مركز جونز هوبكنز أرامكو الطبي
Johns Hopkins Aramco Healthcare

#IAEM25

Drills' After-Action Reports analysis in relation to Emergency Management Cycle

Abdullah Alhadhira, MD.MBA
Sandy Rizk, RN. Ms. EMDM

INTRODUCTION

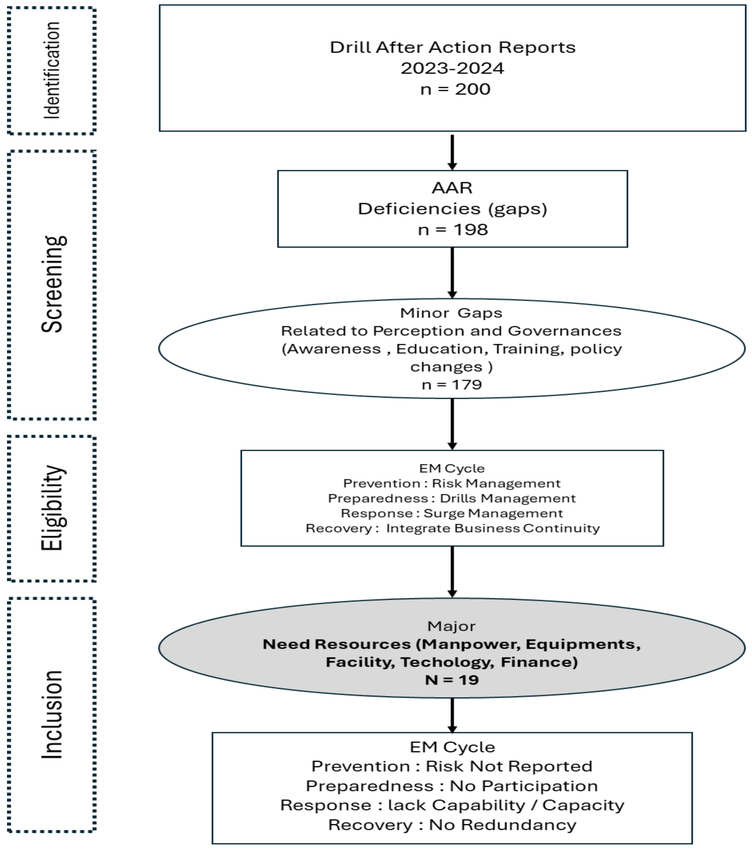
Emergency Management (EM) Cycle as a concept (prevention, preparedness, response, recovery and mitigation) was established in early 20th century, hence making this model successful is based on multiple critical actions, this study will try to provide an understanding of how each phase operates and how data-driven decision-making can significantly enhance outcomes and incorporate specific numerical data to support the importance of key Elements which drive EM cycle

OBJECTIVES

Assess key elements of success in Emergency Management Cycle Model

METHODS

Retrospective cross-sectional review of 200 drills' After-Action Reports (AAR) from 2023 – 2024 conducted at Johns Hospkins ARAMCO healthcare for both internal and external drills. AAR deficiencies classified into minor, and major base on criteria.



DATA/ RESULTS

Using Microsoft Excel for Mac Version 16.84 (13) a data tabulation was designed to measure the central tendency of 19 Drills AAR reported to be Major Deficiency: calculate descriptive statistics on final dataset using information that was collected during this process measuring the frequency of each observed variable (1 = Yes (conducted) 0 = No (Not Conducted)

		Emergecny Management Cycle												
Emergency Drill Codes (N = 19)	No. Encounter	Prevention "Risk Management"			Preparedness "Drill"				Response "Surge"			Recovery		
		Report	Analysis	Mitigation	Schedule	Scenario	Participation	AAR	Competency	Capability	Capability	Redundancy	Cross Training	BCP Integration
Drill Code Red (Fire Drill)	3	1	1	1	1	1	1	1	1	1	1	1	1	1
Drill Code Brown (Utility Failure)	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Drill Code Orange (CBRNE)	1	0	1	1	1	1	0	1	0	0	1	0	1	1
Drill Code White (Combative)	1	1	1	0	1	1	1	1	1	1	0	1	1	1
Drill Code Pink (Missing Child)	4	1	1	1	1	1	1	1	1	1	1	1	1	1
Drill Code Black (Bomb Threat)	1	0	0	0	1	1	0	1	0	0	1	0	1	1
Drill Code Silver (Active Shooter)	1	1	1	1	1	1	0	1	1	1	0	1	1	1
Drill Code Yellow (External Weather)	1	0	1	1	1	1	0	1	0	0	1	0	1	1
Drill Code Gray (Extreme Weather)	1	0	1	1	1	1	1	1	0	0	0	0	1	1
Drill Code Blue (Loss of Life)	4	1	1	1	1	1	1	1	1	1	0	1	1	1
Total	19	**6**	9	8	10	10	**6**	10	**6**	**6**	**6**	**6**	10	10

DISCUSSION

A total of 19 Drills AAR with Major deficiencies were examined, the lowest score (point of failure) is inversely proportion as source of major success of specific phase in the EM Cycle. In prevention phase, the main contributor to risk management success with 68% central tendency is the act of reporting . In Preparedness phase, the act of participation contributed 68% of conducting drills success. In Response phase, multiple actions have been identified contributing to surge success : level of Competency, Capacity "facility" and Capability "Staff" with a central tendency of 96%. In Recovery phase, the act of creating system and facility redundancy and cross training.

CONCLUSION

Based on the extracted data from the AARs, EM cycle implementation and understanding is vital in pre incident, during incident and post incident management. Conducting drill, collecting AAR, and classify deficiencies (gaps) to minor and major is a promising way that guide emergency managers to engage leaders and enhance identifying potential key success elements. This analysis supports key critical actions must be a focus of emergency managers to consider is each phase of the EM cycle.

alhadhira@yahoo.com - rizk.sandy@gmail.com