

Quality Safety Edge

ABC Analysis: Tips and Techniques

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Agenda Today

- ▶ Discuss our history with ABC analysis
- ▶ Brief overview
 - Evolving approach
 - Enhanced Behavioral Engineering Model
- ▶ Illustrate its use in a discussion exercise

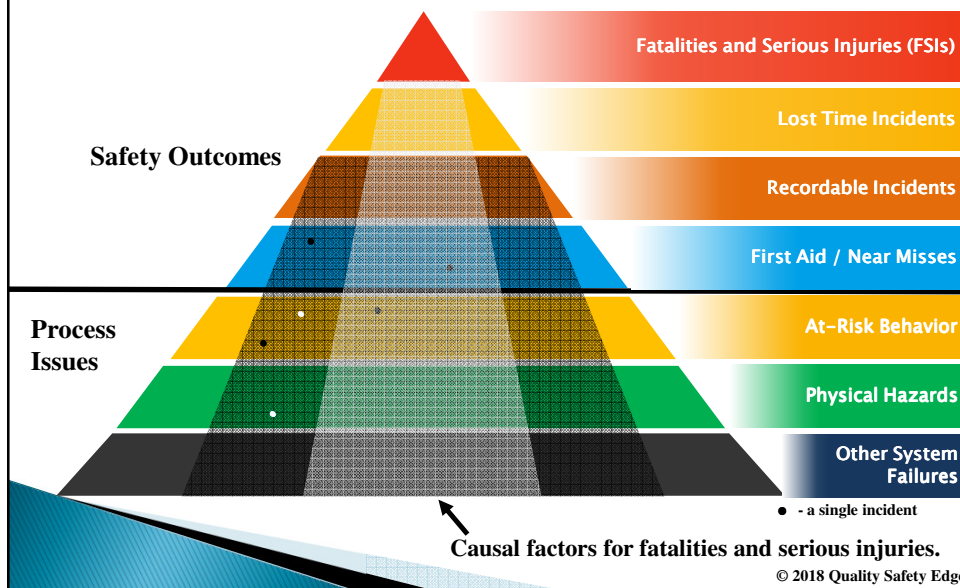
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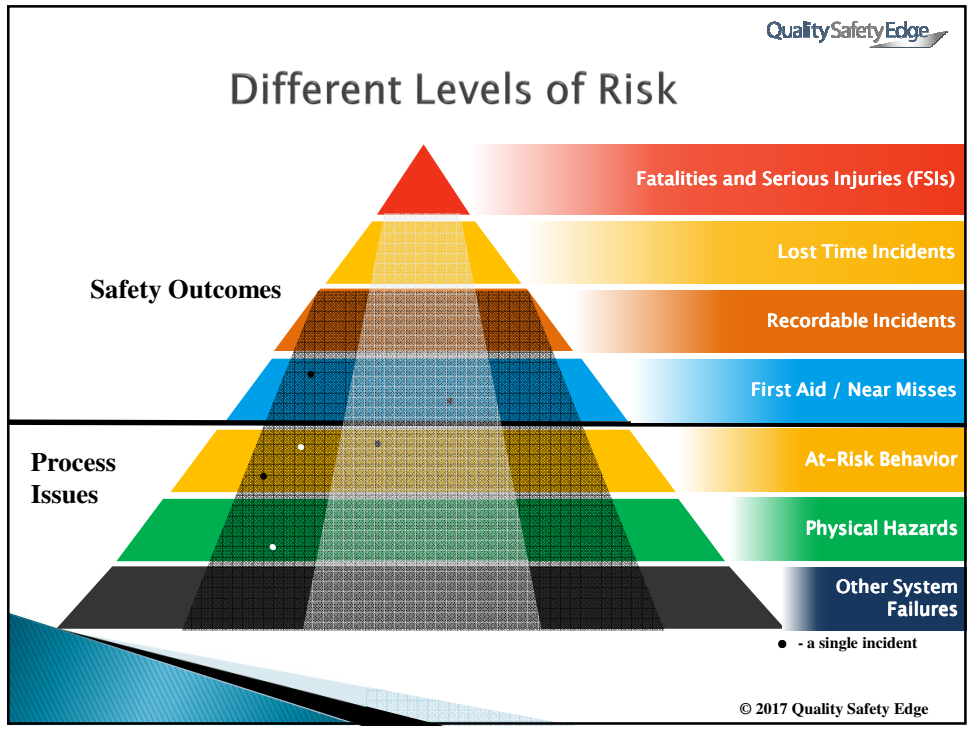
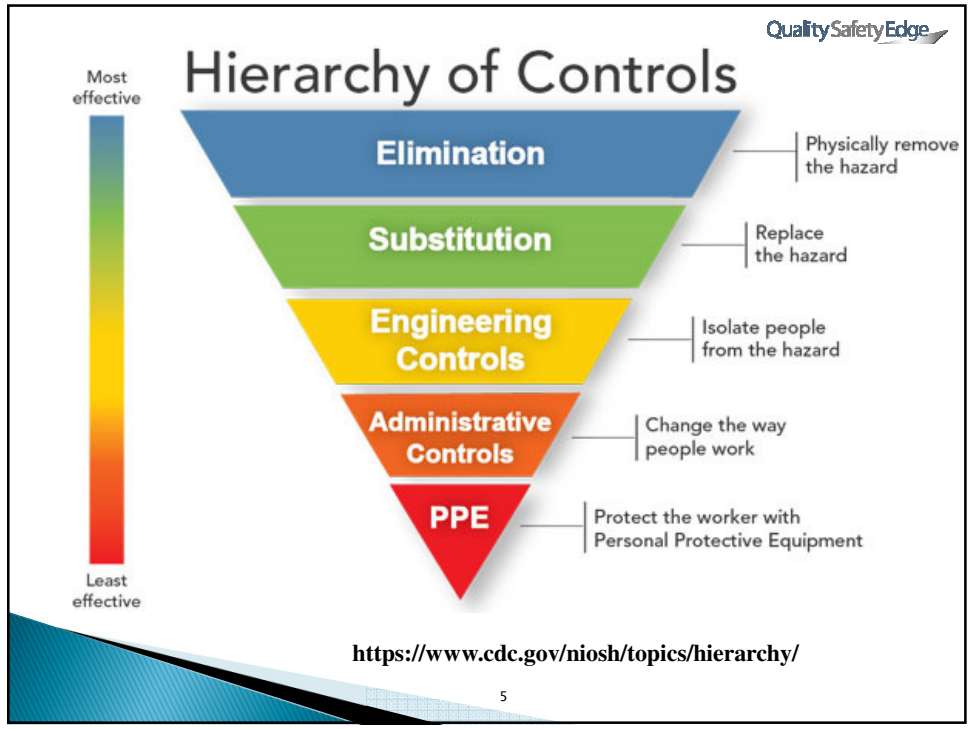
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Some Concerns About BBS...

