



Figuring out fever: What do parents know and do?

Poll report

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Report highlights

- Australian parents report over half (58%) of children aged less than five years have had a fever in the past three months.
- One in three parents say they would always or often visit the GP if their child had a fever and one in 10 would always or often visit an emergency department.
- Many parents hold misbeliefs with 32% believing fever is always a sign of serious illness and 40% mistakenly believing untreated fever can cause death.
- Parents have misunderstandings about the role of medication with four in five believing that treating a fever with medication will help a child get better.

About fever

A fever is when the body temperature is higher than normal. Normal body temperature can vary depending on the age of a child, how it is measured and the time of day, but typically a temperature of 38°C or more is considered a fever.

Fever is common in children. A fever is a normal response to many illnesses and is commonly caused by an infection in the body. Fever itself is usually not harmful – in fact, it helps the body's immune system fight off infection. It is more important to consider how well a child is than to focus on the fever.

This report focuses on fever in children aged over three months. Children aged less than three months with a fever should always be seen by a healthcare provider.

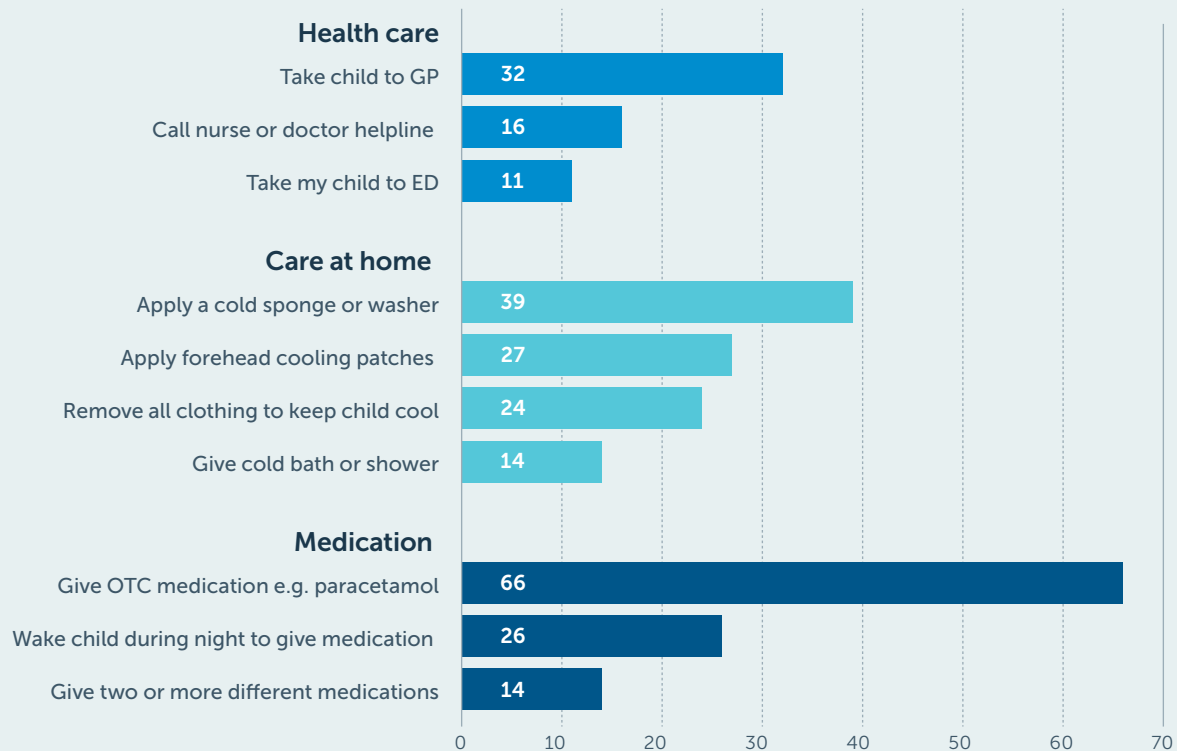
How common is fever?

According to parents, 41% of children have had a fever in the past three months, more commonly in younger children. Parents report that 58% of children aged less than five years, 38% of those aged five to 11 years, and 31% of those aged 12 years or older have had a fever. Prevalence of fever was based on parent report and may be an under or over-estimate as some parents may not have been able to accurately determine if their child had a fever.

Do parents know the correct temperature for a fever?

