

## The Mortality After Release from Incarceration Consortium (MARIC) study: Strengths of international data linkage

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### Introduction

Adults released from incarceration experience complex physical and mental health problems, and are at markedly increased risk of preventable death. Despite this, not enough is known about the granular epidemiology of mortality in this population to inform development of targeted, evidence-based responses.

### Objectives and Approach

We created the Mortality After Release from Incarceration Consortium (MARIC), a multi-disciplinary collaboration from 12 countries representing 30 cohorts of adults with a history of incarceration. The combined sample size is 1,210,168, with 58,840 deaths recorded over 8,261,743 person-years of follow-up time. In this protocol paper, using a two-step, individual participant data meta-analysis (IPDM-A) methodology involving 22 MARIC cohorts, we calculated 1) a crude mortality rate (CMR; with 95% confidence intervals) for each individual cohort over the first 84 days (12 weeks) following release; and 2) a combined, meta-analysed CMR for the same period.

### Results

Of 1,704,208 individual releases, we observed 4,018 deaths over the first 84 days. The overall CMR over the first 84 days after release was 1610.97 deaths per 100,000 person-years (95% CI: 1263.4 - 1958.5). The rate was highest on the day of release (5768.0; 95% CI: 3296.5 - 8239.4), which was significantly higher than on days 4-84.

### Conclusion/Implications

Adults released from incarceration were at an acutely increased risk of death on the day of release, and this risk remained elevated for at least the first 12 weeks. The MARIC study will provide decisive and empirical evidence to guide clinicians and policy makers in reducing mortality in this marginalized

