Case ID#: _____

☐ NOT A CASE

Form Approved;
OMB No. 0920-1011;
Exp Date: 3/31/2017

ADVERSE HEALTH EFFECTS ASSOCIATED WITH SYNTHETIC CANNABINOID USE — MISSISSIPPI, 2015

MEDICAL RECORDS REVIEW

Reviewer: _____Agency:_____Abstraction Date :(mm/dd/yyyy):_____

PATIENT IDENTIFICATION

Full Name (Last Name, First Name)	**Hospital Name**	**Medical Record Number**

Date of Birth (mm/dd/yyyy)	**Sex** ☐ M ☐ F	**Race** (check all that apply): ☐Amer Ind/AK native ☐Asian ☐ Black/Afr Am ☐Native HI/other PI ☐White ☐Other (specify)_____ ☐ Not documented
Phone/Home: _____ Phone/Cell:_____ *If not recorded, please enter 000-000-0000*	**Age**	

Address	**Poison Control Center Number** ☐ None
City/State/Zip	**County**

SPECIMENS

Specimen(s) available? (earliest available specimen(s) preferred) ☐ Yes ☐ No ☐ Unknown

1st Specimen

Type of specimen: ☐ Whole blood ☐ Serum ☐ Urine ☐ Drug Sample/Specimen

If yes, specify: ☐ Sent to outside lab If sent, name of lab: _____ State Specimen ID: _____

Results Available : ☐ Yes ☐ Pending ☐ Unknown

If available, ☐ Synthetic Cannabinoid (name): _____

☐ Illicit drugs (name): _____

☐ Other (name): _____

2nd Specimen

Type of specimen: ☐ Whole blood ☐ Serum ☐ Urine ☐ Drug Sample/Specimen

If yes, specify: ☐ Sent to outside lab If sent, name of lab: _____ State Specimen ID: _____

Results Available : ☐ Yes ☐ Pending ☐ Unknown

If available, ☐ Synthetic Cannabinoid (name): _____

☐ Illicit drugs (name): _____

☐ Other (name): _____

2nd Specimen

Type of specimen: ☐ Whole blood ☐ Serum ☐ Urine ☐ Drug Sample/Specimen

If yes, specify: ☐ Sent to outside lab If sent, name of lab: _____ State Specimen ID: _____

Results Available : ☐ Yes ☐ Pending ☐ Unknown

If available, ☐ Synthetic Cannabinoid (name): _____

☐ Illicit drugs (name): _____

☐ Other (name): _____

MEDICAL RECORDS ABSTRACTION

Type of Records reviewed (mark all that apply): ☐ Emergency Medical Services (EMS)/Ambulance notes* ☐ Emergency Department Notes ☐ Hospital chart**	☐ Coroner/Medical Examiner Documentation*** ☐ Poison Center Chart ☐ Other _____

If patient not brought in or seen by EMS, complete disposition and **skip to Section B.*
***If patient was admitted **also** complete Section C*
****If patient is deceased **also** complete Section D.*

Mode of Presentation to ED: ☐ Self/Ambulatory ☐ Friends/Family ☐ Ambulance ☐ Police ☐ Transfer
☐ Other _____

Presentation & Disposition

Date of presentation (mm/dd/yyyy): _____ ☐ Not Recorded

Disposition (Check all that apply) ☐ Not recorded

☐ Left AMA (Against Medical Advice)	Date: _____ (mm/dd/yyyy)
☐ Treated and Released	ED discharge date: _____ (mm/dd/yyyy)
☐ Admitted to observation (OBS)	OBS discharge date: _____(mm/dd/yyyy)
☐ Admitted to General Medicine	Hospital discharge date: _____(mm/dd/yyyy)
☐ Admitted to ICU	ICU discharge date: _____ (mm/dd/yyyy)
☐ Deceased	Date of death: _____(mm/dd/yyyy)

Discharge Diagnosis: (select all that apply) ☐ Not recorded

☐ Drug Overdose	☐ Altered Mental Status	☐ Seizure
☐ Tachycardia	☐ Hyperthermia	☐ Hypertension
☐ Acute Renal Failure	☐ Rhabdomyolysis	☐ Respiratory Failure
☐ Cardiopulmonary Arrest	☐ Other: _____	

General Information

Chief Complaint (first recorded by MD or other practitioner):