Approximately one in three (36%) parents know a fever is a temperature of 38°C or above. The majority of parents (64%) did not know the correct temperature and incorrectly believe the threshold for a fever to be either lower (42%) or higher (19%) than 38°C with 3% of parents not sure.

How parents typically care for a child* with fever



Percentage of parents (n = 2,007)

*Child aged three months or more

Note: Figure reports proportion (weighted) of parents who 'often' or 'always' take the listed actions

Figure 1.

Misbeliefs parents hold about fever in children aged over three months

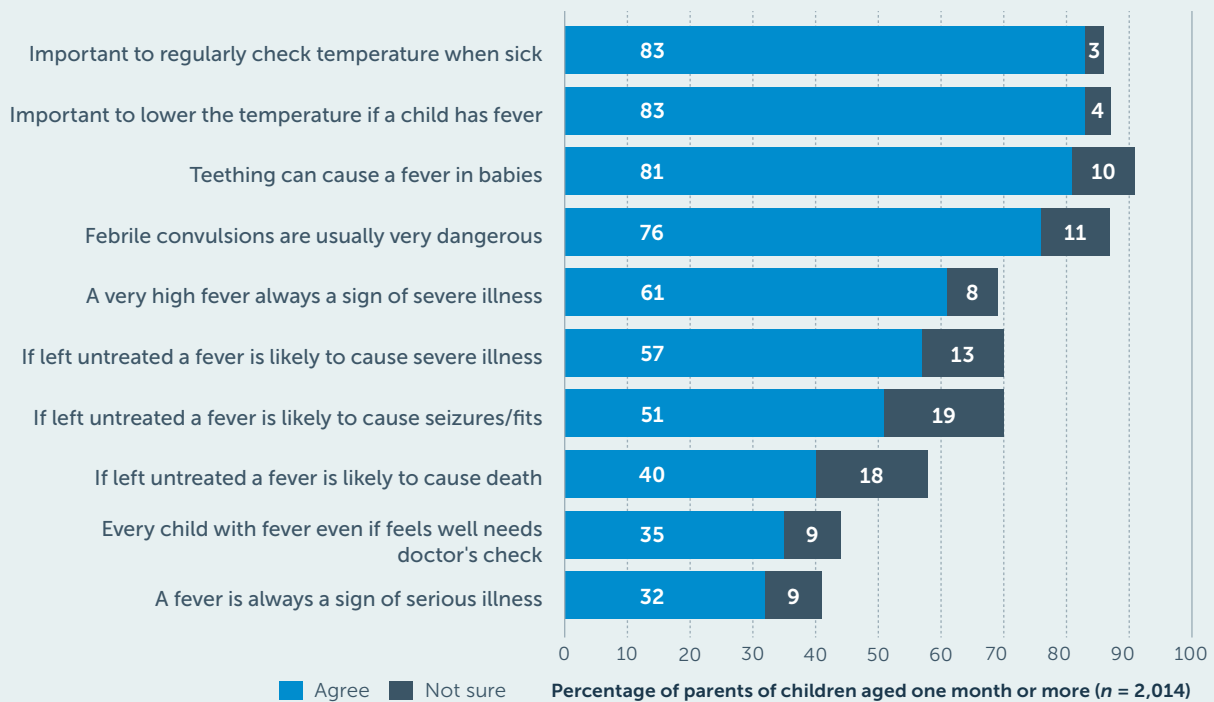


Figure 2.

How do parents care for a child with fever?

Health care

The majority of parents say they would typically seek some form of medical care when their child aged over three months has a fever. One in three parents (32%) say they would always or often and one in two (50%) say they would sometimes visit the GP if their child has a fever. Eleven per cent of parents would often or always take their child to an emergency department, and a further 29% say they would sometimes. Parents also use nurse or doctor helplines such as NURSE-ON-CALL, with 16% saying they would often or always, and 35% saying they would sometimes call them.

Care at home

Non-pharmaceutical measures

The most common way parents reportedly respond to their child's fever at home is to apply a cold sponge or face washer, with 39% saying they would always or often do this. One in four (24%) parents also report they would often or always remove all their child's clothing to keep them cool. Applying forehead cooling patches is also common with just over one in four (27%) often or always using them and one in three (33%) sometimes using them (see *Figure 1*).

