STATE OF IOWA DEPARTMENT OF

Health AND Human

SERVICES

Iowa Plan for Trauma System Development 2022-2027

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Iowa HHS is a trusted leader and partner in protecting health and providing high quality, equitable services.

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Executive Summary

Injury and violence are leading causes of death in the United States. Injuries occur every day and in every state of our nation. This threat remains constant and is magnified by the increasing frequency and magnitude of weather and climate events. The following are facts on injury in the United States and Iowa[1]:

From 2010-2020 there were 2,405,364 injury-related deaths recorded in the United States, with a crude rate of 68.29 per 100,000.

During that same date range, Iowa recorded 22,521 injury-related deaths with a crude rate of 65.7 per 100,000.

The United States and Iowa saw similar trends in 2020, with steep increases in male and female injury-related deaths compared to previous year-to-year trends.

Unintentional injury accounts for the highest percentage of injury-related deaths in the United States and Iowa.

In 2020, Iowa's citizens experienced 37,451 years of potential life lost to injury.

The total value of statistical life lost during 2020 in Iowa is estimated at $20,519,150,000.

Injury has a profound effect on individuals, families, hospitals, and society due to the tremendous medical, psychosocial, and financial burdens. The need for a comprehensive injury prevention and response strategy is clear.

In 1990, Congress addressed the important role of trauma systems in responding to injury as a public health threat through the passage of the Trauma Care Systems Planning and Development Act of 1990 [P.L. No. 101-590, 104 Stat. 2915], which created a new section, Title XII of the Public Health Service Act, on trauma care. The importance of addressing injury remains a public health issue that was also emphasized in the Public Health Security and Bioterrorism Preparedness and Response Act of 2022 [P.L. No. 107-188, 116 Stat. 594]. In recognition of the significance that the trauma system plays in response to multiple casualty and mass casualty incidents, this Act called for trauma and burn care to be a component of state preparedness plans [P.L. No. 107-188, §131(a), 116 Stat. 618, 625; 2002].

The Iowa Trauma Care System Development Act was passed during the 1995 General Assembly and signed into law on April 19, 1995. This trauma legislation designated the Iowa Department of Public Health (now Iowa Department of Health and Human Services) as the lead agency responsible for developing and implementing a statewide trauma system. The legislation empowered the department to draft administrative rules.

Iowa has an inclusive trauma care system that has been fully operational since January 1, 2001. Iowa Administrative Code 641, Chapters 134-Trauma Care Facility Categorization and Verification, 135-Trauma Triage and Transfer Protocols, and 136-Trauma Registry were adopted by the State Board of Health and became effective January 8, 1997. All hospitals in Iowa are verified trauma care facilities.

The Iowa trauma system strives to develop and maintain a comprehensive, coordinated statewide and local injury response network.

The State Trauma Plan will:

- Guide comprehensive system development
- Address system operational requirements
- Allow for local trauma system variations based on assessment results (e.g., rural versus urban needs and resources)
- Reflect inclusiveness of the operational components as they fall under assessment, policy development, and assurance
- Demonstrate an all-encompassing methodology, ranging from injury prevention activities to prehospital trauma care, acute care facilities, and post-acute care rehabilitation
- Reflect integration with the State Health Plan and with the State's Emergency Response Plan
- Allow for a dynamic process that will evolve with changing injury epidemiology and resource availability – both human and financial

The ultimate evaluation outcome of trauma system implementation is a reduction in morbidity and mortality. Iowa will accomplish this goal by planning and implementing a care improvement process, enhancing system performance, using evidence-based research, developing and implementing targeted injury prevention programs, and revisions to trauma system plans based on system assessments and data-based needs.

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List of Acronyms

ACS	American College of Surgeons
ARRC	Administrative Rules Review Committee
BEMTS	Bureau of Emergency Medical and Trauma Services
CDC	Centers for Disease Control
COT	Committee on Trauma
EMS	Emergency Medical Services
EMSAC	Emergency Medical Services Advisory Council
Iowa HHS	Iowa Department of Health and Human Services
ISS	Injury Severity Score
OOHTTDDP	Out of Hospital Trauma Triage Destination Decision Protocol
QASP	Quality Assurance, Standards, and Protocols
SEQIS	System Evaluation Quality Improvement Subcommittee
TSAC	Trauma System Advisory Council

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The Leadership of the Trauma System in Iowa

The Iowa Department of Health and Human Services remains the lead agency responsible for planning, implementing, and evaluating the statewide trauma system. The Bureau of Emergency Medical and Trauma Services oversees the statewide trauma program, emergency medical services, EMS training programs and providers, and the emergency medical services for children program.

BEMTS trauma program is led by the bureau chief and currently includes a trauma program manager, a trauma system coordinator, and a data analyst. BEMTS also works in close conjunction with the BEMTS Medical Director. The bureau chief is responsible for strategic planning, guidance, and implementation of the trauma system. The trauma program manager is responsible for implementing the strategic plan, grant writing, and grant reporting. The trauma system coordinator is primarily responsible for trauma center verification, providing trauma system educational resources, and technical assistance for trauma center excellence. The data analyst provides technical assistance for the state trauma registry and produces an annual trauma registry report for the state of Iowa. The BEMTS Medical Director provides leadership on trauma program strategic planning and vision.

The Trauma System Advisory Council advises the department on issues and strategies to achieve optimal trauma care delivery throughout the state. TSAC provides critical leadership for trauma system development and planning through a public and private partnership to address injury as a community health problem. TSAC consists of 7 multidisciplinary members from both urban and rural settings to include: prehospital provider, trauma surgeon, emergency department provider, urban trauma program manager, rural trauma program manager, rural hospital administrator, and a rehabilitation representative.

