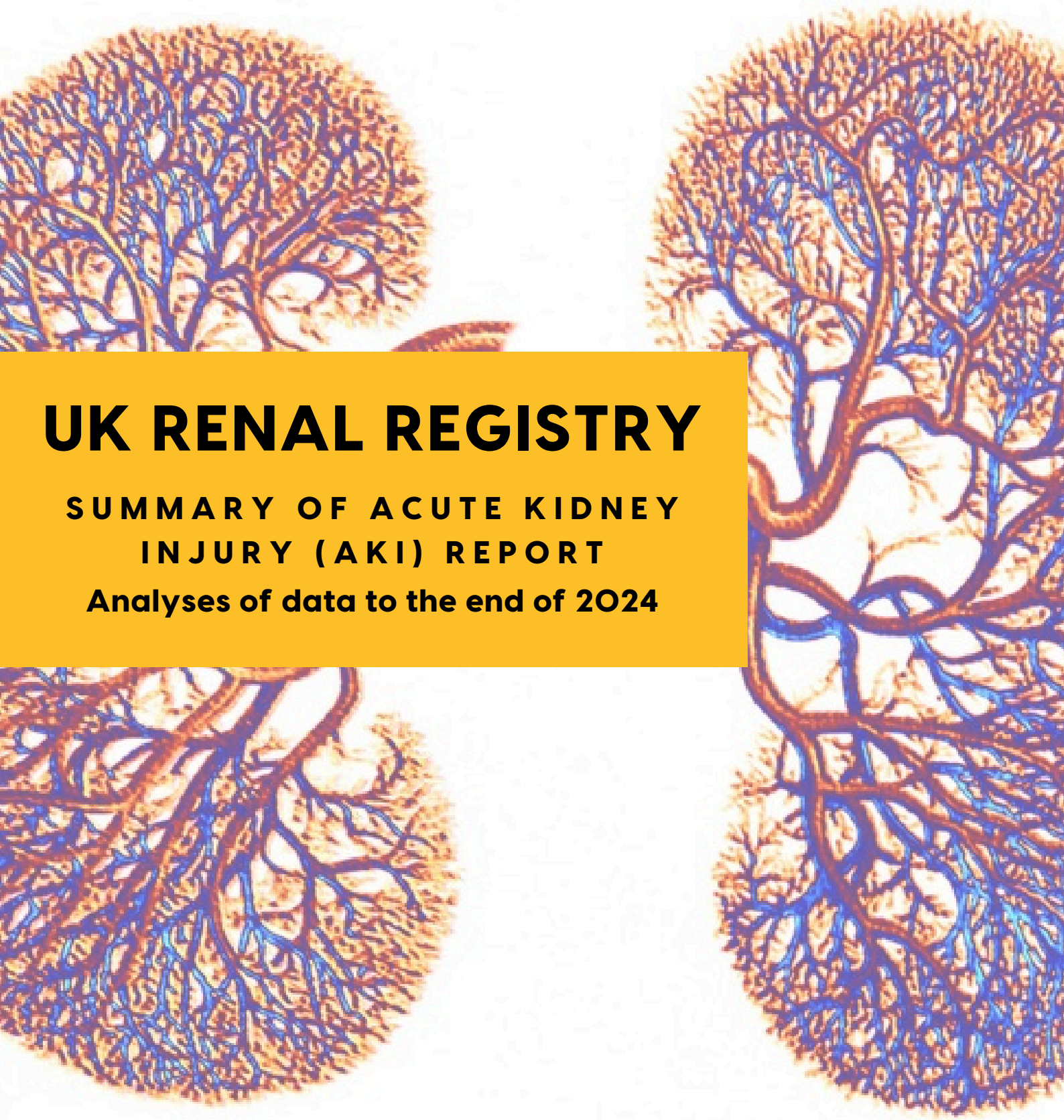

UK RENAL REGISTRY

SUMMARY OF ACUTE KIDNEY INJURY (AKI) REPORT

Analyses of data to the end of 2024

UKKA

UK Kidney Association
UK Renal Registry

INTRODUCTION

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Chair, UKKA Patient Council

Acute kidney injury (AKI) describes a sudden decline in kidney function, lasting from hours to days. It often occurs as a complication of acute illnesses, such as sepsis or heart attack, and may develop in hospitals or the community, for example, in nursing homes. AKI is categorised into stages, ranging from the least severe (stage 1) to the most severe (stage 3).