Synthetic cannabinoid use:
☐ Not recorded ☐ Yes

Synthetic cannabinoid use details (*product name, quantity, place obtained, etc.*)
Name of synthetic cannabinoid product:_____ ☐ Not recorded
Time passed since last use: ☐ ≤ 24 hours ☐ >24-36 hours ☐ >36 hours ☐ Not recorded
Other details:

Mental Status prior to Medication Administration (mark all that apply, including those in chief complaint):	**Obtained from:** ☐ Prehospital Records ☐ ED Records ☐ Transfer Records ☐ Hospital Records ☐ Medical Examiner / Coroner

☐ Normal ☐ Not recorded
☐ Agitated ☐ Confused ☐ Violent/Aggressive ☐ Hallucinating ☐ Paranoid
☐ Anxious ☐ Somnolent ☐ Unresponsive ☐ Seizures ☐ Psychosis
☐ Other_____

Past Medical History

☐ No Past Medical History ☐ Yes (if yes, specify below) ☐ Not recorded

☐ High blood pressure
☐ Heart disease
☐ Kidney disease
☐ Liver disease
☐ Diabetes
☐ Seizure disorder
☐ Mental illness
☐ Substance abuse
☐ Other _____

Review of Symptoms at Time of Presentation
(mark all that apply):

☐ Not recorded

☐ Fatigue ☐ Chest Pain ☐ Abdominal Pain ☐ Sweating
☐ Nausea/Vomiting ☐ Palpitations ☐ Dark Urine ☐ Confusion
☐ Headache ☐ Shortness of Breath ☐ Muscle pain
Other: _____

Physical Exam Findings/Descriptors at Time of Presentation
(mark all that apply):

Skin: ☐ Normal ☐ Not recorded
☐ Diaphoretic (sweating) ☐ Flushed ☐ Other_____

Mucous Membranes: ☐ Normal ☐ Not recorded
☐ Dry ☐ Other_____

Eyes: ☐ Normal ☐ Not recorded
☐ Pupils dilated ☐ Pupils constricted ☐ Nystagmus ☐ Injected Eyes ☐ Other_____

Cardiovascular: ☐ Normal ☐ Not recorded
☐ Tachycardia ☐ Bradycardia ☐ Arrhythmia ☐ Other_____

Respiratory: ☐ Normal ☐ Not recorded
☐ Bradypnea ☐ Tachypnea ☐ Dyspnea ☐ Other_____

Gastrointestinal: ☐ Normal ☐ Not recorded ☐ Vomiting
☐ Abnormal bowel sounds ☐ Tender ☐ Other_____

Neurologic: ☐ Normal ☐ Not recorded ☐ Altered Mental Status
☐ Hyperreflexia ☐ Hyporeflexia ☐ Tremor ☐ Other _____

Musculoskeletal: ☐ Normal ☐ Not recorded
☐ Rigidity ☐ Weakness ☐ Other _____
If exam findings present, specify where (e.g., extremities, generalized)_____

Initial Basic Laboratory Evaluation:

Blood Chemistry: ☐ Not Recorded ☐ Performed

Na	☐ Normal	☐ Abn Value: _____
K	☐ Normal	☐ Abn Value: _____
Cl	☐ Normal	☐ Abn Value: _____
HCO3	☐ Normal	☐ Abn Value: _____
BUN	☐ Normal	☐ Abn Value: _____
Creatinine	☐ Normal	☐ Abn Value: _____
Glucose	☐ Normal	☐ Abn Value: _____
Anion Gap	☐ Normal	☐ Abn Value: _____

Liver Panel: ☐ Not Recorded ☐ Performed

Total protein	☐ Normal	☐ Abn Value: _____
Albumin	☐ Normal	☐ Abn Value: _____
AST	☐ Normal	☐ Abn Value: _____
ALT	☐ Normal	☐ Abn Value: _____
Total Bili	☐ Normal	☐ Abn Value: _____
Alk Phos	☐ Normal	☐ Abn Value: _____

Other:

CK/CPK	☐ Not Recorded	☐ Normal	☐ Abn Value: _____
Lactate	☐ Not Recorded	☐ Normal	☐ Abn Value: _____
Troponin	☐ Not Recorded	☐ Normal	☐ Abn Value: _____