TSAC includes several subcommittees, each with a unique responsibility for optimizing the trauma system in Iowa through planning, implementation, and evaluation of the State trauma care system. The subcommittees include System Evaluation and Quality Improvement, Data Management, System Development, Triage and Transport, Verification, and Prevention and Outreach. Membership is derived from statewide recruitment of trauma system stakeholders in both the public and private sectors.

Iowa's inclusive trauma system utilizes four levels (I – IV) of verification to qualify the available resources and capabilities of each hospital. Criteria from the American College of Surgeons Committee on Trauma are utilized to ensure consistent practice standards and essential program elements are met. Level I facilities are Iowa's most resourced facilities. They include comprehensive care for every aspect of injury. Level IV facilities demonstrate the ability to provide Advanced Trauma Life Support prior to transfer of patients to a higher level trauma center.

Iowa HHS hosts a state trauma registry. The trauma registry collects essential elements of information on trauma patients hospitalized in Iowa. Iowa's trauma care facilities can utilize the state hosted registry at no cost. Each hospital in Iowa is required by statute to verify as a trauma care facility at a level based on the resources available at that facility. Therefore, every hospital in Iowa is required to contribute data on injured patients to the state trauma registry. This valuable resource assists public and private partners in injury surveillance, performance improvement, and program development initiatives.

The trauma program in Iowa is 100% funded by the Federal Preventive Health and Health Services Block Grant Program and does not receive state appropriations for program services.

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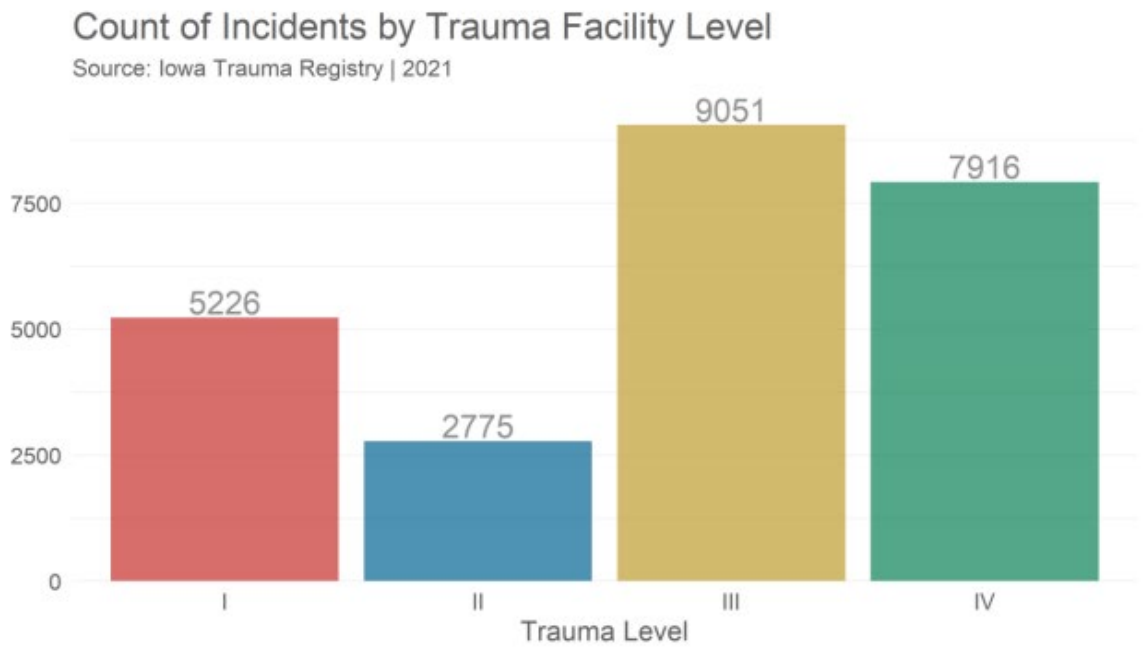
Trauma Data in Iowa

As of publication, Iowa has two Level I adult trauma care facilities, one Level I pediatric trauma care facility, two Level II trauma care facilities, one Level II pediatric trauma care facility, 13 Level III trauma care facilities, and 100 Level IV trauma care facilities. In 2021, Iowa trauma care facilities cared for 22,062 unique patients for a total of 24,968 incidents. The following Figures are pulled from the Iowa Trauma Registry Report 2021.

