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Burn Admissions and Burn Care Adaptation During Four Years of War in Ukraine, 2022–2025

Burn admission volume increased during Russia's full-scale invasion of Ukraine, straining the healthcare system. The Lviv Burn Center First Medical Union serves as a major referral center for both civilian and military burn patients and has undergone rapid transformation to meet evolving demands. This study evaluates burn admission trends from 2022–2025 and describes system-level adaptations in burn care delivery.

A retrospective review of de-identified institutional data was conducted for all burn admissions from January 2022 through December 2025. Annual volumes were stratified by pediatric (<18 years) and adult (≥18 years) populations and compared with pre-war averages (2015–2019). Trends were interpreted alongside publicly reported civilian casualty data from the United Nations Office of the High Commissioner for Human Rights.

Total burn admissions remained above the prewar institutional average of 1,008 per year, reaching 1,079 in 2022, 1,440 in 2023, 1,538 in 2024, and 1,204 in 2025. Pediatric admissions were 541 (37.6%) in 2023, 533 (34.7%) in 2024, and 410 (34.1%) in 2025, representing approximately one-third of annual burn admissions throughout 2023–2025. Nationally reported civilian injuries increased from 6,651 in 2023 to 12,176 in 2025, while deaths increased from 1,975 to 2,549. Concurrent system level adaptations included an expanded intensive care and rehabilitation capacity, establishment of a skin bank, contemporary operative and critical care practices, antimicrobial stewardship, updated fluid resuscitation protocols, and extended dressing-change intervals to conserve resources.

Burn-care demand remained above the prewar institutional average throughout the first four years of Russia's full-scale invasion. National civilian casualty trends did not consistently parallel Lviv burn admissions, highlighting that national casualty counts may provide context for conflict intensity but do not directly capture specialized burn-care demand. Concurrent advances in referral, critical care, surgical, rehabilitation, antimicrobial, reconstructive, and scar-management practices demonstrate the importance of continuous system adaptation during prolonged conflict. A national burn registry with standardized adult and pediatric data elements is needed to evaluate injury mechanisms, treatment, outcomes, and system performance.