Blood gas: ☐ Not Recorded ☐ Performed

pH	☐ Normal	☐ Abn Value: _____
PaO2	☐ Normal	☐ Abn Value: _____
PaCO2	☐ Normal	☐ Abn Value: _____
HCO3	☐ Normal	☐ Abn Value: _____

☐ Supplemental O2 If yes, Specify: _____FiO2

Urine Drug Screen ☐ Not recorded ☐ Performed
If performed, mark all that apply

Benzodiazepines (BZD)	☐ Positive	☐ Negative
Amphetamine	☐ Positive	☐ Negative
Cocaine (benzylecgonine)	☐ Positive	☐ Negative
Cannabinoids (THC)	☐ Positive	☐ Negative
Opioids	☐ Positive	☐ Negative
Barbiturates	☐ Positive	☐ Negative
Other(s)_____	☐ Positive	☐ Negative

Blood Drug Screen: ☐ Not recorded ☐ Performed
If performed, mark all that apply

☐ Ethanol	☐ Positive	☐ Negative
☐ Other(s)_____	☐ Positive	☐ Negative

Electrocardiographic (ECG/EKG) or Telemetry Findings (e.g. rhythm strip) **Physician Interpretation at Presentation**:

Initial cardiac rhythm: ☐ Not recorded ☐ Normal sinus

☐ Abnormal, please describe:_____

Imaging Findings at Presentation

☐ Not Recorded ☐ Performed

If performed, mark all that apply:

☐ Head CT ☐ Normal ☐ Abnormal Specific abnormal findings_____

☐ Chest X-ray ☐ Normal ☐ Abnormal Specific abnormal findings_____

☐ Other(s) Specify_____ ☐ Normal ☐ Abnormal Specific abnormal findings_____

Prehospital Data

☐ No Prehospital Data Available

Earliest Prehospital Vital Signs ☐ Cardio Pulmonary Arrest ☐ Not Recorded

Date:_____(mm/dd/yyyy)

Temperature _____°☐F ☐C (Temp: ☐ Not Recorded) Heart Rate:_____/minute; Blood Pressure:_____/_____

Respiratory Rate:_____/minute %O2 Saturation: _____% (O2 sat: ☐ Not Recorded)

Prehospital Interventions

☐ Not Recorded ☐ Performed

If performed, mark all that apply:

☐ Intubation, specify reason (e.g. hypoventilation, airway protection) _____

☐ Cardiopulmonary resuscitation

☐ Defibrillation

Prehospital Medications

☐ Not Recorded ☐ Performed

If performed, mark all that apply:

☐ Benzodiazepine Name (s) :_____

☐ Antipsychotics Name (s):_____

☐ Antidotes Name (s):_____

B. ED Data

☐ No ED Data Available

Earliest ED Vital Signs: ☐ Cardio Pulmonary Arrest ☐ Not Recorded

Date:_____(mm/dd/yyyy)

Temperature _____°☐F ☐C Heart Rate:_____/minute; Blood Pressure:_____/_____

Respiratory Rate:_____/minute % Oxygen Saturation: _____ %

ED Interventions

☐ Not Recorded ☐ Performed

If performed, mark all that apply:

☐ Intubation, specify reason (e.g. hypoventilation, airway protection) _____

☐ Cardiopulmonary resuscitation

☐ Defibrillation

☐ Hemodialysis

☐ Cooling Measures

ED Medications (see instruction sheet for included medications)

☐ Not Recorded ☐ Performed

If performed, mark all that apply:

☐ Benzodiazepine Name (s) :_____

☐ Antipsychotics Name (s):_____

☐ Antidotes Name (s):_____

☐ Vasopressor Name (s): _____

C. Inpatient Data

☐ No Inpatient Data Available

Most abnormal laboratory values during hospitalization

Blood Chemistry: ☐ Not Recorded ☐ Performed

If abnormal, specify max values during hospitalization

		Lowest Abnormal Value	Highest Abnormal Value
Na	☐ Normal	_____	_____
K	☐ Normal	_____	_____
HCO3	☐ Normal	_____	_____
BUN	☐ Normal		_____
Creatinine	☐ Normal		_____
Glucose	☐ Normal	_____	_____
Anion Gap	☐ Normal		_____