Figure 1: Count of Incidents by Trauma Facility Level



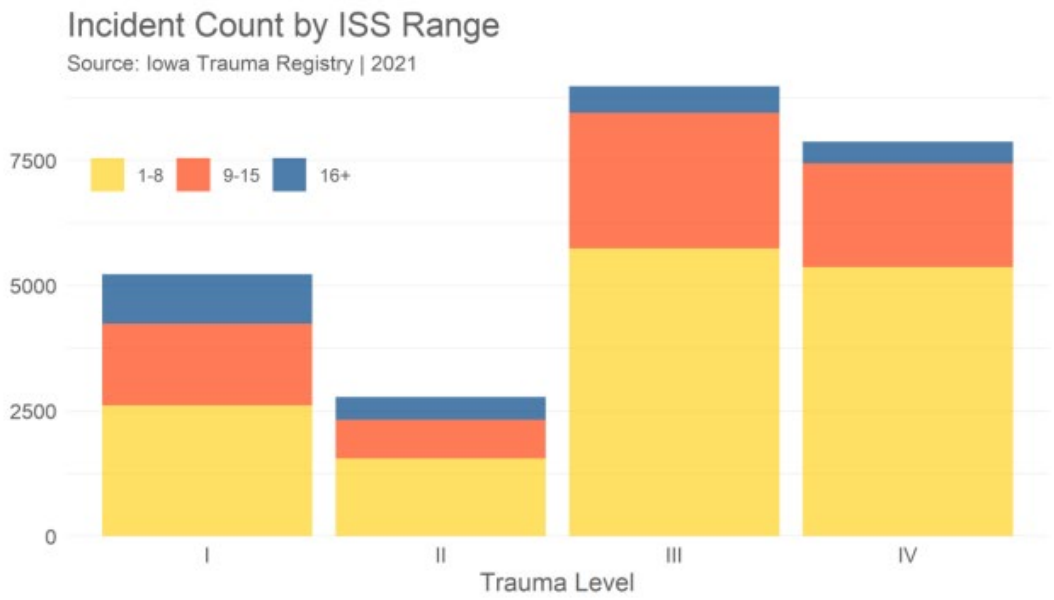
The burden of caring for injured patients lies most heavily with Level III and Level IV facilities in Iowa. These facilities tend to be more rural than urban. All critical access hospitals in Iowa are verified as Level IV facilities.

For the most up-to-date verification levels and locations of trauma care facilities visit:

https://hhs.iowa.gov/bets/trauma/facilities-map

The Injury Severity Score is a method used to rate the severity of a patient's injury. It correlates with morbidity, mortality and hospital length of stay for injured patients. ISS scores can range from 0 to 75. A score of 1 to 8 is considered minor trauma, and scores ranging from 9 to 15 are considered moderate trauma. Any score greater than 15 is considered major trauma.

Figure 2: Incident Count by ISS Range

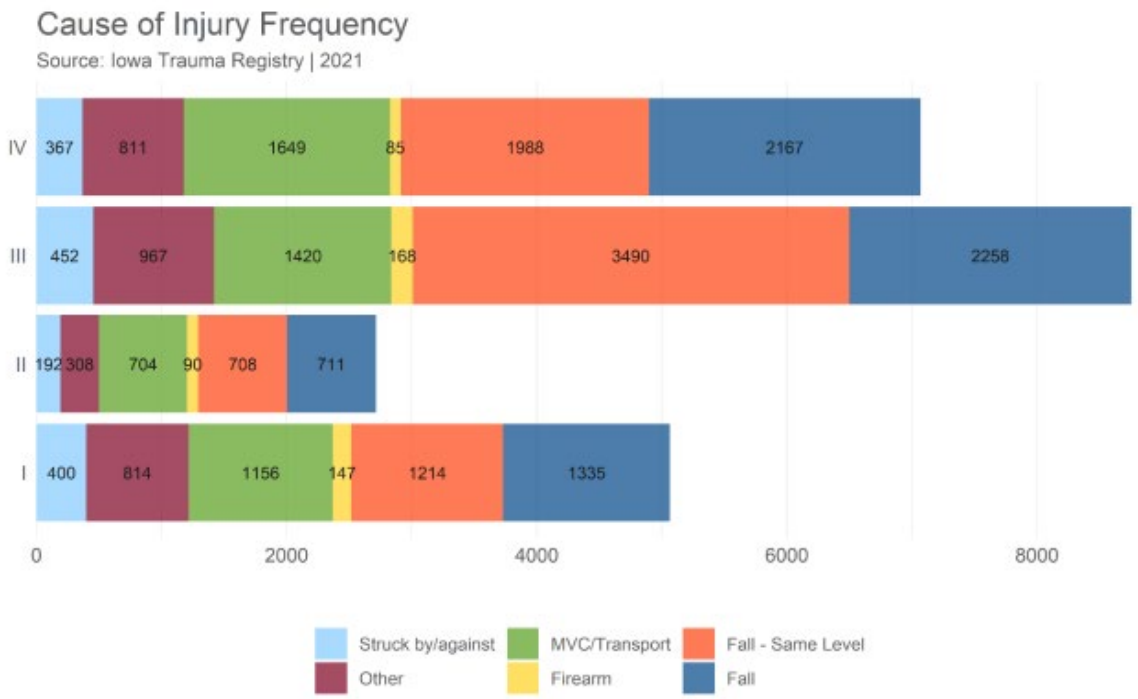


The data in the chart are from all levels of hospitals, and does not solely depict data from hospitals that provided definitive care for the trauma patient. Level IV and some Level III facilities provide stabilizing care for significantly injured trauma patients before transferring that patient to a definitive care hospital that is able to perform a higher level of stabilizing treatment. Some severely injured patients at Level IV and some Level III facilities may not transfer to a higher level of care, instead choosing to opt for a palliative care treatment approach.

The ISS is retrospective and based on all of the patient's diagnosed injuries. The ISS ratings for patients seen at Level III and Level IV facilities are likely to be artificially low. The Level III and Level IV facilities may not identify all of the trauma patient's injuries before transport. Level III and Level IV facilities may only identify the most critical injuries that require stabilization before transport. This may impact the reported ISS of some patients seen at Level III and Level IV facilities. These patients are then transported to a definitive care facility for a higher level of treatment.

