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COMMENTARY

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Commentary on Friedman *et al.*: Inequitable improvements and data gaps—A call for better drug surveillance data

Deaths should not be our proxy for data on the illicit drug supply. The United States needs an integrated drug surveillance infrastructure to target interventions, evaluate policies and adapt during this rapidly evolving overdose epidemic.

After increasing for decades, United States (US) drug overdose deaths fell 24.4% in 2024—the largest single-year decline of the crisis [1]. However, the magnitude and timing of improvements in drug overdose mortality are inequitably distributed across racial and ethnic groups. Friedman and colleagues [1] disentangle the national decline by race and substance involvement. Despite the dramatic decline, the 2024 age-adjusted Black overdose mortality rate (33.8 per 100 000) was only slightly lower than the highest ever observed among non-Hispanic White Americans (35.6 per 100 000 in 2022) [2]. Among American Indian and Alaska Native Americans, the 2024 age-adjusted mortality rate (51.6 per 100 000) was nearly 45% higher than the peak non-Hispanic White rate. These official numbers likely understate the real gap, as approximately half of American Indian and Alaska Native deaths are misclassified on US death certificates [3].

The substances driving drug overdoses vary sharply by racial group. Methamphetamine-involved deaths not involving fentanyl were over three times the national rate among American Indian and Alaska Native Americans in 2024, a longstanding pattern [4]. Similarly, cocaine-involved deaths not involving fentanyl were over three times the national rate among Black Americans, a multi-decade pattern that predates the recent decline [5], and xylazine-involved deaths were 1.66 times the national rate [1].

These race-specific patterns are rooted in a long history of structural exclusion. Methamphetamine mortality among American Indian and Alaska Native populations is concentrated in places with limited Indian Health Service (IHS) coverage [4]. The IHS itself operates at approximately 50% of the per-capita funding of comparable federal health systems [6]. Similarly, cocaine mortality among Black Americans is concentrated in metropolitan areas where three forces intersect: decades of disinvestment in opioid treatment access, the increasing co-involvement of fentanyl in cocaine supply and a longer history of criminalization and treatment-system exclusion [5, 7]. There is no US Food and Drug Administration-approved pharmacotherapy for cocaine use disorder, and contingency management (the only evidence-based treatment) has only recently begun to gain Medicaid coverage in a small number of states [8]. US methadone delivery is restricted to federally regulated opioid treatment programs, leaving rural communities—including tribal lands—at substantial driving distance from the nearest provider [9]. Buprenorphine is concentrated in predominantly White and private-pay clinical settings [10]. The race-stratified rates Friedman *et al.* [1] report are downstream signals of upstream drivers—appropriations, geography, treatment access—that vary by place.

Mortality records are a lagging indicator, and these structural factors become visible in mortality data only after the fact. They document where the supply has already landed in bodies. When potency or substances shift, deaths must accumulate before a change is detected. Vangelov and colleagues [11] argue that the 2024 decline reflects a North American supply shock, traceable through seizure purity data and social-media content analysis. That triangulation was necessary because the existing US supply-monitoring infrastructure cannot meet that need. National Forensic Laboratory Information System-Drug, arguably the most comprehensive drug-monitoring system in the United States, tests only a subset of drugs from law enforcement seizures, providing a biased glimpse of the US illicit drug supply rather than a systematic overview [12]. The substance coding system itself is inadequate, for instance, nitazenes and other emerging synthetic opioids fall under the same broad ICD-10 code (T40.4) that already captures fentanyl [13], so the next wave's first deaths may register in vital statistics as more of the same. Deaths should not be our proxy for data on the illicit drug supply.

Answering basic questions—which racial group will be most affected by the next shift, which adulterant is replacing the last, which county is at highest risk—will require an integrated drug surveillance infrastructure the United States has not yet built. The European Union Drugs Agency has coordinated standardized wastewater surveillance across 88 cities in 23 European countries for over a decade [14]. Emergency department-based toxicology surveillance has detected emerging adulterants such as medetomidine before they appeared in mortality data [15]. Wastewater testing of illicit-drug metabolites, de-identified biospecimen sampling and social media could complement vital statistics in something closer to real time [16]. The ability to collect the data exists, but there will be challenges. Any expansion of these data streams onto tribal lands requires tribal-data-sovereignty arrangements consistent with the CARE Principles (collective benefit, authority to control, responsibility, and ethics) for Indigenous data governance [17], that the current vital statistics infrastructure does

not yet accommodate [18]. Furthermore, death reporting in the United States is fractured and quality is variable [19, 20]. However, without this infrastructure, the 'tailored solutions' Friedman and colleagues call for will be tailored to last year's epidemic—for as long as the data remain retrospective.

KEYWORDS

cocaine, drug overdose mortality, fentanyl, illicit drug supply, methamphetamine, racial disparities

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