The first England-wide AKI report from the UK Renal Registry (UKRR) was compiled in response to the National Confidential Enquiry into Patient Outcome and Death (NCEPOD) report, Acute kidney injury: adding insult to injury. The report was published in 2020, followed by yearly reports since 2023. This report highlights the main findings from data on individuals recorded with an AKI warning test score during 2024.

97% of laboratories in England were included in the report, compared to 95% in 2023. This enables the UKRR to have greater confidence in the population rate of AKI, with fewer assumptions and adjustments necessary to estimate the population covered.

Unfortunately, the latest AKI report reveals that the overall rate of AKI continues to rise each year. However, the rate of AKI-associated deaths has improved over the last two consecutive years. Substantial differences in AKI rates persist across geographic areas, even after accounting for the age and sex of individuals in these regions.

In addition, this report includes data on patients with AKI who required dialysis or admission to an Intensive Therapy Unit (ITU), also referred to as an Intensive Care Unit (ICU). These patients face a significantly increased risk of death while hospitalised, contributing to increased pressures on healthcare systems.

Improving the prevention, detection, treatment, and follow-up of AKI remains a national priority. This effort is supported by NICE guidance and updated AKI resources available on the UKKA website.

ACUTE KIDNEY INJURY

Acute kidney injury (AKI) is defined as a **sudden decrease** in kidney function.
It has a number of **different causes**.
AKI can be grouped into **3 stages**, with stage 3 being the most severe.

This is a summary of the UKKA's report on the nationwide collection of AKI warning test scores from 2024.

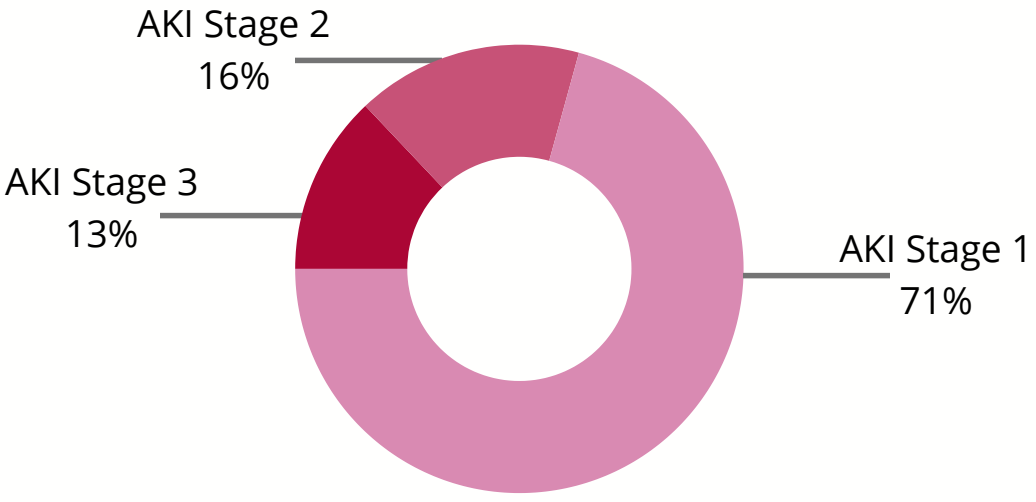
This summary is designed to:

1. Demonstrate the **impact** of AKI on the **English population** in 2024.
2. Show the different **characteristics and outcomes** of people with AKI, comparing people who develop AKI in the community with those who develop it in hospital.

Characteristics of people with AKI in 2024

- **97% of people** with AKI were **aged over 18**.
- The **average age** of people with AKI was **73.1 years**.
- **Males and females** were almost **equally likely** to develop AKI (48.2% male / 51.8% female).
- There were **more people** with AKI **in the most deprived areas** (23%) than the least deprived (17%).

