

Safety Science in Wisconsin: Systems Change Review

Scott Modell, PhD. Noel Hengelbrok, M.Sc.



Child Welfare Across the U.S.



Time for Something New

-	
-	

Tennessee child welfare officials draw on lessons from aviation, call for "safety culture"



-IMMAGE DISTRIBUTED FOR COMMISSION TO ELIMINATE CHILD ABUSE AND NEGLECT FATALITIES is Staffers from The commission of the Children's Services Offices of Offile Health and Safety Note! Hengelton's from left, or Modell. and Michael Cult toward during a public meeting of the Commission to Eliminate Child Abuse and

NEW3	TOPICS
Infortile	emphis.
School	s & Education
Courts	
Region	sal .
Mid-Sc	uth Memories
News (Obhavies
Twe	eets by one
Twe	Commercial A
8	Commercial A
-Qua	







Expert Findings

- The Captain had close to 11,000 hours on the Boeing 737 alone. This combination of training standards and experience is apparently not enough to protect crews from the subtle effects of automation failures during automated, human-monitored flight.
- The documentation and training available for flight crews of the Boeing 737NG leaves important gaps in the mental model that a crew may build up about which systems and sensor inputs are responsible for what during an automatically flown approach.

(Dekker, 2009)



Expert Findings

- It is indisputable that OKDHS was well aware of the hazard associated with the pool.
- The home should never have been approved without a specific and shared understanding between OKDHS and the foster parents about the pool.
- The pool should have been removed or a suitably protective fence should have been placed around it.
- No children should ever have been placed in the home before one of these things happened.
- By failing to ensure that this hazard was either removed or mitigated, OKDHS violated CWLA and COA standards and its own policy.

Goad, 2011



Developing a Safety Culture

Three Transitions

_



Blame to Accountability *To understand how to learn and improve as an organization.*

Applying quick fixes to understanding underlying features To make meaningful change and address the real problems.





First Stories to Second Stories
To dive beneath surface level descriptions of events and understand the true sources of failure and success.



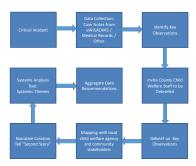
Systems Change Review



Systems Change Review

- Departs from Blame and Increases Individual and Systems Accountability
- Integrates safety science into the learning process
- Establishes an environment that promotes staff engagement
- · Values staff perspective
- Compatible with complexity of work

Systems Change Review Process Flow





Systems Change Review

- · Key Features
 - Human Factors Debriefing
 - Systemic Mapping
 - Systemic Analysis



Human Factors Debriefing

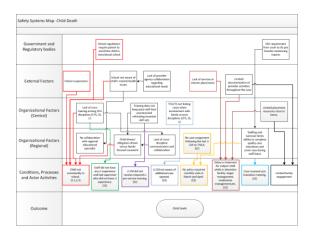
- Conducted by Wisconsin Reviewers
- · Characteristics of Debriefing
 - Voluntary
 - Supportive
 - Safe
- Uses Human Factors Techniques
 - Understands decisions made in context
 - Explores Local Rationality



Systems Mapping

- Facilitated by Wisconsin Reviewers
- Multidisciplinary
- Based on AcciMap model
- Explores identified Learning Points and their influences at different levels of the system
 - Frontline
 - County
 - State
 - External
 - Government/Legislative

Sample Map





Narrative Creation

- Created by Wisconsin Reviewer
- Derived from Mapping process
- Turns Mapping product into contextual narratives
- Scored with Systems Analysis Tool

Example Narrative



Narrative Example

- Event: A JJ supervisor was assaulted by a youth
- Learning Point: Youth was left with one staff person



Narrative Example

 Narrative: The historical practice of not using the county detention facility to hold youth on the weekends influenced the decision to bring the youth to the office. An absence of role clarity between the agency and law enforcement in processing youth after-hours supported the decision of law enforcement to leave the office before a transportation plan had been finalized. This resulted in the Social Worker and Supervisor adapting procedures around being alone with youth so that one of them could secure the required vehicle needed for transport.



Narrative Example

 The youth's continued calm demeanor and history of non-violence with the Social Worker and Supervisor contributed to their perception of the effectiveness of this modified plan. Overall staffing patterns, without after-hours backup from the agency and law enforcement, placed staff in a position of having to choose which work requirements to prioritize in order to accomplish the task of transporting the youth to the identified placement setting.



Systemic Analysis

- Identifies Underlying Systemic Themes
 - Examples:
 - Teamwork/Coordinating Activities
 - Service Availability
 - Prescribed Practice
 - Demand-Resource Mismatch
- Targets resources and interventions during recommendation process
- Integrated into broader CQI efforts



Final Discussion

•	