Appendix B: ISDH Vital Statistics and Hospital Discharge Data

Death data, representing a portion of the data presented in this Resource Guide, relies upon the Indiana State Department of Health mortality reports, based on completion of death certificates. The cause-of-death section of the death certificate is organized according to the World Health Organization guidelines and coded with ICD-10. Death records data is collected from the ISDH Office of Vital Records.

The source agency for the collection of hospital discharge data is the Indiana Hospital Association, which collects hospital discharge data from Indiana hospitals. Beginning with year 2002, selected patient-level data has been sent to the ISDH Epidemiology Resource Center through a working agreement. The injury and external cause of injury codes were classified according to the ICD-9-CM. The criterion of data analysis is based on the recommendations from the Safe States to be used to determine if a patient record is defined as an injury hospitalization. Records can be characterized as patient-level hospital discharges whose principle reason for admission was the result of injury and whose record had at least one valid supplemental E-code.

Outpatient/Emergency Department visit data was also utilized in this report from the hospital discharge data. The same procedures from Safe States Alliance were followed for inclusion and exclusion of injury related data. The injury and external cause of injury codes were classified according to the ICD-9-CM. These records can be characterized as patient-level hospital discharges whose principle reason for admission was the result of injury and whose record had at least one valid supplemental E-code.

A significant part of the ISDH Division of Trauma and Injury Prevention's mission involves collecting data from Emergency Medical Services (EMS) providers, hospitals with emergency departments (ED) and rehabilitation facilities. The trauma registry is a core component of any statewide trauma system. The Indiana Trauma Registry is a repository into which statewide trauma data has been brought together to support three foundational activities: identification of the trauma population, statewide process improvement activities, and research. The Indiana Trauma Registry was implemented in 2007, with initial participation by the seven hospitals in Indiana that were verified by the American College of Surgeons as Level I or Level II trauma centers. Non-trauma hospitals in Indiana actively submit data to the state trauma registry. In 2013, the ISDH implemented the Indiana State EMS Bridge. The combination of EMS and trauma data allows Indiana to develop a more robust data system with which we can create a better patient care system. The rehabilitation component of the trauma registry began data collection in June 2014.

Data Analysis Notes: A **crude rate** is the number of deaths, hospitalizations, or ED visits over a specified time period divided by the total population (per 100,000). An **age-adjusted rate** is a weighted average of the age-specific incidence or mortality rate from a targeted population with a weight that is proportional to persons in corresponding age group of a standard population, for purposes of making comparisons of rates over time or between populations. A **count** is simply the number of deaths, hospitalizations or ED visits during a specified time. Depending on the data source and the injury topic, crude and age-adjusted rates and counts are provided to illustrate the burden within Indiana, a specific demographic or age group, and the burden on the healthcare system in Indiana.