## News from the NHSN Help Desk

Part 2: How to Apply the 21 Day Rule

The 21 day rule is an event reporting rule, which reduces reporting of dialysis events that are likely to be related to the same patient problem. However, the rule is applied differently to each dialysis event type and should be understood before reporting any dialysis event data to NHSN.

How to apply the 21 day rule to IV antimicrobial start events (ABX): Report two dialysis events on separate event forms if 21 or more days have passed between the end of the first course of ABX and the beginning of the next course of ABX.

How to apply the 21 day rule to positive blood culture events (PBC): Report two dialysis events on separate event forms if 21 or more days have passed between the **specimen collection date** of the first PBC and the **specimen collection date** of the second PBC. If different organisms grow from subsequent PBC that are collected within 21 days of the first specimen collection date, add these new organisms to the first reported event.

How to apply the 21 day rule to pus, redness, or increased swelling at the vascular access site events (PRS): Report two dialysis events on separate event forms if 21 or more days have passed between the onset date of the first PRS and the onset date of the second of PRS.

**Test Your Knowledge!** Consider the following scenario.

During a routine hemodialysis treatment on March 2<sup>nd</sup>, the patient develops a fever. Blood cultures are drawn and the physician starts the patient on a course of IV vancomycin. Two days later, the blood culture results come back positive for *E. faecalis*. On March 9<sup>th</sup>, the patient is feeling better and receives a final dose of IV vancomycin, after which antimicrobials are discontinued. Then on March 28<sup>th</sup>, the patient develops a fever, accompanied by chills. Blood cultures are drawn again and a new course of IV cefazolin is administered. The blood cultures test positive for *E. faecalis* again on the following day, March 29<sup>th</sup>.

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			March 2016			
SUN	MON	TUE	WED	THU	FRI	SAT
		1	Patient presents with fever. Blood cultures drawn + patient started on IV vancomycin	3	4 Culture positive for <i>E. faecalis</i>	5
6	7	8	9 Final dose of IV vancomycin administered	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	Patient presents with fever and chills. Blood cultures drawn and patient started on IV cefazolin	29 Culture positive for <i>E.</i> faecalis	30	31	Note: Patient dialyzes M/W/F	

## Ask yourself:

- 1. What types of dialysis events should I consider reporting for this patient?
- 2. How many days passed between the first specimen collection date and the next specimen collection date for each positive blood culture?
  - Do I need to report both positive blood culture events to NHSN?
- 3. How many days passed between the end of the first course of antimicrobials and the beginning of the next course of antimicrobials?
  - Do I need to report both ABX events to NHSN?
- 4. How many dialysis events in total should I report to NHSN for this patient?
- 5. For each event that needs to be reported, what is the appropriate event date
  - 4.  $\Delta$ ; Event 1 (PBC + ABX) = March  $2^{nd}$  and Event 2 (PBC) = March  $28^{th}$
  - 3. 18; No, Even though two different antimicrobials were administered the 21 day rule applies
    - 2. 25; Yes, more than 21 days passed between each specimen collection date
      - 1. Positive blood culture and IV antimicrobial start events



**Questions about NHSN?** Contact us at nhsn@cdc.gov with "Dialysis" in the subject line and we will respond to your inquiry within 5 business days.