



South Dakota Healthcare Preparedness Coalition (HPC)

Comprehensive Integrated Hospital HVA and Readiness Assessment (2026)

1. Executive Summary

The compiled 2026 Hazardous Vulnerability Assessment (HVA) dataset reflects the risk profiles and readiness of over 25 healthcare facilities across South Dakota. The data represents a fusion of two reporting models: the qualitative capabilities matrix used predominantly by the state's Critical Access Hospitals (CAHs) and the quantitative Threat/Hazard Assessment Model (THAM) utilized by major Sioux Falls care hubs (Avera McKennan, Avera Heart, Avera Specialty).

The primary finding across the coalition is a strong baseline of emergency planning, with an operational readiness consensus of "Mostly" capable. However, the larger systems data confirms that while internal, localized emergencies rank as LOW risk, the entire network faces extreme systemic threats from **Cybersecurity** vulnerabilities and seasonal **Meteorological** events. Because rural CAHs rely heavily on regional hubs during systemic crises, a localized cyber or weather event at a hub facility poses a cascading threat to the entire state network.

2. Threat Landscape Analysis

The threat landscape is rigidly defined by the following categories:

A. Technological & Systemic Hazards (Highest Risk)

- **Cybersecurity / IT Failures [VERY HIGH]:** This multifaceted, "larger facilities use a network to provide or maintain services or functions." If these hubs go down, the rural CAHs that rely on them for specialist consults and transfers are immediately stranded.
- **External Chemical HAZMAT, Highway [HIGH]:** The data specifically identifies the highway corridors as high-risk, citing 51 historical highway HAZMAT release events over the past 20 years. For facilities located near major interstates, this represents a significant, highly probable threat.
- **Supply Chain Disruption & Communications:** Qualitatively ranked as the top internal vulnerabilities for the rural CAHs.

B. External & Natural Hazards (High Probability, High Impact)

The geographical realities of South Dakota dictate a heavy external threat load. The historical data paints a stark picture of the meteorological risks:

- **Severe Thunderstorms & Lightning [HIGH]:** Scored universally high due to a "6 to 12 per square mile annual flash density" in the immediate areas of some facilities.
- **Hail [HIGH]:** One facility notably recorded 151 historical hail events over the past 20 years, making this a highly probable structural threat.
- **Tornadoes [HIGH]:** Historical data shows 27 tornado events over the past 20 years in the Sioux Falls region.
- **Flooding [MODERATE]:** While Flash Flooding has a moderate historical probability (37 events in 20 years), it is the primary natural disaster that rural CAHs flag as requiring external state aid to manage.

C. Biological & Human-Caused Hazards (Low Frequency, Complex Escalation)

- **Internal Criminal/Violent/Biological Events [LOW]:** The data consistently rate internal incidents (Bomb Threats, Hostage Situations, Internal Biological/Radiological Exposures, Infant Abductions) as Low, occurring less than once every 20 years. Facilities possess strong internal protocols to handle these.
- **Systemic Epidemics/Pandemics:** While internal exposures are low risk, widespread community epidemics remain the single greatest tipping point in the capabilities matrix. During a pandemic, rural reliance immediately jumps from Internal capability to requiring **State or Federal** support.

3. Vulnerability Profile by Facility Type

The fusion of the two datasets clearly delineates risk tolerances based on the scope of the facility:

- **Acute Care & Specialty Hubs:** These 100+ bed facilities possess deep resource pools and manage localized incidents with ease. However, as their extreme reliance on complex digital infrastructure makes them highly lucrative targets for **Cyber threats**. Because they act as the "spoke and hub" for the region, a cyberattack here acts as a force multiplier, disrupting care across the state.
- **Critical Access Hospitals (CAHs):** Highly agile for small, daily emergencies. However, they lack the stockpiles and staffing depth to endure multi-day infrastructure failures. Their primary vulnerabilities are the external threats (blizzards, highway HAZMAT) that hinder their physical and digital lifelines to the hubs.



4. Capability & Readiness Assessment (Coalition Consensus)

Across the broader coalition, the facilities demonstrate the following operational reality:

- **Operational Plans (Mostly):** Almost all facilities have formalized Hospital Incident Command Systems (HICS).
- **Real-World Activations (Limited):** Hospitals are rarely forced to activate their command centers in a given year.
- **Information & Resource Sharing (Mostly):** Memorandums of Understanding (MOUs) and regional integrations are documented and legally intact.

5. Primary Barriers to Capability

To bridge the gap from "Mostly" prepared to "Completely" resilient, facilities cited the following barriers preventing them from achieving total capability:

1. **Funding:** Smaller hospitals lack the capital to invest in the redundant IT systems required to mitigate the **High** Cyber threats or build structural resilience against **High/Moderate** Severe Weather threats.
2. **Training / Exercise:** Because real-world command center activations are exceptionally rare, staff proficiency naturally degrades.

Strategic Conclusion

The data perfectly validates the fears of the rural network. South Dakota healthcare facilities are highly capable of managing localized, internal, and human-caused emergencies. However, the coalition is facing severe, highly probable external threats from **Cyber Networks** and **Meteorological Events**. Moving forward, the data inferences state coalition funding and regional simulation exercises must prioritize digital infrastructure hardening and severe weather continuity-of-care plans to ensure the network does not fracture during a systemic event.