

Improving Safety in the IV Room

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The speaker has no conflict to disclose.



Unique qualities of an IV Room

- Tech to Pharmacist ratio may be high.
- Direct supervision of compounding is very difficult.
- Most Pharmacists and Techs have no or minimal previous IV training.
- Errors are not easily discoverable.
- TRUST is a MUST.



Opportunities to Improve

- Be Proactive and learn from others.
- Be Reactive and learn from our own errors.
- Re-evaluate processes continually for potential improvements.



Proactive – Vinca Alkaloids

- Follow published guidelines or recommendations.
 - ISMP Nurse Advise-ERR, October 2008
Volume 6 Issue 10
Syringe mix-ups lead to fatal intrathecal administration of IV vinCRISTine.
- Perform GAP analysis.
 - Changes in Storage Areas.
 - Prepare dose in IVPB rather than syringe form.
 - Development of a Time Out Checklist.



Vin CRIS tine



- This is **VinCRISTine**
- **LOOK** LOOK ALIKE / SOUND ALIKE DRUG - Do not confuse with VinBLASTine.
- Max dose of VinCRISTine is:
2 mg
- Double Check the drug and dose you are looking for.



Vin BLAS tine



- **LOOK** LOOK ALIKE / SOUND ALIKE DRUG - Do not confuse with VinCRISTine
- Due to Look Alike/Sound Alike policy, VinBLASTine is found on the bottom shelf of this refrigerator, and will NOT be stored alphabetically.
- Keep this bin turned over as VinBLASTine will be stocked in another bin.



Vin BLAS time

- **LOOK** LOOK ALIKE / SOUND ALIKE DRUG - Do not confuse with VinCRISTine.
- This is Vin BLAS time.
- Double check Drug Name and Dose you are looking for.



IVPB rather than Syringe

- Needed buy-in from Adult and Peds Oncologists.
- Compromise may be necessary.
- New procedure in Pharmacy IV Guidelines.



SFMC Vinca Alkaloid Time Out Checklist

Patient Name: _____ Date: _____
 MRN: _____ Page: _____ of 2

Time Out Checklist for Vinca Alkaloids (VinBLASTine, VincRISTine, Vincetristine)

This is a finished preparation release check.
 Turn of these forms must be attached to all IV orders for Vinca Alkaloids dispensed from Pharmacy, and will be placed out in their entirety before the preparation leaves the Pharmacy.
 Each form will be completed by a Pharmacist. The IV team Pharmacist will attach both copies to the IV / Syringe Card prior to dispensing the preparation from the IV team.

The following preparation contains (circle one):	VinBLASTine	VincRISTine	Vincetristine	Verified by:
I have no:				
The formulation is an IV/IO diluted to a total volume of 20ml with NS.				
This has been placed in an empty multi bag.				
For IV Use ONLY. IV/IO if given intrathecally - manufacturer supplied label present on patient label.				
This is the rare exception of a Pediatric preparation in syringe form due to peripheral line.				
For IV Use ONLY. If ALKAL given intrathecally - manufacturer supplied label present over top of syringe connection.				
Syringe is placed in manufacturer supplied overcap bag.				
For IV Use ONLY. If ALKAL given intrathecally - manufacturer supplied label present on patient label on overcap bag.				
This preparation is Protected from Light.				
This preparation will not be dispensed with any intrathecal preparations.				



Education to Staff

- Email and staff meeting presentations on changes in process and use of Vinca Time Out Checklist.
- Information on Pharmacy Portal and IVG under all Vinca Alkaloids.
- Q&A with results to staff.



Reactive – Hazardous Drug Compounding Process

- Learn from your own errors.
 - IV Chemotherapy labeling error.
- Perform Root Cause Analysis
 - Number and Experience level of individuals in Chemo Room.
 - Number of preparations in the Chemo Hood at one time.
 - Labeling and Setup done by RPh.



Max of 3 Individuals in Chemo Room

- Chemo Room is used for all sterile and non-sterile preparation of Hazardous Medications.
- Number of individuals in the Room, contributed to stress level the day of the error.
- Experience Level of those individuals was less than ideal.



One Prep in the Chemo Hood at any given time

- Volume of Hazardous IV preparations was high on day of error.
- Time consuming in nature.
- Some have short stability.
- Made on “as needed” basis due to above factors and cost.



Hazardous Drug Labeling and Setup

- Labeling was not a process defined prior to the error.
- Labeling done by RPh only.
- All labeling materials are now stocked in the Chemo Room.
- Setup of preparation materials for next shift, done by RPh.



Education to Staff

- Staff meeting discussions on the Error that occurred and results of the RCA.
- New Policies written and reviewed with staff.
- Q&A on these process changes is immeasurable.
- Signage used on Chemo Room door, Chemo Hood, Labeling materials present, and IV RPH job duties posted in IV Room.



Re-evaluate Current Process -Independent Double Check

- We use an IV Profile Card to document compounding directions, time/date of compounding, and individuals involved.
- Errors have occurred in the compounding directions.
- Review of those errors has led to the Independent Double Check procedure.



Independent Double Check

- Two individuals are involved in verifying the accuracy of compounding directions for parenteral preparations.
- Policy/Procedure has been modified to require two Pharmacists verify and sign every preparation card.



IV Profile Card


OSF ORTHOGONAL SURVEILLANCE CENTER Department of Pharmaceutical Services Sterile Intravenous Solution Profile			<table border="1"> <tr> 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Independent Double Check


☉ Profile Cards for Documentation.

- Instructions
- Date and Time due
- Date and Time compounded
- Who compounded
- Who Checked and Double Checked


☉ IV Guidelines.

- Homegrown monographs specific to our institution.
 - Training for new Pharmacists.
- 


Independent Double Check Policy Changes

- Policies were in place for profile cards.
 - Added the RED RULE of the Independent Double Check by a Second Pharmacist.
 - Techs are asked to “Stop the Line” if a double check is not present.
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Education to Staff

- Email and staff meeting presentations on the use of an Independent Double Check.
 - Information on Pharmacy Portal under Policy and Procedure.
 - Q&A with results to staff.
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Change is Difficult but Crucial to Success

- New processes are never easy.
 - Continually learning how to improve.
 - Keep Safety at the forefront of process changes.
 - ***You must be the change you wish to see in the world.*** Mahatma Gandhi
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Post Test Questions

1. To use established guidelines, such as those outlined by ASHP, USP, or NIOSH, to determine gaps in a current process, is a _____ approach to improving safety in an IV Room process?
 - a. Proactive
 - b. Reactive

2. Which of the following is NOT a way to improve safety in compounding Hazardous parenterals?
 - a. Verify compounding of one dose at a time.
 - b. Reduce environmental stress by limiting personnel in the area of compounding.
 - c. Teach Hazardous handling to multiple students/trainees at one time, by having many present to watch an experienced Tech compound a Chemotherapeutic agent.