

# Analysis of ED and UCC Visits Related to Synthetic Marijuana in ESSENCE-FL, 2010-2015

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## Objective

One of the numerous functions of syndromic data has been the identification of visits of public health interest using customized free text queries. A specific query of syndromic data was created to search for and identify emergency department (ED) and urgent care center (UCC) visits possibly related to the use of synthetic marijuana to describe and quantify this public health issue in Florida.

## Introduction

Illnesses related to synthetic marijuana use have been reported in many states, including Florida. Because these visits can present with a variety of symptoms, as well as be attributed to numerous diagnosis codes, it can be difficult to identify and quantify these visits. The Electronic Surveillance System for the Early Notification of Community-based Epidemics in Florida (ESSENCE-FL) receives chief complaint (CC) and discharge diagnosis (DD) data as free text allowing uncommon or new terms to be searched for within each patient visit. The main source of data for ESSENCE-FL is emergency department (ED) and urgent care center (UCC) data. There are currently 210 EDs and 33 UCCs throughout Florida that send their data to the ESSENCE-FL server. Using ESSENCE-FL, a free text query of patient CCs and DDs was used to identify visits related to synthetic marijuana use. This study is designed to analyze these identified visits for trends over time, geographical distribution and descriptive statistics and demographics.

## Methods

News articles, publications and internet searches were used to develop a comprehensive list of all terms and names that could be used for synthetic marijuana (ie. Spice, K2, etc.). These terms, and their common misspellings, were used to create the free text query. The query attempted to identify visits related to synthetic marijuana, while minimizing the identification of unrelated visits. All identified visits from January 1, 2010 through June 30, 2015 were analyzed using Microsoft Excel and mapped using GIS.

The query used was written as:

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(, (^synth^, andnot, ^synthroid^, or, ^syth^, or, ^sint^, or, ^fake^), and,
(^pot^, or, ^THC^, or, ^weed^, or, ^mari^, or, ^mara^, or, ^herb^, or, ^bud^,
or, ^cannab^, or, ^cannib^, or, ^cananb^, or, ^canab^),), or, (, (^spice^,
andnot, (^hospice^, or, ^spicy^),), or, ^smoked K^, or, ^smoking K^, or, ^of k^,
or, ^from k ^, ^on k ^), or, ^Scooby^, or, ^nice guy^, or, ^cloud nine^, or,
(, (^used^, or, ^smok^, or, ^inhal^), and, (, (^potpo^, or, ^herb^, or, ^incen^,
or, ^insecn^, or, ^insen^),), or, ^genie^, or, ^Yucatan^, or, ^solar flare^, or,
^fire n ice^, or, ^fire and ice^, or, ^mamba^, or, ^bombay^, or, ^bad to the bone^,
or, ^dark night^, or, ^berry blend^, or, ^magma^, or, ^budz^, or, ^sativah^,
or, ^ultra chronic^, or, ^zohai^, or, ^funky green^
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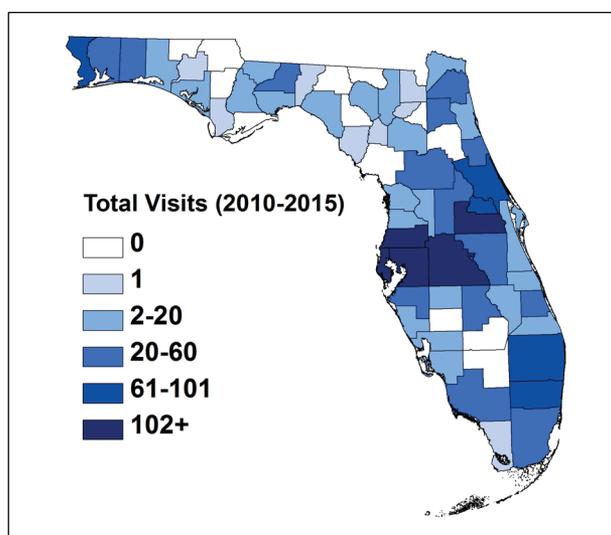
## Results

This query identified 2545 visits between January 1, 2010 and June 30, 2015.

## Conclusions

Utilization of this query provided key insights and information into the demographics, geographic distribution and trends of synthetic marijuana visits in Florida. The Tampa Bay Area - Hillsborough,

Pasco, Pinellas, and Polk counties - had a substantial concentration of visits (37.1% of all identified visits). Visits were mostly male (75.2%) and with an average age of 26.8 years old (66% of visits were age 14-28). Additionally evident is the recent reemergence of this public health issue. The ability to identify visits related to drugs with numerous names and nicknames, as well as novel synthetic drugs, within specific demographics and geographic areas may be integral in the effective implementation of public health interventions.



ED and UCC Visits Related to Synthetic Marijuana, Florida, January, 2010 - June, 2015, by County



ED and UCC Visits Related to Synthetic Marijuana, Florida, January, 2010 - June, 2015, by Month

## Keywords

Synthetic; Marijuana; query; ESSENCE; Florida

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