Implementation and Evaluation of a Disaster-Related Injury Surveillance System Following an Outbreak of Severe Weather, Kentucky 2012

Alexander Freiman, MPH, CPH CDC/CSTE Applied Epidemiology Fellow Kentucky Department for Public Health June 6, 2012



Background





West Liberty, KY



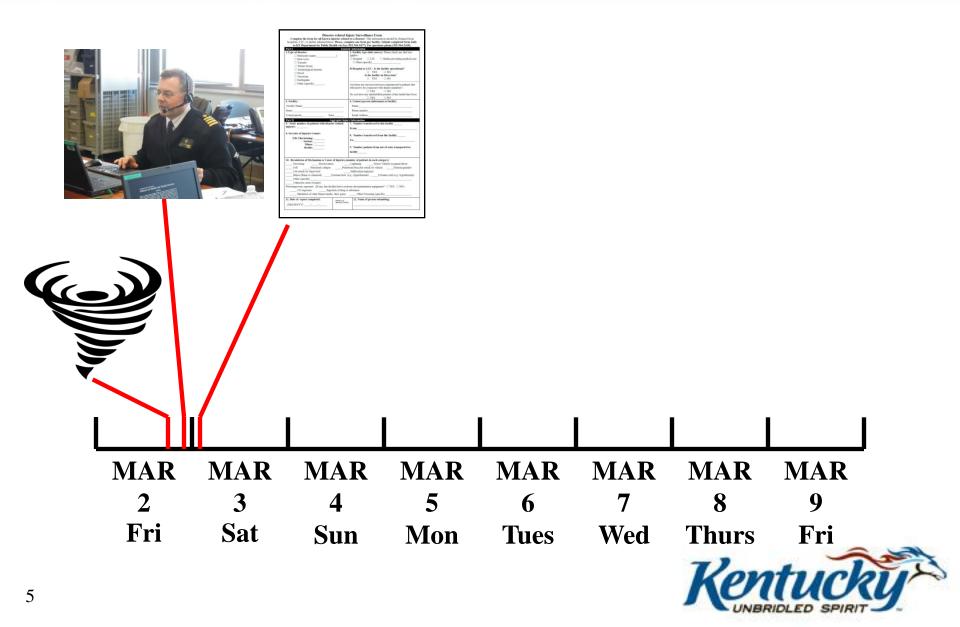


West Liberty, KY





Timeline of Response Events



Do not seek treatment

Minor injuries treated onsite and released home by emergency medical personnel Injuries requiring additional medical attention sent to medical facility Kentucky Department for Public Health (KDPH) disseminates injury surveillance form to stakeholders

Patient seen in emergency room

Hospitals complete and fax injury surveillance form to Kentucky Department for Public Health Local health department
personnel or regional
epidemiologists
communicate with healthcare
facilities to complete
surveillance forms

KDPH enters collected information from surveillance forms into electronic system



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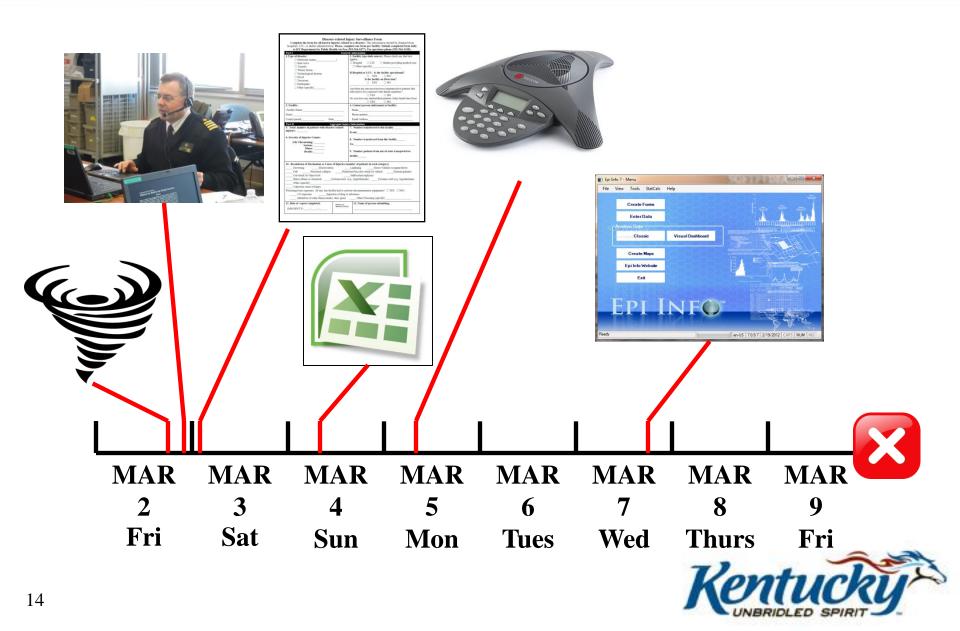
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Surveillance Findings

Table 1. Submitted injury surveillance forms

	3/2 F	3/3 Sa	3/4 Su	3/5 M	3/6 T	3/7 W	3/8 Th	Total
Type of Facility								
Long-Term Care Facilities	0	30	1	41	24	2	22	120 (59)
Hospitals	3	13	3	29	9	12	3	72 (35)
Shelters/Other Facilities	0	0	1	7	2	1	0	11-(5)
Total	3 (1)	43 (21)	5 (2)	77 (38)	35 (17)	15 (7)	25 (12)	203



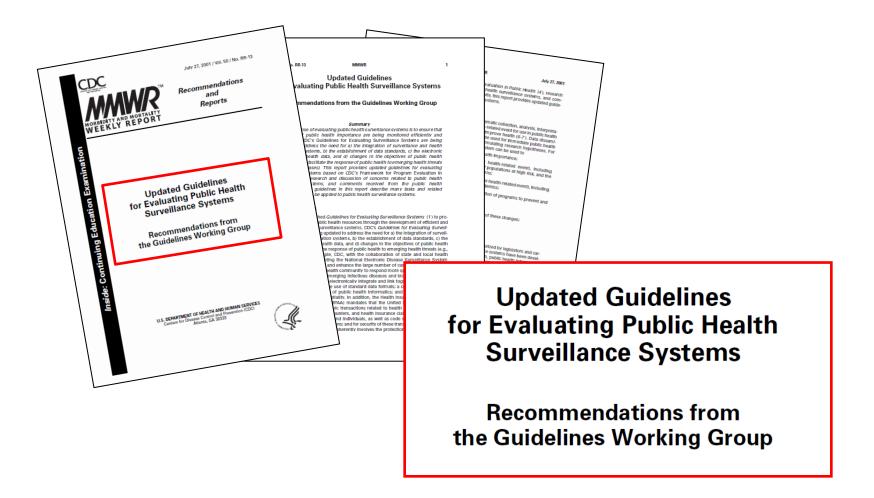
Surveillance Findings

Table 2. Frequencies of storm-related injuries by severity

	3/2	3/3	3/4	3/5	3/6	3/7	3/8	Total
	F	Sa	Su	M	Т	W	Th	
Injury Severity								
Minor	26	56	12	11	0	0	2	107
Serious	2	27	3	2	0	0	0	34
Life Threatening	1	10	1	0	0	0	0	12
Total	31	92	18	13	0	2	2	158



Evaluation Methods





Strengths

Simple

Flexible

Stable

Timely





Areas for Improvement

Data Quality

Acceptability

Representativeness





Conclusion

- Successful implementation
- Daily reports of observed injuries
 - Maintain situational awareness
 - Improved messages promoting responder and general public safety
- Address identified areas for improvements



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