AKI by peak stage



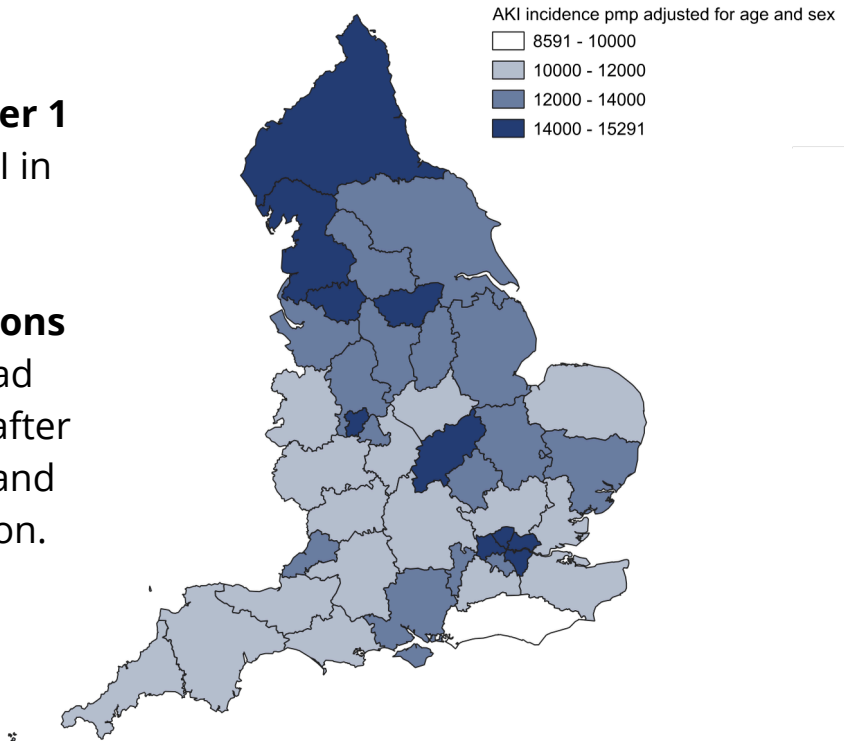
71% of people had an AKI that did not progress past Stage 1

Rate of AKI episodes per million population for England in 2024, by Integrated Care Board*

*Integrated Care Boards are NHS organisations responsible for planning health services for their local population

Across all of England, **just over 1 in 100** people developed AKI in 2024.

Different geographical regions (Integrated Care Boards) had **different rates of AKI** even after taking into account the age and sex of the people in the region.



Community acquired versus hospital acquired AKI

About **600,000 people** experienced one or more **AKI episodes in 2024**.

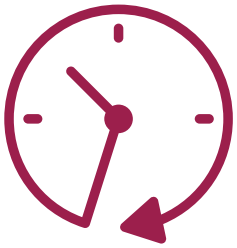
The **majority** of individuals developed their AKI in the **community** (70%), which means the AKI occurred in a setting outside the hospital, such as a person's home or in long-term care. This includes people whose AKI was diagnosed within 48 hours of admission to hospital.

The remaining AKI episodes occurred in hospital (30%).

70% developed AKI in the community

OUTCOMES OF AKI

Length of stay in hospital



Where people with AKI were in hospital (for any reason), those who had an **emergency admission** stayed in hospital longer (**11 days**) than those who had a **planned admission (9 days)**. Among patients hospitalised with **severe AKI** (stage 2 and 3), **9%** required dialysis and **16%** needed intensive care.

People who developed **AKI in the community** had a **shorter hospital stay** than people who developed AKI in hospital.

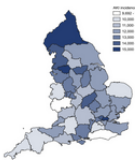
Risk of death

Risk of death within 30 days of an AKI episode **increased with AKI stage** – 12% for stage 1, 26% for stage 2, and 33% for stage 3.

There were **more deaths in people who developed their AKI in hospital**, and also more deaths in the winter months in people with AKI.

CONCLUSIONS

The overall rate of AKI has increased but mortality rates have improved.



There continue to be substantial **differences** in the rates of AKI **across geographical areas**, even when taking into account the age and sex of the people in the area.

AKI continues to be associated with a **significant number of deaths**, and the rates of AKI-associated deaths vary between hospitals and regions.

UKKA

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For more information about this report, or the UK Renal Registry, please contact:

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Kidney Patient Reported Experience Measure (PREM) reports are available from:
ukkidney.org/kidney-patient-reported-experience-measure

The UK Renal Registry Data Portals, with information on the Annual Report, are available from:
ukkidney.org/audit-research/data-portals