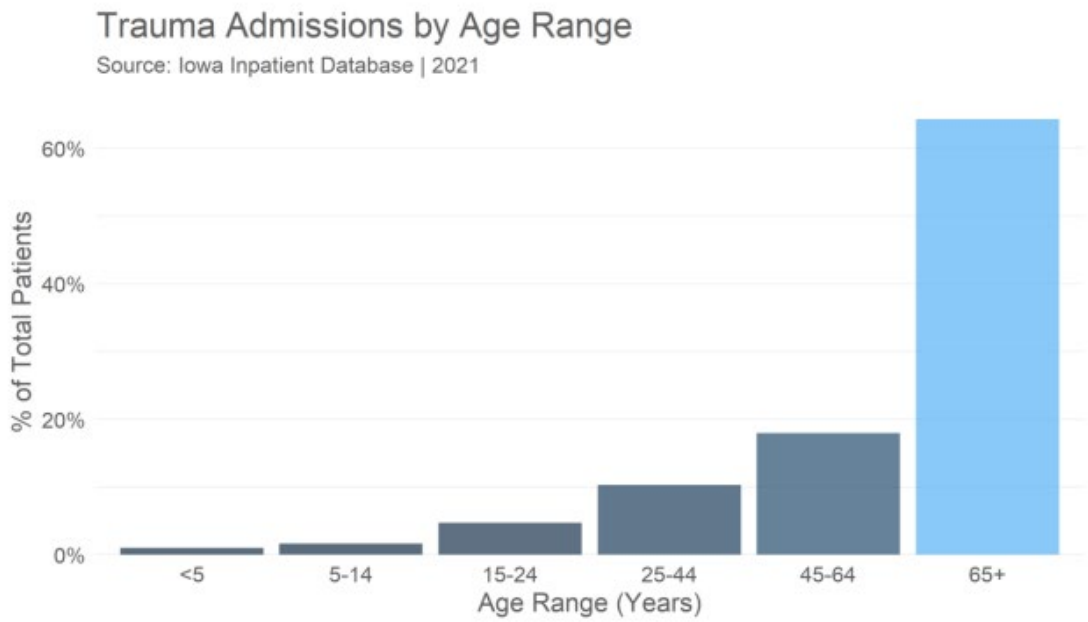
Trauma registry data shows 50% of incidents at Level I facilities had an ISS over 8 and Level II facilities had 44% of incidents with an ISS over 8. Level III and Level IV facilities had 36% and 32% of incidents with an ISS over 8, respectively. These percentages are all slightly lower than in 2020, but most had increased from 2019, so there is no significant trend here.

Figure 3: Cause of Injury Frequency



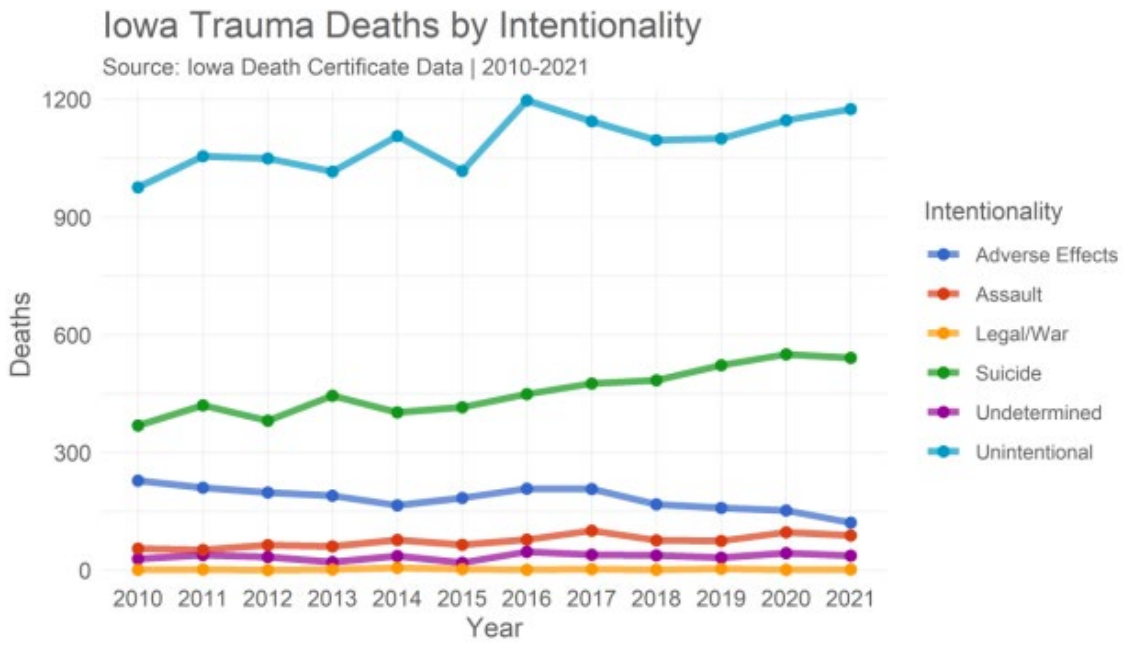
Level IV facilities saw a greater percentage of their incidents as falls compared to Level I and II facilities. Firearm injuries account for less than half the rate of injuries at Level IV facilities compared to the Level I and II facilities. An injury type that is not shown as its own category in the table is burn injuries; they are in the "Other" category due to relatively small counts. Level I facilities see about as many burn patients as the other levels combined. The state's only verified burn center is a Level I trauma care facility.

