

New research uncovers factors that increase unintentional injury hospitalisation

9 December 2024

A new study by Menzies School of Health Research has uncovered high rates of unintentional injury hospitalisation among children under 5 in the Northern Territory (NT) as well as a concerning link between these injuries and incidents of child maltreatment.

Published in PLOS ONE, the study found that key factors associated with unintentional injury hospitalisations in children included being male, living in a remote or very remote area, and having a record of child protection notifications or confirmed cases of abuse. Child protection notification for neglect was noted as an additional risk factor for Aboriginal children.

These findings come from examining data from more than 20 000 children (where 54% identified as Aboriginal) born between 2000 and 2010 in the NT.

By linking data from perinatal records, hospital admissions, school enrolment and child protection services until a child reached 5 years of age, the researchers were able to produce a more comprehensive picture of how different factors contribute to unintentional injury hospitalisation.

The top 2 causes of unintentional injury hospitalisation were falls and contact with fire/heat in both Aboriginal and non-Aboriginal children. The incidence rates were higher in Aboriginal children for most major causes except the rate for drowning, which was higher in non-Aboriginal children. However, when the analysis included multiple other risk factors, the rate difference between Aboriginal and non-Aboriginal children disappears. This indicated that the higher rate of unintentional injury hospitalisation observed in Aboriginal children can be explained by the varied exposure to these other risk factors.

Reducing these injuries are key to Closing the Gap and lowering the associated mortality experienced by Aboriginal children.

The researchers noted that the factors identified highlight the importance for cross-agency collaboration to best support child outcomes. They also noted the importance of community-based parenting programs to grow knowledge on child safety to reduce injury risk.

This study was made possible through the Child and Youth Development Research Partnership (CYDRP), a collaboration between Menzies School of Health Research and the Northern Territory Government Departments of Children and Families, Health, Education and Training, Chief Minister and Cabinet, Treasury and Finance, the Attorney-General's Department and NT Police.

Read the study in full: <https://doi.org/10.1371/journal.pone.0311586>

Quotes attributable to lead author of the study and Data Manager/Analyst at Menzies School of Health Research, [Dr Jiunn-Yih Su](#):

"This data linkage study is key to helping us better understand child and youth wellbeing across the Northern Territory.

“Through identifying the factors that place children at risk, it supports initiatives and prevention programs to be targeted where they are needed the most.”

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Menzies School of Health Research

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