- ▶ Treat all behaviors as same weight
- ▶ Too little analysis
 - Overuse of goal setting and feedback
 - Confusion & difficulties with ABC analysis
- ▶ Action plans don't cross levels
- ▶ Over reliance on "training" and communication.

Different Levels of Risk





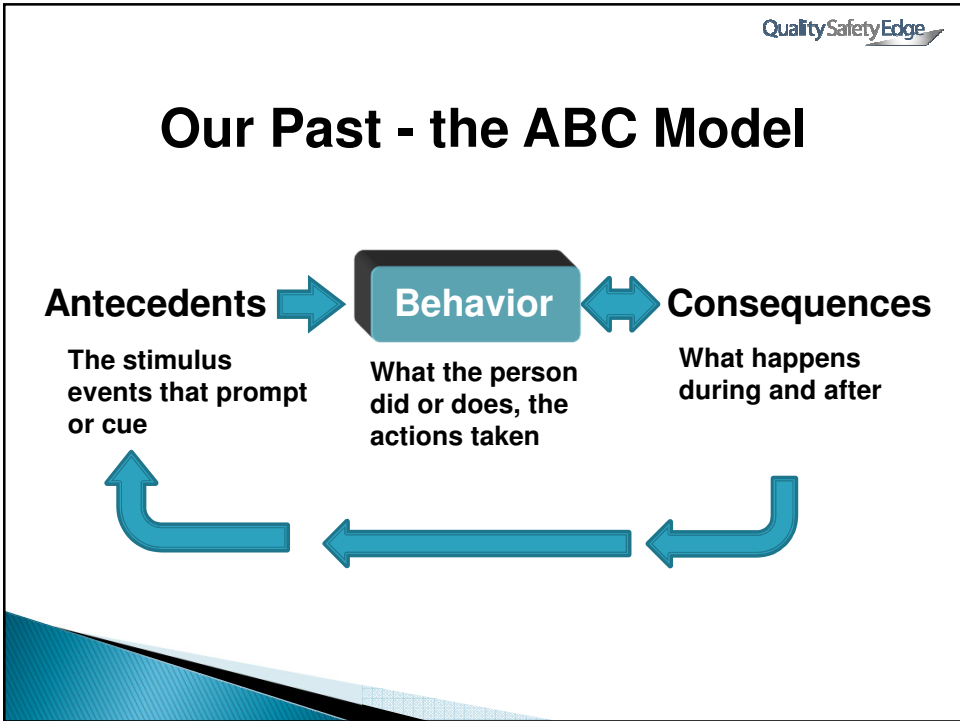
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Appropriate Level of Response

For behavior related to:	Respond with:
A (potential) serious incident or fatality	<ul style="list-style-type: none"> - Engineering Study - Behavioral Engineering Model
A (potential) lost workday case	<ul style="list-style-type: none"> - Behavioral Engineering Model <ul style="list-style-type: none"> • Engineering support
Recordable injuries	<ul style="list-style-type: none"> - Behavioral Engineering Model - Target improvement & feedback in BBS process
Minor injuries	<ul style="list-style-type: none"> - Target improvement & feedback in BBS process

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Consequences

Probability:	<ul style="list-style-type: none"> • <u>Certain</u> that the consequence will occur • <u>Uncertain</u> that the consequence will occur
Type:	<ul style="list-style-type: none"> • <u>Positive</u> to the performer • Negative to the performer

(Delay is seldom an issue.)

ABC Analysis

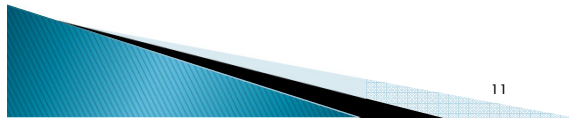
Performer: Maintenance mechanic

Antecedents	Undesired Behavior	Consequences	C/U	P/N
<ul style="list-style-type: none"> • Lockout shuts down entire line • In a hurry • Thinks it simple jam 	<ul style="list-style-type: none"> • Working on press without locking out 	• Increases production	C	P
		• Saves time	C	P
		• Avoids mgmnt oversight	C	P
		• Gets to coffee break on time	C	P
		• Could be injured or killed	U	N

Behavioral Engineering Model

<i>Influence of</i>	Information (Antecedents)	Behavior	Motivation (Consequences)
Work Environment	(1) Warnings/Context/ Hazards	(2) Tools, Resources, & Support	(3) Consequences
Person	(4) Skills & Knowledge	(5) Capacity	(6) Needs & Values

Adapted from Gilbert, T.F, Human Competence, McGraw-Hill, NY, 1978.



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