Figure 4: Trauma Admissions by Age Range



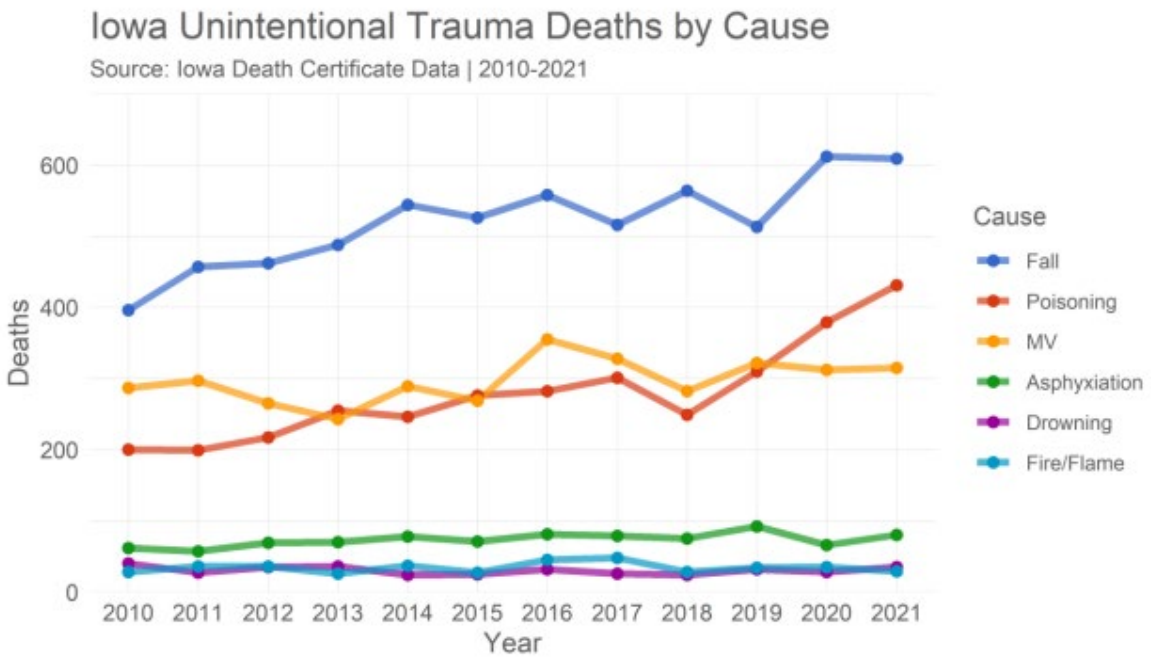
Patients 65 and older accounted for the majority of trauma admissions. Note that the age ranges are not equal length; there are 5-, 10- and 20-year ranges, and the open-ended 65+ range.

Figure 5: Iowa Trauma Deaths by Intentionality



Unintentional injury accounts for the highest number of trauma deaths in Iowa.

Figure 6: Iowa Unintentional Trauma Deaths by Cause



Falls account for the highest percentage of unintentional trauma deaths.

This brief overview of Iowa's trauma data demonstrates the burden of injuries in the state. Iowa's most rural facilities initially care for more than half of the trauma patients in the state. Falls account for a significant portion of traumatic injury frequency and death in the state. A comprehensive public health approach to trauma system optimization is required to reverse the trends seen in the data to reduce the burden of injury in Iowa.

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A Public Health Approach to Trauma System Planning

Iowa's trauma system plan aligns with Governor Reynolds' priorities for Iowa. Specifically:

IMPROVING ACCESS TO QUALITY HEALTH CARE

The trauma system adheres to the mission, societal and organizational vision, and guiding principles of Iowa HHS.

MISSION

Iowa HHS provides high quality programs and services that protect and improve the health and resiliency of individuals, families, and communities.

SOCIETAL VISION

Individuals, families, and communities are safe, resilient and empowered to be healthy and self-sufficient.

ORGANIZATIONAL VISION

Iowa HHS is a trusted leader and partner in protecting health and providing high quality, equitable services.

GUIDING PRINCIPLES

Data-driven, Accountability, Integrity, Equity, Communication, Collaboration

Iowa HHS strives to improve the quality of life for all Iowans by identifying systemic and structural barriers, including social determinants of health, resulting in health inequities among people in Iowa, and assuring access to evidence-based population-health programs and services. Specifically, the trauma system is integral to the mission and strategic plan of public health in the areas of:

- Preparing for, responding to, and recovering from emergencies
- Preventing injuries and violence
- Assuring access to quality health services

The public health system provides a conceptual framework for trauma system development, management, and ongoing performance improvement. The core functions of public health are assessment, policy development, and assurance.

