Louisiana Hospital Emergency Department Syndromic Surveillance

Infectious Disease Epidemiology (IDEpi) conducted enhanced syndromic surveillance in response to a report of the use of a synthetic drug known as 25-I at Voodoo Fest causing the hospitalization of three people, one of which eventually died. The music festival took place in New Orleans, LA from October 26-28, 2012. Daily summaries of emergency department (ED) chief complaint data were extracted from Louisiana Early Event Detection System (LEEDS), IDEpi's syndromic surveillance system, from six hospitals in the New Orleans area to monitor visits indicative of symptoms related to alcohol, drugs, and seizures from October 15 to November 1, 2012 (Table 1).

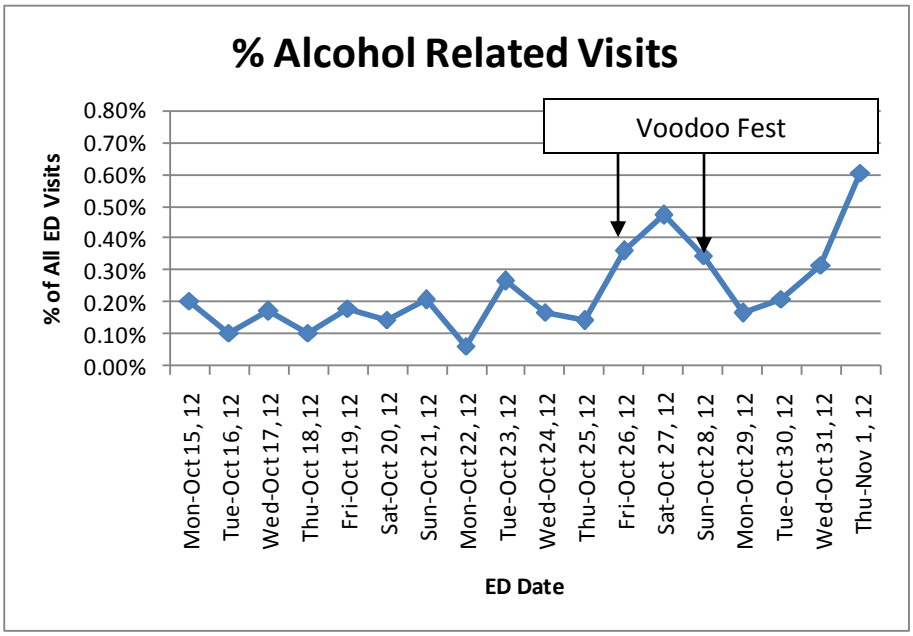
There was no statistically significant increase in ED visits related to alcohol, drugs, or seizures during Voodoo Fest. Monitoring this type of syndromic surveillance data from LEEDS can provide situational awareness regarding overall usage levels of alcohol and drugs at the regional or statewide level.

Table 1. Daily summaries of ED visits related to alcohol, drugs and seizures in the New Orleans area

New Orleans Area								
Date	Number of Hospitals	Total Number of ED Visits	Number of ED Visits Associated with Each			Percent of Total ED Visits Associated with Each		
			Alcohol	Drugs	Seizures	Alcohol	Drugs	Seizures
October 15, 2012	6	3462	7	0	7	0.20%	0.00%	0.20%
October 16, 2012	6	2878	3	1	0	0.10%	0.03%	0.00%
October 17, 2012	6	2934	5	4	11	0.17%	0.14%	0.37%
October 18, 2012	6	2904	3	1	14	0.10%	0.03%	0.48%
October 19, 2012	6	2775	5	3	5	0.18%	0.11%	0.18%
October 20, 2012	6	2748	4	4	9	0.15%	0.15%	0.33%
October 21, 2012	6	2925	6	2	2	0.21%	0.07%	0.07%
October 22, 2012	6	3239	2	3	16	0.06%	0.09%	0.49%
October 23, 2012	6	2644	7	2	5	0.26%	0.08%	0.19%
October 24, 2012	6	2982	5	0	7	0.17%	0.00%	0.23%
October 25, 2012	6	2823	4	1	19	0.14%	0.04%	0.67%
October 26, 2012	6	2779	10	5	12	0.36%	0.18%	0.43%
October 27, 2012	6	2545	12	2	8	0.47%	0.08%	0.31%
October 28, 2012	6	2612	9	4	11	0.34%	0.15%	0.42%
October 29, 2012	6	3028	5	3	11	0.17%	0.10%	0.36%
October 30, 2012	6	2848	6	2	6	0.21%	0.07%	0.21%
October 31, 2012	6	2541	8	5	8	0.31%	0.20%	0.31%
November 1, 2012	6	2477	15	5	6	0.61%	0.20%	0.24%

A small peak was seen in alcohol-related visits during the festival, however the increase was not statistically significant (Tukey's HSD Test) (Figure 1).

