***Prevalence of Alcohol and Other Drug Use among Motor Vehicle Crash Victims Admitted to Select Trauma Centers***

Appendix A

**Justification for De-identified Data Provided by Trauma Centers and Medical Examiners**

The trauma centers and medical examiners will provide NHTSA with de-identified information. No contact will be made with the patient as all information will come from secondary sources. The data will allow demographics and other de-identified classification information to be included as covariates in the data analyses and for between groups comparisons.

**Item number 1 (Case Start Location)**

This item documents whether the case started at the trauma center or medical examiner.

**Item number 2 (Mechanism of Injury)**

This item will allow research staff to determine how the patient became injured. Victims of crashes will have their blood sent for toxicological analysis. In some instances, the cause of injury will not be immediately known. If it is later determined that the mechanism of injury was not related to road use, the associated sample will be discarded and any data related to the case deleted.

**Item number 3 (Position in Crash)**

The information from this item can be used to compare drug prevalence among the different types of road users.

**Item number 4 (Type of Vehicle)**

The information from this item can be used to compare drug prevalence among drivers and passengers of the various types of vehicles.

**Item number 5 (Protective Devices)**

The information from this item can be used to compare drug prevalence among people who do and do not wear protective devices such as seatbelts or helmets.

**Item number 6 (Drug Administered Prior to Arrival)**

Drugs commonly administered by Emergency Medical Services (e.g., Ativan, fentanyl, morphine, versed) before the patient arrives at the trauma center will appear in the toxicology tests. This item will allow researchers to account for drugs that were administered during transport.

**Item number 7 (Arrival Day of Week)**

The information from this item can be used to compare drug prevalence among victims appearing at trauma centers by day of the week.

**Item number 8 (Arrival Month)**

The information from this item can be used to compare drug prevalence among victims appearing at trauma centers by month.

**Item number 8 (Arrival Time)**

The information from this item can be used to compare drug prevalence among victims appearing at trauma centers during time ranges.

**Item number 10 (Blood Tube Scan)**

This is the study-assigned blood tube identification number and is needed to match toxicology test results from the independent laboratory to the other de-identified information for a case.

**Item number 11 (Age)**

The information from this item can be used to compare drug prevalence among the different age ranges.

**Item number 12 (Sex)**

The information from this item can be used to compare drug prevalence among the sexes.

**Item number 13 (Race)**

The information from this item can be used to compare drug prevalence among the different racial groups to the extent the information is available in hospital records.

**Item number 14 (Hispanic or Latino)**

The information from this item can be used to compare drug prevalence among Hispanics/Latinos and non-Hispanic/Latino to the extent the information is available in hospital records.

**Item number 15 (Trauma Designation)**

The information from this item can be used to compare drug prevalence among the different trauma designations which are commonly used to signify the level of severity of an injury before the patient arrives at the trauma center.

**Item number 16 (Drug Administered Prior to Blood Draw)**

Drugs administered by trauma center staff (e.g., ativan, dilaudid, etomidate, fentanyl, haldol, morphine, versed) before blood samples are drawn for clinical purposes will appear in the toxicology tests. This item will allow researchers to account for drugs that were in the patient’s system as part of treatment before the blood sample was taken for clinical purposes.

**Item number 17 (TRISS)**

The Trauma – Injury Severity Score (TRISS) value is calculated by the trauma center or medical examiner to identify the severity of injury among trauma patients. The information from this item can be used to compare drug prevalence among the different severities of injury.

**Item number 18 (ISS)**

The Injury Severity Score (ISS) value is calculated by the trauma center or medical examiner to identify the severity of injury. ISS is used as part of the TRISS calculation. The information from this item can be used to compare drug prevalence among the different severities of injury.

**Item number 19 (ICD-10)**

The ICD-10 code is assigned to classify diagnoses, procedures, and symptoms associated with hospital care. The information from this item can be used to compare drug prevalence among the different code types.

**Item number 20 (Deceased)**

This item is an indicator of whether the person died after receiving treatment at the trauma center. The information from these items can be used to compare drug prevalence among victims who died after presenting to the trauma center versus those who did not.

**Item number 21 (Death Day of Week)**

The information from this item can be used to compare drug prevalence among victims who died on particular days of the week. The medical examiner will always provide this information rather than Arrival Day in Item 7.

**Item number 22 (Death Month)**

The information from this item can be used to compare drug prevalence among victims who died during particular months. The medical examiner will always provide this information rather than Arrival Month in Item 8.

**Item number 23 (Death Time)**

The information from this item can be used to compare drug prevalence among victims who died at particular times. The medical examiner will always provide this information rather than Arrival Time in Item 9.

**Table 1 (Drugs for toxicology testing).**

The drugs listed in Table 1 were selected because of their potentially impairing effects on roadway users and the likelihood that the drugs would be present in a large enough percentage of the populations being sampled to support the desired data analyses. The drugs were selected based on NHTSA’s prior experience with similar collections at the roadside and from crash victims.