



هيئة الصحة العامة
PUBLIC HEALTH AUTHORITY

DE Surveillance Data Validation Tool

PART I : DE Surveillance Process (Dialysis Events)

#	Items	A: Staff Knowledge	Score	Comments
WHAT? (ICPs responsible for SSI Surveillance must be well trained about SSI Surveillance Protocols)	CDC - NHSN DE Criteria (Numerator) 1: IV Antimicrobial Start	<p>Q1: Ask ICP about CDC-NHSN criteria for identification of Dialysis Events? The numerators are the number of dialysis events that occur during a defined time period. There are 3 types of dialysis Events: 1: IV Antimicrobial Start 2: Positive Blood Culture (PBC) 3: Local Site Infection (Pus, Redness, Swelling) Report all starts of IV antibiotics or antifungals administered in an outpatient setting regardless of the reason for administration or duration of treatment.</p> <ul style="list-style-type: none">• A start is defined as a first single outpatient dose of an antibiotic during a course.• Report outpatients starts that are continuations of inpatient treatment.• Do not report IV antiviral starts. This event is for the patient who is given IV antimicrobial agents in the dialysis unit for any reason• If IV antimicrobials are stopped for less than 21 days and then restarted, this is NOT considered a new event.• If IV antimicrobials are stopped for 21 or more days and then restarted, this is considered a new event.		
		<p>Q2: What is Dialysis Event 21 Day Rule? An event reporting rule which reduces reporting of events likely related to the same patient problem. For each patient, 21 or more days must exist between two dialysis events of the same type for the second occurrence to be reported as a separate or new dialysis event.</p>		
	2: Positive Blood Culture (PBC)	<p>Q1: Ask ICP about Positive Blood Culture Criteria for identification of Dialysis Events?</p> <ol style="list-style-type: none">1: Report all the positive blood cultures from specimens collected as an outpatient (including Emergency department) or collected on the day of admission or a day following hospital admission.2: Report regardless of whether or not a true infection is suspected or whether the infection is thought to be dialysis related.3: The date of a blood culture result is based on the date the blood specimen was collected, not the date the laboratory reported the result. <p>NOTE: 21 Days rule will be applied to all 03 types of dialysis Events.</p>		
WHAT?	3: Local site Infection at vascular access site	<p>Q1: Ask ICP about Positive Blood Culture Criteria for identification of Dialysis Events?</p> <ul style="list-style-type: none">• Pus• Redness that is suspicious for infection• Greater than expected swelling that is suspicious for infection.• Report regardless of whether the patient received treatment for infection.• Always report pus and indicate the vascular access site(s) where the symptom(s) occurred. <p>NOTE: 21 Days rule will be applied to all 03 types of dialysis Events.</p>		
WHERE?	DE Surveillance Location & Data Source	<p>Ask IC staff about the DE Surveillance location:</p> <ol style="list-style-type: none">1: Outpatient hemodialysis centers2: These centers may be attached to or affiliated with a hospital, but should serve hemodialysis outpatients.		