Liver Panel: ☐ Not Recorded ☐ Performed

If abnormal, specify max values during hospitalization

		Highest Abnormal Value
AST	☐ Normal	_____
ALT	☐ Normal	_____
Total Bili	☐ Normal	_____
Alk Phos	☐ Normal	_____

Other:

CK/CPK	☐ Not Recorded	☐ Normal	_____
Lactate/Lactic Acid	☐ Not Recorded	☐ Normal	_____
Troponin	☐ Not Recorded	☐ Normal	_____

Inpatient Interventions

☐ Not Recorded ☐ Performed

If performed, mark all that apply:

☐ Intubation, specify reason (e.g. hypoventilation, airway protection) _____

☐ Cardiopulmonary resuscitation

☐ Defibrillation

☐ Hemodialysis

☐ Cooling Measures

Inpatient Medications

☐ Not Recorded ☐ Performed

If performed, mark all that apply:

☐ Benzodiazepine Name (s) :_____

☐ Antipsychotics Name (s):_____

☐ Antidotes Name (s):_____

☐ Vasopressor Name (s): _____

Other Data/Notes:

D. ME or Coroner Record Review ☐ No Prehospital Data Available

Date and Time of Death (mm/dd/yyyy)/(hh:mm A.M./P.M.):
☐ Check if time of death is estimated

Significant Positive Gross Autopsy Findings:

Significant Positive Histopathology Autopsy Findings:

Blood Chemistry: ☐ Not Recorded ☐ Performed
If abnormal, specify max values during hospitalization

		Lowest Abnormal Value	Highest Abnormal Value
Na	☐ Normal	_____	_____
K	☐ Normal	_____	_____
HCO3	☐ Normal	_____	_____
BUN	☐ Normal		_____
Creatinine	☐ Normal		_____
Glucose	☐ Normal	_____	_____
Anion Gap	☐ Normal		_____

Liver Panel: ☐ Not Recorded ☐ Performed
Highest
If abnormal, specify max values during hospitalization

			Highest Abnormal Value
AST		☐ Normal	_____
ALT		☐ Normal	_____
Total Bili		☐ Normal	_____
Alk Phos		☐ Normal	_____
Other:			
CK/CPK	☐ Not Recorded	☐ Normal	_____
Lactate/Lactic Acid	☐ Not Recorded	☐ Normal	_____
Troponin	☐ Not Recorded	☐ Normal	_____

Case ID#: _____

Drug Screen:
☐ Not Recorded ☐ Performed
If performed, mark all that apply

Ethanol	☐ Negative	☐ Blood +	☐ Urine +
Opioids	☐ Negative	☐ Blood +	☐ Urine +
Benzodiazepines	☐ Negative	☐ Blood +	☐ Urine +
Cocaine	☐ Negative	☐ Blood +	☐ Urine +
Barbiturates	☐ Negative	☐ Blood +	☐ Urine +
Methamphetamines	☐ Negative	☐ Blood +	☐ Urine +
THC/cannabinoids	☐ Negative	☐ Blood +	☐ Urine +

Other Drug Screen:
☐ Not Recorded ☐ Performed
If performed, mark all that apply
☐ Other: _____ ☐ Negative ☐ Blood + ☐ Urine +
☐ Other: _____ ☐ Negative ☐ Blood + ☐ Urine +
☐ Other: _____ ☐ Negative ☐ Blood + ☐ Urine +
☐ Other: _____ ☐ Negative ☐ Blood + ☐ Urine +

Synthetic cannabinoid use:
☐ Not recorded ☐ Yes

Synthetic cannabinoid use details (*product name, quantity, place obtained, etc.*)
Name of synthetic cannabinoid:_____
Other details:

Other Data/Notes (please include any past medical history or any pertinent case history listed)**:**

Cause of Death: _____

SPECIFIC MENTAL STATUS DESCRIPTORS:

Normal
AAOx3
Alert and Oriented

Agitated-Delirium
AGITATION or EXCITATION PLUS one of following:
Delirious
Delirium
Confused
Altered / Altered mental status

Violent
Violent
Angry
Agitated (but not delirious)

Hallucinating
Visual hallucinations
Auditory hallucinations

Paranoid
Paranoid / Paranoia

Anxious
Anxious
Nervous

Somnolent
Somnolent
Fatigued
Sedated
Sleeping
Depressed mental status
Difficult to arouse

