What is Spice?
Spice, or synthetic marijauna as it is sometimes known, refers to a variety of herbal mixtures that contain dried, shredded plant material and chemical additives that are meant to produce mind-altering effects. It is often marketed as a “safe”, legal alternative to Marijauana because it contains some synthetic compounds found in Marijauana. For several years, spice mixtures have been easy to purchase at smoke shops, gas stations, and through the Internet. It is often sold as incense that resembles potpourri and labeled “not for human consumption.” Spice is sold under many names, including K2, King Kong, Yucatan Fire, Skunk, Moon Rocks, and others. The United States Drug Enforcement Administration has attempted to limit the sale of spice by banning the most common active chemicals found in the drug; however, manufacturers of spice evade these restrictions by substituting different chemicals into their mixtures, resulting in an ever-changing chemical composition of the drug and unpredictable effects for users.

How Spice is Used and its Effects
Spice is primarily abused by smoking. Spice users often report experiences of elevated mood, relaxation, and altered perception. Some users also report psychotic effects like extreme anxiety, paranoia and hallucinations. Other commonly reported effects can include rapid heart rate, high blood pressure, vomiting, agitation, confusion, and hallucinations. Because the chemical composition of spice can differ greatly from product to product, the effects of the drug are often unpredictable. Currently, the effects of long-term spice use on human health is unknown.

Spice Use in Pima County
People in Pima County and the United States have been using spice for a number of years. However, little is known about who uses spice, how many people use it, or how often it causes severe adverse reactions. In April 2015, the City of Tucson and the City of South Tucson Police and Fire Departments began reporting a substantial increase in the number of spice-related incidents they were handling. To gain a better understanding of spice use in our community and the risk posed to public health, the Pima County Health Department collected and analyzed spice-related incident data from these agencies between April and August 2015. The following highlight key findings from those data.

Pima County Spice-Related First Responder Incidents
From April to August of 2015, the City of Tucson and the City of South Tucson Police and Fire Departments responded to a combined 675 spice-related incidents. On average, these agencies responded to approximately 135 spice-related
incidents per month and 4.5 spice-related incidents per day over this time period. Figure 1 on the previous page shows the number of responses made by each agency from April to August 2015.

**Demographics of First Responder Spice Cases**
Approximately 80% of the people experiencing a spice-related overdose or adverse reaction were males. Additionally, most (~66%) were between the ages of 19-35 and less than 10% were under the age of 19.

**Locations of Spice-Related First Responses**
A majority of the responses by the City of Tucson Police and Fire Departments were downtown at or near the Ronstadt Transit Center or in South Tucson at the Laos Transit Center. Almost all of the responses by the City of South Tucson Police and Fire Departments were near the intersection of 6th Avenue and 29th Street.

The clustering of responses suggests that some exchange and distribution of spice is occurring in or around these areas and that many spice users spend time at Tucson’s major bus transit centers and use public transit.

**Next Steps Being Taken by Pima County Health Department**
The Pima County Health Department will continue to work with its community partners as we search for innovative ways to address this unique public health concern. We will monitor data as necessary and work to help develop messaging and awareness around this issue in coordination with partners and stakeholders in the near future.

*Note: In 2015, there were two deaths related to spice intoxication in Pima County.*