WHAT?	DE Surveillance Data Collection	Ask IC staff about the DE Surveillance Data Collection: 1: ICP must collect data for numerator for outpatient hemodialysis centers <i>(Collect data as per criteria using manual data collection sheet or electronic data source: patient files, Patient treatment charts etc)</i>		
HOW?	Denominator Data Collection	Q: How and from where denominator data can be collected?? Patient Months 1: Denominator data are collected as counts of patients by vascular access type used to estimate the number of patient-months considered at risk for dialysis events each month. 2: Number of hemodialysis outpatients and their hemodialysis vascular access type who received hemodialysis at the center during the first two working days of the month must be reported. <i>Working Days: The first two "working days" of the month should provide the opportunity to capture all patients who received hemodialysis at the center during those days.</i>		
WHO??	Targeted Patients (Inclusion Criteria & Exclusion Criteria)	Ask about the inclusion & exclusion criteria for DE Surveillance? Inclusion Criteria: <ul style="list-style-type: none"> Total number of outpatients undergoing Hemodialysis Transient patients (undergoing hemodialysis) Peritoneal dialysis patients and Transplant patients (undergoing temporary hemodialysis) hemodialysis Outpatients with acute kidney injury (Regular, transient, kidney transplant patients on temporary dialysis) Exclusion Criteria: <ul style="list-style-type: none"> inpatients receiving hemodialysis 		
WHAT??	Key terms & Definitions	Ask about type of vascular access used and infection risk? - In order of increasing infection <ul style="list-style-type: none"> Arteriovenous fistulas: <i>Implanted access created from the patient's own blood vessels</i> Arteriovenous graft: <i>Implanted access constructed from synthetic materials</i> Permanent central line: <i>tunneled cuffed catheter</i> Temporary central line: <i>non-tunneled non-cuffed catheter</i> Port access device: <i>a fully implantable access device (e.g., Lifesite)</i> <i>NOTE: If the patient has multiple vascular accesses, only his/her vascular access type with the highest risk of infection is counted</i> <i>If multiple dialysis events occur together, as a part of the same patient problem, they should be reported on the same dialysis event form. Always use the date when the first event that occurred.</i>		

B: Positive Culture Linelist & Internal Validation

WHAT?	Line list Review	Is there any effective notification system between the IPC department, laboratory, and all departments in the hospital for any critical values (i.e. MDROs, positive cultures & high-alert microorganisms).		
		Is there any updated inelist of registered patients that includes Patient information, access site information, Local Site infection S/S, date of blood specimen collection, type of organism, type of DE etc		
		Internal validation done to review data for candidate dialysis Events according CDC NHSN criteria.		
		Internal validation done to review denominator data - Number of Patient months		

C: Dialysis Events Identification & Reporting

WHAT?	Data Analysis & Event reporting	Number of Dialysis Event/s correctly identified as per CDC-NHSN Criteria		
		Number of Dialysis Event/s matching CDC criteria that were missed by ICP and were detected during visit.		
		Number of correctly identified Dialysis Event/s are reported Via seha platform in a timely manner.		
		Number of Event/s as per manual sheet are 100% matching with Seha Platform & Power BI dashboard		

D: DE Surveillance Data Entry Via Seha Platform				
WHAT?	Electronic Platforms	All registerd hemodialysis patients are entered in Seha Platform. (1st & 2nd Working days)		
		All required information is entered accuratley and dialysis bundle forms are filled. (Check at least 20% of registered patients via Seha Platform on day of visit to ensure completeness and accuracy		
		Number of registered patients as per manual records MUST be 100% matching with Patients registered in SEHA platform on 1st & 2nd Working days of each month.		
E: HAI Outbreak Detection & Reporting (ESKAPE-C)				
WHAT?	Outbreak Detetction Reporting	Outbreak was detected correctly as per latest GDIPC updates (version 7.2 Jan 2025)		
		Outbreak was reported in a timely manner via electronic Platform		
		An outbreak was missed which was detetced during visit as per linelist (Device associated (Central Line) or non device associated) There was epidemiological link between cases reported from same location in same time frame.		
<div></div> <div>F: Improving Dialysis Event Monitoring and Notification Data (I-DEMAND) Project</div>				
WHAT?	I-Demand Tools (Knowledge & Practices)	Assess staff knowledge about the National I-Demand project.		
		Ask about the I-Demand prevention tools & their implementation.		
		Compare the actual complaince data Vs data submitted each month - observe any discrepancy.		
PART II : On Site Visit Dilaysis Unit				
WHAT?	Validation Rounds	Conduct rounds in HDUs & ensure Dialysis bundles & prevention tools are applied.		
		Assess staff knowledge about Dilaysis bundle elements & I-Demand prevention tools.		
PART III (Education & Training Session)				
WHAT?	DE Surveillance Education & Training	External Validator conducted short concluding training & education session ????		
		DE Surveillance Protocols based on CDC-NHSN Criteria DE Prevntion Bundle (Connection) I-Demand Prevencion Tools overview		
WHO?		Targeted Audience: Infection Control Team Nursing staff /Representatives from Hemodialysis Units		