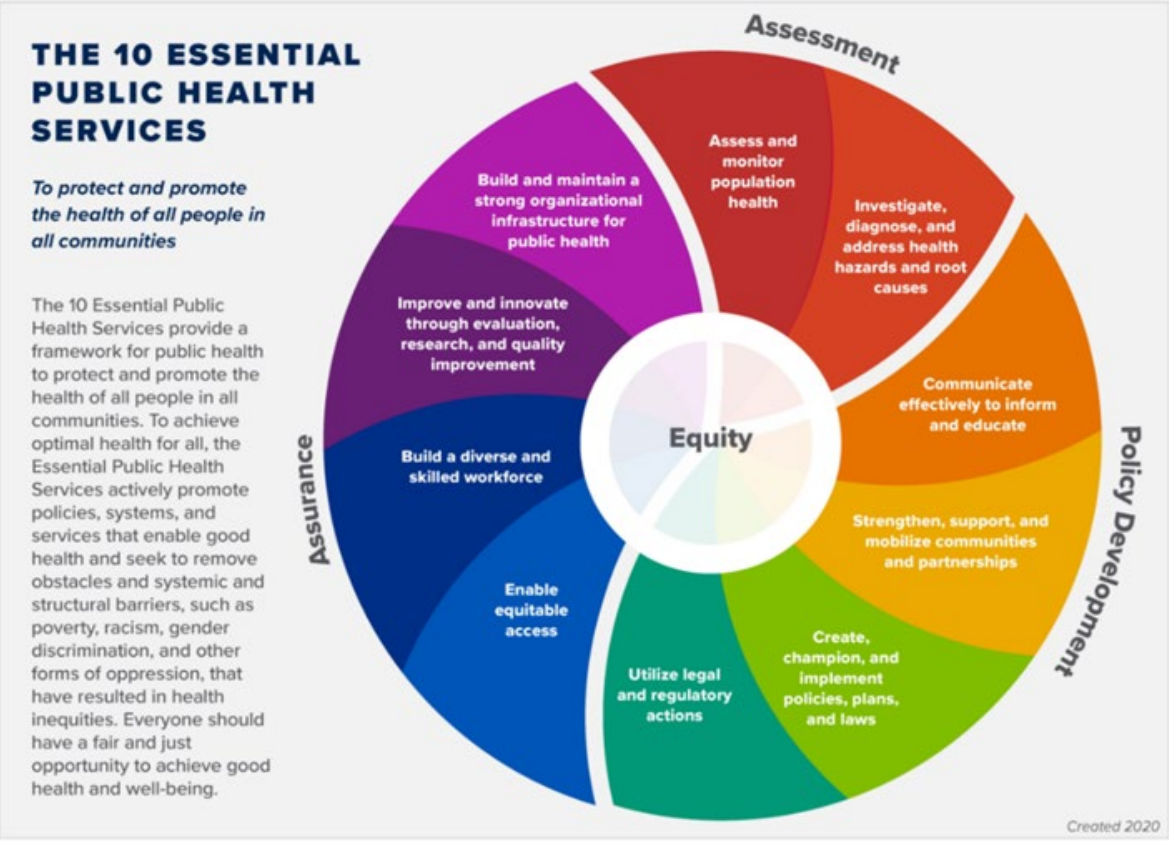
Assessment – the regular and systematic collection and analysis of data from a variety of sources to determine the status and cause of a problem to identify potential opportunities for interventions.

Policy development – uses the assessment results in an organized manner to establish comprehensive policies intended to improve the public's health.

Assurance – agreed-on goals to improve the public's health, are achieved by providing services directly, by requiring services through regulation, or by encouraging the actions of others (public or private).

The ten essential services of public health help to clarify the core functions of public health. These ten essential services are used to understand the process of decision-making within the trauma system programs. The essential services can be seen as cyclic, repeated over time as new assessments lead to new policies. At the core of the ten essential public health services is the concept of equity, which allows everyone should have a fair and just opportunity to achieve good health and well-being. The Iowa trauma system strives for equity in all programs through promoting policies, systems, and services that enable good health for all and removes systemic and structural barriers that have resulted in health inequities for Iowa's citizens.

Figure 7: The 10 Essential Public Health Services



The ability to prevent injury or reduce morbidity and mortality after an injury can be categorized into three phases: primary, secondary, and tertiary. The phases focus on efforts to prevent, reduce, or substantially diminish the impact of injury before, during, and after the injury.

Primary prevention or pre-injury prevention involves activities that seek to avoid the injury or injury-producing incident altogether. Secondary prevention seeks to maximally reduce the severity of the injury-producing incident at the time of occurrence, such as through safety devices. And tertiary prevention acts to substantially diminish the impact of the injury through actions to further reduce the severity of the injury and optimize the patient's outcome, including timely dispatch and delivering the injured patient to a trauma facility with the appropriate resources to best meet the patient's needs. The trauma system will take a comprehensive approach to injury prevention and morbidity and mortality reduction after injury, by implementing programs that address all three phases.

The public health system is a complex network of individuals and organizations that have the potential to play important roles in creating conditions for health. The trauma system has strong public and private collaborative efforts through all system components. The trauma system will meet its goals by utilizing the primary strategies of assessment, policy development, and assurance working through the operational components of the ten essential services of the public health cycle, with equity at the mission's core.

TRAUMA SYSTEM GOALS

- To decrease the incidence and severity of trauma
- To ensure optimal, equitable, and accessible care for all persons sustaining an injury
- To prevent death and disabilities from trauma
- To contain costs while enhancing efficiency
- To implement quality and performance improvement of trauma care throughout the system
- To ensure designated facilities have appropriate resources to meet the needs of the injured

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Iowa Work Plan for Trauma System Development

Iowa utilizes the Regional Trauma Systems: Optimal Elements, Integration, and Assessment, American College of Surgeons Committee on Trauma: Systems Consultation Guide[2] as an instructive evaluation tool to improve the Iowa trauma system and care of injured patients. The System Development subcommittee of the Trauma System Advisory Council utilizes this document for current status trauma system evaluation and as a tool for future planning efforts. The optimal elements fall into three categories, which closely align with the public health conceptual framework of assessment, policy development, and assurance:

Trauma System Assessment – Regular systematic collection, assembly, analysis, and dissemination of information on the health of the community.

Trauma System Policy Development – Promoting the use of scientific knowledge in decision-making which includes building constituencies, identifying needs and setting priorities, using legislative authority and funding to develop plans and policies to address needs, and ensuring the public's health and safety.

