

INSIGHTS: Summarizing Recent Research on Healthcare Workplace Violence

February 10, 2026



Publication: Prevalence of Weapons in the Health Care Setting: A Systematic Review and Meta-Analysis ([link](#) to original article)

Key Findings

Healthcare facilities increasingly face threats related to weapons carried by patients and visitors—a dangerous form of workplace violence that can escalate otherwise routine interactions into life-threatening situations. This study systematically reviewed the scientific literature to estimate how often weapons are present within healthcare settings, what kinds of weapons are found, and where these risks are most concentrated.

Researchers conducted a comprehensive search of major medical and scientific databases, screening studies that reported on the presence of weapons among individuals entering or present within healthcare environments. Fourteen observational studies—spanning from 1984 to 2023 and all conducted in the United States—met inclusion criteria.

Across these studies, the **prevalence of weapons identified ranged widely**, from less than 1 % to more than 26 % of individuals screened, reflecting differences in populations, settings, and screening methods. When combined using statistical methods that account for this variability, the **overall pooled prevalence of weapons in healthcare settings was estimated at approximately 4.0 %**.

Most weapons detected were **bladed instruments** (e.g., knives), with a pooled estimate of 3.8 %, while **firearms were uncommon but present** at a pooled rate of about 0.1 %. Other types of weapons (e.g., blunt objects) appeared at lower rates.

Notably, weapon prevalence varied depending on **who was screened and where** they were screened. For example, individuals entering the hospital overall showed a modest rate of weapon prevalence, but rates were substantially higher among **major trauma patients** who were hand-searched as part of clinical care. Additionally, weapons were more commonly identified among **male individuals** than female individuals in the studies that reported gender data.

Implications & Recommendations for Hospital Administrators and Security Personnel

Area of Focus	Recommendation
Screening Policies	Evaluate the feasibility and ethics of targeted weapon screening (e.g., in trauma units, emergency departments) to identify risks early.
Security Training	Provide security personnel and frontline staff with training on recognizing, reacting to, and de-escalating encounters involving weapons.
Environmental Controls	Assess physical access points and consider metal detection or other passive detection technologies in high-risk units.
Incident Reporting	Standardize documentation of weapon-related incidents to track trends and inform policy adjustments.
Collaboration with Law Enforcement	Establish clear protocols with local law enforcement for timely response when weapons are identified or threats are imminent.
Staff Support & Communication	Communicate findings transparently with staff and include them in planning safety enhancements to build trust and reduce anxiety.