Figure 1. Daily % of total ED visits related to alcohol



No significant peaks occurred for visits related to drugs (Figure 2), nor seizures (Figure 3).

Figure 2. Daily % of total ED visits related to drugs

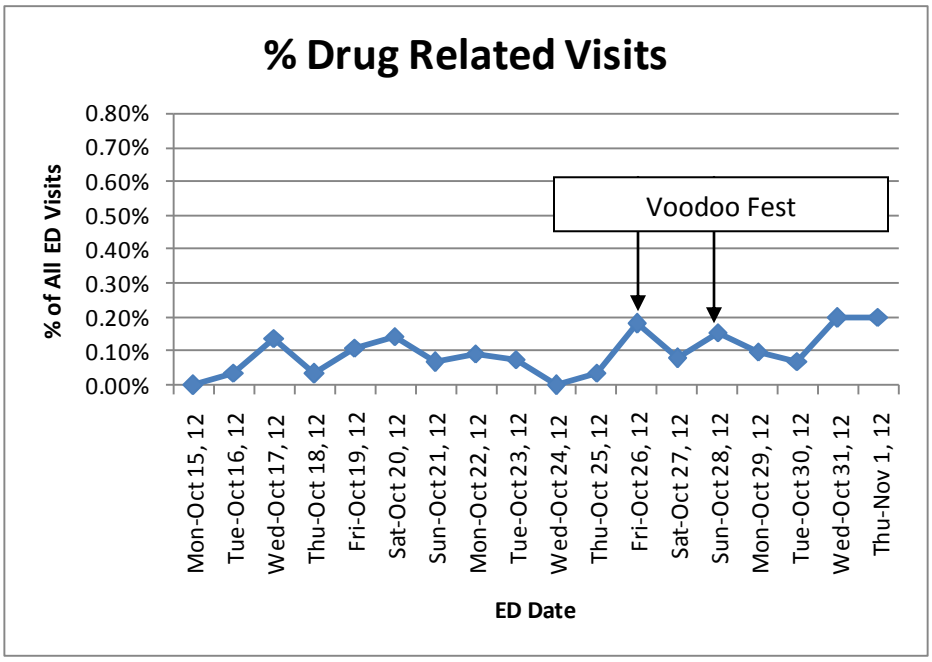
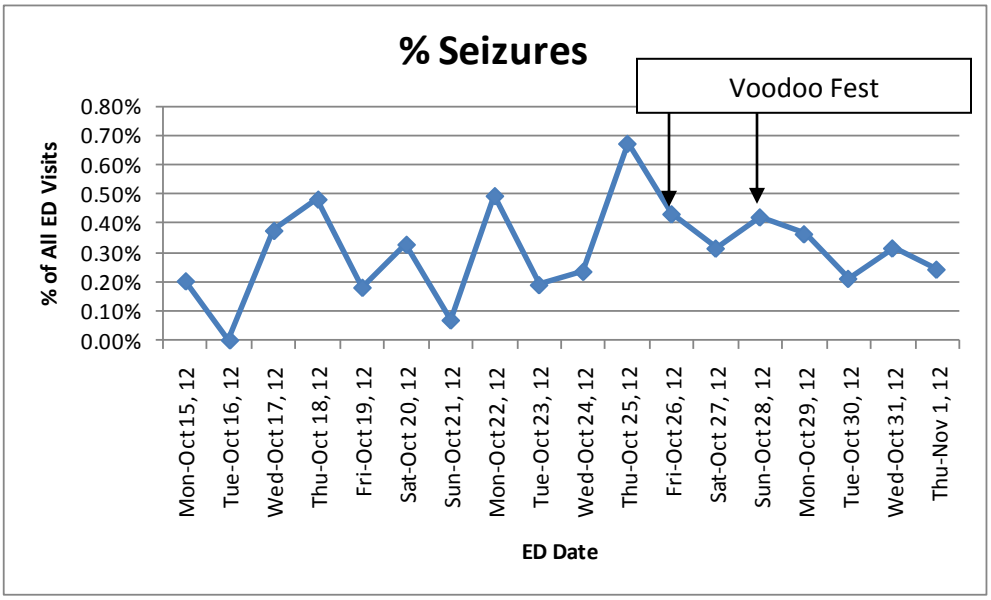



Figure 3. Daily % of total ED visits related to seizures