



The ICN/TCN/SCN is a 57-bed Level II/Level III/Level IV neonatal intensive care unit operating 24 hours per day, 7 days per week. The purpose is to provide care to critically ill, high risk and convalescing neonates who require monitoring services and are at risk of needing immediate intensive treatment.





## Involve Families from the Start

Quoted from a letter given to families on admission:

“Dear Parents,

We would like to ask you to join the staff of the ICN in an effort to lower the risk of infection in our nursery. Infections in premature and sick infants can lead to dangerous complications. The Duke ICN has begun a campaign that focuses very closely on infection prevention. This campaign is called “RAIN”. RAIN stands for Rally Against Infection. During your baby’s stay in the ICN you will get a lot of information about infection prevention. This is a team effort to keep your baby infection free, and we are asking you to join us in this effort. You are a very important part of this team and we need your help.”



## Reminders/Prompts for Staff:





## Unit Screensaver





## SAMPLE: Unit Activity

### Nosocomial Monday Activity

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Activity: List (10) actions and or practice changes that can help prevent nosocomial infections.

---

---

---

---

---

---

---

---

---

---

---



SAMPLE:

Celebrate!

Monday October 6th  
ICN Bake off  
Create an edible infection related creation  
Win a prize!!!

Tuesday October 7th  
ICN CSI  
Solve the crime scenes  
Win a Prize!!!

Wednesday October 8th  
Test your Infection IQ  
Win a Prize!!!!

Thursday October 9th  
Camp ICN  
Create an ICN infection control camp Tshirt  
Win a Prize

Friday October 10th  
Pizza Party  
Celebrate our success!!!!

During National Infection Control Week



Letter to staff when an infection is being studied:

"Dear staff,

**As part of our commitment to eradicate Catheter-Associated Blood Stream Infections (CA-BSI) in the NICU, we are performing a Root Cause Analysis of all CA-BSIs. We are not looking for anyone to blame, but opportunities to improve care to PREVENT a future CA-BSI in this and every patient.**

**cont:**



Questions asked as memory prompts to staff:

1. Was the necessity of lines for this patient discussed on daily patient rounds?
2. Were there any observed breaches of proper hand hygiene by anyone involved in daily line care for this patient?
3. **Did you use the 15 second CHG scrub before all line entries?**
4. Was the dressing integrity and change date assessed/addressed during your shift?
5. If there was a dressing change on your shift, was alcohol used instead of CHG?
7. Were the catheters used for lab draws during your shift?
8. What was the nursing staffing ratio for your assignment appropriate?
9. Can you identify any other possible sources of contamination for the closed/sterile tubing-CVL circuit?
10. Was this line manipulated/used by any non-ICN/TCN/SCN physicians/nurses (e.g., anesthesia, radiology, cath lab, etc)
11. Were there any mechanical problems with catheters prior to infection date? (not drawing, difficult to infuse, repositioned, etc)
12. Are there any significant patient factors that you believe may have contributed to this infection?

# SAMPLE report back about RCA

## Root Cause Analysis of Patient, Date

Patient: X

CA-BSI date //



### Summary

Unstable 24wk infant w/ the following problems prior to CA-BSI  
24 week prematurity, birth wt <1000gms, No PNC, Maternal cocaine exposure

RDS s/p surf x 2, HFJV

PIE

Metabolic acidosis (mult bicarb boluses over several days)

Renal insufficiency

Abnm bowel gas pattern w/ subsequent spont perforation

B grade II IVH w/ PVL on L

R/O sepsis

Hypotension (s/p dopa & epi gtt)

UAC x 13 days, UVC x 7 days, PICC 48 hrs prior to CA-BSI

CONT:



## **Lessons learned:**

Prolonged UAC placement  
Multiple line entries  
Multiple individuals providing care at one time – technique ? x 1  
Multiple IV attempts, Multiple arterial puncture attempts  
PICC migration 24hrs prior to (+) culture

## Action Plan:

Discuss /reinforce need to limit umbilical lines to <7days when possible  
Discuss with PICC team appropriate means of securing line at insertion site-?need for education(2<sup>nd</sup> infant with CA-BSI and migration of PICC)  
Develop system for monitoring/limiting IV and blood sampling attempts  
Continue to enforce and hold individuals accountable for good aseptic techniques

Reviewed: 3/2/2010