Trauma System Assurance – Ensuring constituents that services necessary to achieve agreed-on goals are provided by encouraging the actions of others (public and private), requiring action through regulation, or providing services directly.

The System Development subcommittee evaluated Iowa's performance on the optimal elements for a trauma system each placed within one of these three broad categories. The ratings for Iowa's current performance on each element were then used to set priorities for short-term and long-term improvement of the system. The table below summarizes the findings of the committee and the priorities identified for trauma system development for the years 2022-2027.

Priority 1: Trauma System Policy Development. Trauma System Plan. The state lead agency has a comprehensive written trauma system plan based on national guidelines. The plan integrates the trauma system with EMS, public health, emergency preparedness, and incident management.		
Strategy 1.1: Develop a written trauma system plan in collaboration with community partners and stakeholders		
Action Steps	Who's Responsible	Timeline
1.1a. Engagement of identified partners	Iowa HHS	Ongoing
1.1b. Complete the state trauma plan	Iowa HHS, TSAC	Completed
1.1c. Share and obtain feedback from community partners and trauma system stakeholders	Iowa HHS	Completed
1.1d. Trauma plan reviewed and approved by Department leadership	Iowa HHS	March 31, 2023

Priority 2: Trauma System Policy Development. Statutory Authority and Administrative Rules. Comprehensive state statutory authority and administrative rules support trauma system leaders and maintain trauma system infrastructure, planning, oversight, and future development.		
Strategy 2.1: Update administrative rules with the most up-to-date national benchmarks and guidelines.		
Action Steps	Who's Responsible	Timeline
2.1a. Engage the Verification Subcommittee of the TSAC to review and update trauma care facility criteria to the most current version of the ACS Resources for Optimal Care of the Injured Patient	Verification Subcommittee, TSAC, Iowa HHS, local stakeholders	Completed
2.1b. Update administrative rule 641.134 to reflect decisions of the Verification Subcommittee and TSAC on criteria for trauma care facility verification	Iowa HHS	On Hold pending rules review
2.1c. Notice rules and work through the Administrative Rules and Review Committee process to update 641.134 to reflect decisions of the trauma system	Iowa HHS, ARRC	On Hold pending rules review
2.1d. Engage the Triage and Transport Sub-committee of the TSAC to review and update the Out of Hospital Destination Decision Protocols for adults and pediatrics based on the most current version of the National Guidelines for the Field Triage of Injured Patients	Triage and Transport Subcommittee, TSAC, Iowa HHS, QASP, EMSAC, local stakeholders	Completed
2.1e. Update administrative rule 641.135 to reflect decisions of the Triage and Transport Subcommittee and TSAC on criteria for OOHTTDDP	Iowa HHS	On Hold pending rules review
2.1f. Notice rule and work through the ARRC process to update 641.135 to reflect decisions of the trauma system	Iowa HHS, ARRC	On Hold pending rules review
2.1g. Engage the Data Management subcommittee of the TSAC to review and update the Trauma Registry Data Dictionary.	Data Management Subcommittee, System Evaluation, and Quality Improvement Subcommittee, TSAC, Iowa HHS	On Hold pending rules review

2.1h. Update administrative rule 641.136 to reflect any necessary changes related to the trauma registry	Iowa HHS	On Hold pending rules review
2.1i. Notice rule and work through the ARRC process to update 641.136 to reflect decisions of the trauma system	Iowa HHS, ARRC	On Hold pending rules review

Priority 3: Trauma System Policy Development. System Leadership. Trauma system leaders (lead agency, trauma center personnel, and other stakeholders) use a process to establish, maintain, and constantly evaluate and improve a comprehensive trauma system in cooperation with medical, professional, governmental, and other citizen organizations.

Strategy 3.1: Utilize the System Development Subcommittee to evaluate and improve the trauma system using the ACS COT Regional Trauma Systems: Optimal Elements, Integration, and Assessment Systems Consultation Guide.

Action Steps	Who's Responsible	Timeline
3.1a. Convene the System Development Subcommittee of the TSAC to evaluate the trauma system utilizing the ACS COT Regional Trauma Systems: Optimal Elements, Integration, and Assessment Systems Consultation Guide	System Development Subcommittee, TSAC, Iowa HHS	Completed
3.1b. Prioritize the Optimal Elements for improvement based on group rating and create action plans to achieve SMART goals.	System Development Subcommittee, TSAC, Iowa HHS	Ongoing

Strategy 3.2: Host an ACS COT Trauma Systems Consultation Program re-visit and utilize the final report for future trauma system performance improvement efforts.

Action Steps	Who's Responsible	Timeline
3.2a. Initial meeting with ACS COT Trauma Systems Consultation Committee	Iowa HHS	Completed
3.2b. Strategize with TSAC and local stakeholders on application and funding.	Iowa HHS, TSAC, local stakeholders	2022 – 2024
3.2c. Host a Trauma System Consultation Visit	Iowa HHS, TSAC, local stakeholders	December 31, 2025
3.2d. Utilize the final report from the Trauma System Consultation Visit to set trauma system performance improvement goals for the next planning period	Iowa HHS, TSAC, local stakeholders	January 2026 – July 1, 2027

