive blood cultures that occur on day 22 or later are reportable. 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. If different organisms grow from subsequent positive blood cultures, add the new organisms to the first reported dialysis event.

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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 a common commensal is identified from one of several blood cultures thought by the physician, infection preventionist, or nurse manager to be a contaminant. Examples of common commensals can include (but are not limited to): diphtheroids (*Corynebacterium* spp., not *C. diphtheriae*); *Bacillus* spp. (not *B. anthracis*); *Propionibacterium* spp.; coagulase-negative staphylococci (including *S. epidermidis*); viridans group streptococci; *Aerococcus* spp.; and *Micrococcus* spp. For a full list of Common Commensal organisms, refer to the Common Commensal tab of the NHSN organism list (https://www.cdc.gov/nhsn/xls/master-organism-com-commensals-lists.xlsx).
	
	• 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. (e.g., dialysis clinic, hospital or other). Other implies any other location such as urgent care.
^Date of positive blood culture	Conditionally required. Enter the date of specimen collection for the positive blood culture.

Data Fields	Instructions for Completion
Pus, redness, or increased swelling at the vascular access site	Report each new outpatient episode where the patient has one or more of the following symptoms that are suspicious for infection at any vascular access site: pus, redness, or increased swelling, regardless of whether the patient receives treatment for infection. Cellulitis involving the vascular access site is also reportable as a pus, redness, or increased swelling event.

21-day rule: There must be greater than 21 days 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. The day after onset of pus, redness, or increased swelling at a vascular access site is day 1; if the symptoms resolve, then the next onset of any of pus, redness, or increased swelling on day 22 or later is reportable. 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. If pus, redness, or increased swelling occur at a central line site after the central line was removed, report the event. |
| ^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."

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. |
| ^Date of pus, redness, or increased swelling | Conditionally required. Enter the date of onset for the pus, redness, or increased swelling at the vascular access site event. |

Data Fields	Instructions for Completion
*Specify Problem(s)	**Required.** Indicate all problems present at the time of the event.
Fever	Select if a fever of ≥37.8°C (100.04°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 greater than expected swelling at vascular access site) is present. Specify the problem.

Data Fields	Instructions for Completion
*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).

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Data Fields	Instructions for Completion
Pathogens	
^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. <u>Do not</u> 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.
	
	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

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	**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.