Outline

What	Problem(s)	Patient, fetus death, enteral misconnection (feeding tube/IV mixup)
When	Date	July 18, 2006 (death of patient)
	Different, unusual, unique	Patient was 35 weeks pregnant, vomiting
Where	State, city	Kansas
	Facility, site	Hospital
	Task being performed	Patient being fed through a tube

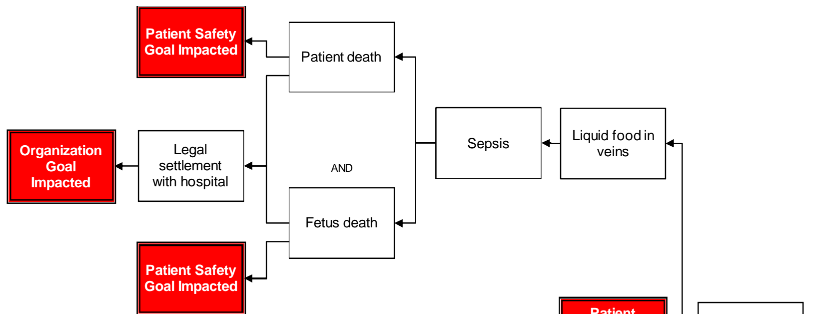
Impact to the Goals

Patient Safety	Patient death	
	Fetus death	
Employee Impact	?	
Compliance	"Never event"	
Organization	Legal settlement with hospital	?
Patient Services	Food delivered through IV	
Environmental	N/A	
Property, Equip, Mtls	Potential to declare equipment unsafe	
Labor, Time	?	
	This incident	?
Frequency	24 cases over 7 years (based on study of voluntary reporting system)	
	Annualized Cost	?

Feeding Tube Misconnection Results in Patient, Fetus Death
July 18, 2006

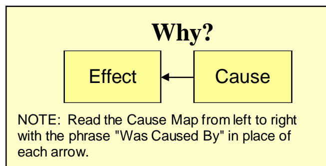
Timeline

Year	Date	Description
1972		First case of tubing misconnect (breast milk inadvertently delivered by IV) reported in *The Lancet*
1979		Call for international enteral feed apparatus not compatible with IV lines
1983		Case report suggests incompatible connectors
1996		Association for the Advancement of Medical Instrumentation (AAMI) standard passed with specific guidelines for feeding tubes - not luer lock compatible
2006		FDA and the American Society for Parenteral and Enteral Nutrition survey showed that 15.9% of responding institutions had experienced an enteral misconnection
2006		AAMI standard re-released
2006		Manufacturer releases a line of enteral feeding adminstration sets and feeding tubes that accept only oral syringes
2006	July 18th	Patient and fetus killed in Kanses due to enteral misconnection
2007		The Joint Commission proposes a National Patient Safety Goal regarding the prevention of tubing misconnection (this Goal was not adopted)
2007	March	Review of the Medication Errors Reporting (MER) Program identified 24 incidents involving enteral misconnection



Cause Map
Detail Level

Patient Services Goal Impacted
Food delivered through IV
Feeding tube connected to intravenous (IV) line
Staff made misconnection
?
AND
Multiple tubing connections
Patient support
AND
Compliance Goal Impacted
"Never event"
Use of device other than intended
Feeding tube able to be connected to IV
Use of compatible connector
Adoption of needle-free connectors
Caregiver safety
AND
Lack of incompatible tubing
Delay in development of incompatible tubing
Resistance from medical-device industry
AND
Difficulty to get approval of changes from FDA
FDA approval process *
AND
Delay in requirements for incompatible tubing
Waiting on international group to develop recommendation
Property Goal Impacted
Potential to declare equipment unsafe



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