Priority 4: Trauma System Policy Development. Coalition Building and Community Support. The lead agency informs and educates state, regional, and local constituencies and policy-makers to foster collaboration and cooperation for system enhancement and injury control.		
Strategy 4.1: Conduct a partnership evaluation and apply strategies to further partnership development to strengthen the trauma system in Iowa.		
Action Steps	Who's Responsible	Timeline
4.1a. Utilize the Partnership Assessment Tool to assess the current state of public and private partners within the trauma system.	Iowa HHS, TSAC	Completed
4.1b. Analyze results and share the results with others.	Iowa HHS, TSAC	TSAC year 2022 – 2023
4.1c. Consider opportunities for partnership development utilizing the Partnership Assessment Tool.	Iowa HHS, TSAC	TSAC year 2023 - 2024
4.1d. The Partnership Assessment Tool is utilized every 2 years to compare and track public and private partnerships.	Iowa HHS, TSAC	Every even TSAC year, Fall Meeting
Priority 5: Trauma System Assessment. Injury Epidemiology. There is a thorough description of injury epidemiology in the system jurisdiction using population-based data and clinical databases.		
Strategy 5.1: Beyond the current annual data report, develop strategies to visualize trauma data for local, regional, and state use.		
Action Steps	Who's Responsible	Timeline
5.1a. Work with the System Evaluation Quality Improvement Subcommittee of TSAC to identify and prioritize data visualization strategies for public consumption.	SEQIS, TSAC, Iowa HHS	Ongoing

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References

1. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2005) [2022 July 20]. Available from URL: www.cdc.gov/injury/wisqars
2. American College of Surgeons Committee on Trauma. (2008). *Regional Trauma Systems: Optimal Elements, Integration, and Assessment, American College of Surgeons Committee on Trauma: Systems Consultation Guide.* American College of Surgeons.

Appendix A - Glossary

Assessment: The regular, systematic collection, assembly, analysis, and dissemination of information on the community's health. A variety of sources will assist in determining the status and cause of a problem and identify potential opportunities for interventions.

Assurance: Services necessary to achieve agreed-on goals by encouraging actions of others (public or private), requiring action through rules and regulations, or providing services directly.

Available Resources: The components required to respond to injured patients and provide injury care (for example, workforce, equipment, medications, supplies, and facilities).

Benchmarks: Global overarching goals, expectations, or outcomes. In the context of the trauma system, a benchmark identifies a broad system attribute.

Comprehensive Trauma System: A coordinated, inclusive system of care for injured people that encompasses all phases of care, from the prehospital setting to rehabilitation services and follow-up care. Such systems include data systems for injury surveillance and prevention and performance measurement and improvement.

Definitive Care: Actions taken or implemented to ensure the patient's needs are met.

Equity: In health, equity is achieved with every person having the opportunity to attain their full health potential, and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances.

Inclusive Trauma System: A system that includes all hospitals to the extent that their resources and capabilities allow, and the patient's needs are matched to hospital resources and capabilities.

Injury: Physical harm or damage to the body resulting from the transfer of or exposure to mechanical, thermal, electrical, or chemical energy or from the absence of such essentials as heat or oxygen.

Lead Agency: The agency responsible for trauma-EMS systems planning and program coordination within the state.

Morbidity: The relative incidence of disease; the condition of being diseased; the ratio of sick to well persons in a community.

Palliative Care: Specialized medical care that focuses on providing patients relief from pain and other symptoms of a serious illness, no matter the diagnosis or stage of disease.

Performance Improvement: Method for evaluating and improving processes that uses a multidisciplinary approach and focus on data, benchmarks, and components of the system being evaluated.

Policy Development: A core function that uses the results of assessments and scientific knowledge, in an organized manner, to establish comprehensive policies intended to improve public health; a process of decision making that includes building constituencies, identifying needs and setting priorities, exercising legislative authority and providing funding to develop plans and policies to address needs, and ensuring the public's health and safety.

Protocol: Standardized plan for the triage, transport, resuscitation, and eventual definitive care of trauma patients. Protocols provide guidance to the care of trauma patients.

Public Health: What society does collectively to ensure the conditions in which people can be healthy; a societal effort that addresses the health of the population as a whole rather than medical health care, which focuses on the treatment of the individual ailments. Public health programs address the physical, mental, and environmental health concerns of communities and populations at risk for disease and injury.

Public Health Approach: A proven, systematic method for identifying and solving problems. In partnership with the health care system, improvements in the public health system can be accomplished through informed, strategic, and deliberate efforts to affect health positively.

Public Health System: A system to ensure a safe and healthy environment for all citizens in their homes, schools, workplaces, and such public spaces as medical care facilities, transportation systems, commercial locations, and recreational sites.

Regulation: A rule or an order having the force of law issued by the executive authority of the government. The term "regulation" is often used interchangeably with "rule."

Stakeholder: A person or group of individuals with a direct interest, involvement, or investment in a matter; in the context of trauma, an individual with an interest in trauma care or trauma system development.

Trauma: Tissue or organ injury, or both, sustained by the transfer of environmental energy.

Trauma System Plan: A document in which the lead agency's guiding members envision the future, identify system needs, and develop necessary procedures and operations to achieve that expectation. The plan will provide direction and function as a communication tool so that all within the system are functioning with the same mindset, following the same guidelines, policies, and protocols; and striving for the same goals and objectives.

Trauma System: An organized, inclusive approach to facilitating and coordinating a multidisciplinary system response to injured patients. A trauma system encompasses a continuum of care provision. The trauma system is inclusive of injury prevention and control, public health, EMS field intervention, E.D. care, surgical interventions, intensive and general medical in-hospital care, and rehabilitative services, along with the social services and the support groups that assist injured people and their families with their return to society at the most productive level possible.

Verification: A process by which experienced on-site reviewers evaluate an institution's trauma care capability and performance.