Unresponsive
Unresponsive
Comatose / Coma
GCS-3

Seizures
Seizures
Seizure-like activity
Epileptic activity

Psychosis/Psychotic
Psychosis
Psychotic
Out of touch with reality

SPECIFIC MEDICATION DESCRIPTORS:
Do not include medications used in CPR/ACLS/code

Benzodiazepines:
Lorazepam (Ativan)
Diazepam (Valium)
Midazolam (Versed)
Alprazolam (Xanax)
Clonazepam (Klonopin)

Antipsychotics:
Haldoperidol (Haldol)
Chlorpromazine (Thorazine)
Droperidol (Inapsine)
Prochlorperazine (Compazine)
Aripiprazole (Abilify)
Olanzapine (Zyprexa)
Quetiapine (Seroquel)
Ziprazidone (Geodon)
Risperidone (Risperdol)

Antidotes:
Naloxone (Narcan)
Flumazenil (Romazicon)
Physostigmine (Antilirium)
N-acetyl cysteine (Acetadote)
Activated charcoal
Calcium
Dantrolene
Bromocriptine
High-dose insulin
Intralipid

Vasopressors:
Epinephrine (Adrenalin)
Norepinephrine (Levophed)
Vasopressin (Vasostrict)
Dopamine (Intropin)
Dobutamine
Milrinone

SPECIFIC COOLING MEASUES:
Active cooling
Fans / Fans Cooling
Removing all clothing
Ice bath
Ice pack

Form Approved;
OMB No. 0920-1011;
Exp Date: 03/31/2017

ADVERSE HEALTH EFFECTS ASSOCIATED WITH SYNTHETIC CANNABINOID USE — MISSISSIPPI, 2015

PATIENT (OR SURROGATE) INTERVIEW

Interviewer: _____ Agency: _____ Date:(mm/dd/yyyy):____/____/_____

NARRATIVE #1 – For Adults

My name is (YOUR NAME) and I'm from the Mississippi health department. We have recently seen an increase in people getting sick from synthetic marijuana. We want to learn why you and other people are getting sick, and how we can help prevent others from getting sick. You are free to choose if you want to participate in this survey. Also, you are free to skip any questions you do not wish to answer, and you may decide to end the interview at any time. Everything you say is confidential. Your name is not attached to any of your answers, and we do not report any of your information to the authorities. Would you be willing to take a few minutes to talk with us? *(If asked will take approximately 15-20 minutes to complete.)*

☐ Yes ☐ No; *If "Yes," start questionnaire with Question 1*.

If "No," then read the Closing Statement on the last page.

NARRATIVE #2 – For Minors

My name is (YOUR NAME) and I'm from the Mississippi health department. We have recently seen an increase in people getting sick from synthetic marijuana. We want to learn why (PATIENT'S NAME) and other people are getting sick, and how we can help prevent others from getting sick. We would like your permission to ask (PATIENT'S NAME) a few questions about this hospital visit. (PATIENT'S NAME) is free to choose if they want to participate in this survey. Also, (HE/SHE) is free to skip any questions they do not wish to answer, and (HE/SHE) may decide to end the interview at any time. Everything (HE/SHE) says is confidential. (HIS/HER) name is not attached to any of the answers, and we do not report any of their information to the authorities. Would you be willing to take a few minutes to talk with us? *(If asked will take approximately 15-20 minutes to complete.)*

☐ Yes ☐ No; *If "Yes," start questionnaire with Question 1*.

If "No," then read the Closing Statement on the last page.

SYNTHETIC MARIJUANA USE (GENERAL)

Now I am going to ask you questions about synthetic marijuana or S*pice* and other recreational drugs you may have used.

1. **Were you aware that over the past month many people in Mississippi have been getting sick after using synthetic marijuana?** ☐ Yes ☐ No ☐ Don't know ☐ Refused

   1a. *If yes:* **how did you find out?** (*Read options and check all that apply*)
   ☐ TV/Radio,
   specify_____
   _____
   ☐ Social media (e.g. Facebook, Twitter, Instagram),
   specify_____
   ___
   ☐ Internet website,
   (specify)_____
   _____
   ☐ Friend
   ☐ Family member
   ☐ Other,
   (specify)_____
   _____

2. **Why do you choose to use synthetic marijuana?**
   _____
   ____

3. **How long have you been using synthetic marijuana?**
   ☐ First time ☐ Less than 1 year ☐ More than 1 year ☐ Don't Know ☐ Refused

4. **How often did you use synthetic marijuana in the past 30 days?**
   ☐ One time only (this episode) ☐ Less than once a week ☐ Once a week ☐ Several times a week ☐ Daily ☐ Don't know ☐ Refused

DETAILS OF SYNTHETIC MARIJUANA USE

Now I am going to ask some questions related to the synthetic marijuana product you used in the past 24 hours.

5. **What was the brand/street name of the synthetic marijuana product that you used in the past 24 hours?** ☐ Spice ☐ K2 ☐ Crazy Monkey ☐ Black Mamba ☐ Mojo ☐ Skunk ☐ Moon Rocks ☐ Yucatan Fire ☐ AK-47 ☐ Other
   _____ ☐ Don't Know ☐ Refused

6. **Do you remember what the packaging looked like?:**
   ☐ Yes,
   *specify*_____
   _____
   ☐ No ☐ Don't Know ☐ Refused

7. **Have you ever used** <*insert brand name from Q5*> **before?** ☐ Yes ☐ No ☐ Don't Know ☐ Refused

   If No/Don't Know/Refused, skip to question 11

   7a*. If yes:* **how many times have you ever used** <*insert brand name from Q5*>**?** ☐ Once ☐ 2-5 times ☐ > 5 times ☐ Don't Know ☐ Refused

8. **Other than this time, have you ever gotten sick after using** <*insert brand name from Q5*>**?** ☐ Yes ☐ No ☐ Don't Know ☐ Refused

9. **Did you notice anything different about this** <*insert brand name from Q5*> **(such as the appearance, taste, or smell) compared to other times you've used** <*insert brand name from Q5*>**?** ☐ Yes ☐ No ☐ Don't Know ☐ Refused

   9a. *If yes:* **What did you notice was different?:**_____
   _____

10. **Did you notice anything different about how this** <*insert brand name from Q5*> **made you feel compared to other times you've used** <*insert brand name from Q5*>**?** ☐ Yes ☐ No ☐ Don't Know ☐ Refused

    10a. *If yes:* **What did you notice was different?:**_____
    _____

11. Why do you think you got sick this time?

_____
_____

12. How did you use this product in the past 24 hours? (*Read options and check all that apply*)

☐ Smoke ☐ Vaping ☐ Eat or Swallow ☐ Snort ☐ Intravenous ☐ Other_____

☐ Don't Know ☐ Refused

13. Was this different than the way you usually use it?

☐ Yes ☐ No ☐ Don't have normal method

☐ Don't Know ☐ Refused

14. Without giving a specific name, where did you get this product? (*Read options and check all that apply)*

☐ Convenience store/Gas station ☐ Tobacco store/Head shop

☐ Bought from a dealer ☐ From a friend or family member

☐ Internet ☐ Party or Rave

☐ Other, *specify*_____
_____

☐ Don't know ☐ Refused

15. Do you know if anyone else who used the same product as you got sick?

☐ Yes ☐ No ☐ Don't Know ☐ Refused

15a. *If yes:* **Did they have to go to the hospital because of it?** ☐ Yes ☐ No ☐ Don't Know ☐ Refused

16. In the past 24 hours, did you also use any street drugs or prescription drugs recreationally?

☐ Yes,
*specify*_____
_____
____

☐ No ☐ Don't Know ☐Refused

Regarding Question 16 – Data entry team will categorize the drug name:

☐ Alcohol ☐ Tobacco ☐ Regular Marijuana ☐ Heroin or Opioids ☐ Cocaine ☐Methamphetamines ☐ Bath Salts ☐ Benzodiazepines ☐ Other, specify:
_____
_

CLOSING QUESTIONS/COMMENT

17. What should we tell people about synthetic marijuana?

_____
_____
__

_____
_____

18. What's the best way to get the word out?

_____
_____

19. Notes or comments:

_____
_____

_____
_____

Closing Statement:

Thank you for your time. For your information, there have been reports of people getting sick after using synthetic marijuana in Mississippi. If you would like more information about synthetic marijuana, please contact Mississippi Poison Control Center at 1-800-222-1222, or go to the website - http://msdh.ms.gov/msdhsite/_static/23,16273,195.html