Use of over-the-counter medication

The most common way parents respond to fever in their child is by giving over-the-counter (OTC) medication such as paracetamol or ibuprofen, with two thirds of parents (66%) saying they would often or always and one quarter (24%) saying they would sometimes give medication. One quarter (26%) of parents report they would always or often, and one third (35%) would sometimes wake their child during the night to give them medication. Although most parents (55%) say they would rarely or never give their child two or more medications, one in seven (14%) would often or always give two or more medications (see *Figure 1* on previous page).

Misbeliefs parents hold about fever

Harm associated with fever

Parents reported a wide range of concerns and misbeliefs about fever in children aged over three months. One in three parents (32%) mistakenly believe that a fever is always a sign of serious illness and just under two in three (61%) believe that a very high fever is always a sign of a severe illness. Most parents are concerned about febrile convulsions, with three quarters (76%) mistakenly believing they are usually very dangerous (see *Figure 2*).

Misbeliefs about giving medication for a fever

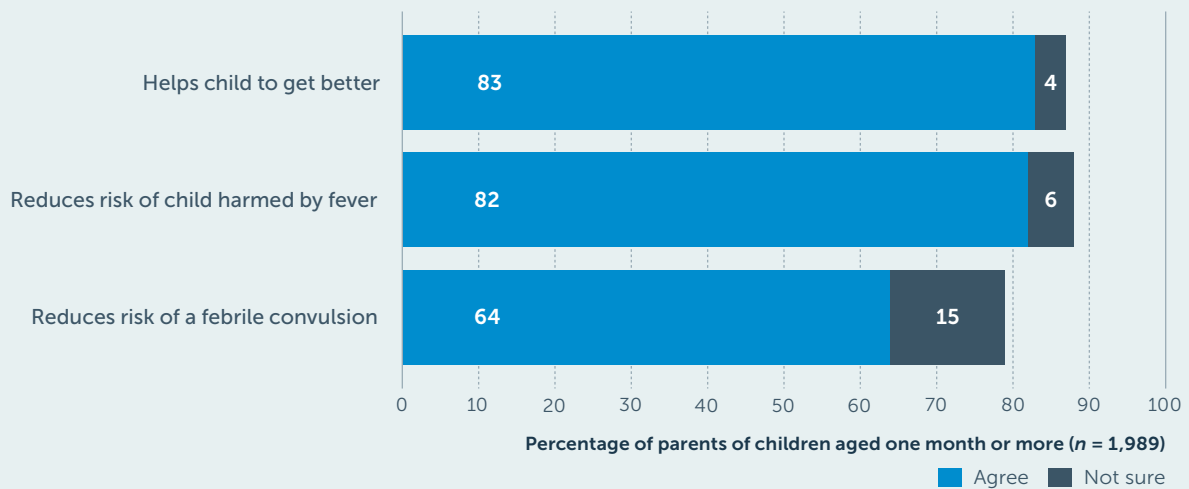


Figure 3.

Treatment of fever

Most parents hold misbeliefs about the need to treat fever in children over three months of age. The vast majority believe that a fever should be treated, with four in five (83%) believing it is important to try and lower the body temperature of a child with a fever. Other common misbeliefs held by parents include that if left untreated, fever can cause severe illness (57%), seizures or fits (51%), brain damage (47%), or blindness or coma (33%). One in three (35%) parents believe that every child with a fever needs to be seen by a doctor, even if they appear well (see *Figure 2*).

Fever is common:
Over half of children under five years have recently had a fever.



Why parents give medication for fever

Over half (59%) of parents say that medication should always be given to lower the body temperature. Parents were asked how they thought giving OTC medication to reduce their child's fever would help their child. Almost all parents (90%) reported medication would reduce discomfort caused by fever. However, the vast majority of parents falsely believed medication would help their child to get better (83%), reduce the risk of their child being harmed by the fever (82%) and reduce the risk of a febrile convulsion (64%) (see *Figure 3*).

Which parent groups have the biggest knowledge gaps?

Younger parents, parents who spoke a language other than English and single parents more commonly held misbeliefs about harm associated with fever, often falsely believing fever itself to be harmful. For example, 69% of parents aged between 18–30 years believed if left untreated, fever could cause serious illness compared to 46% of parents aged 50 years and over.

Among parents who spoke a language other than English at home, 68% held this belief compared to 53% of parents who only spoke English as did 64% of single parents compared to 55% of partnered parents. This demographic group (younger parents, parents who spoke a language other than English at home and single parents) also more commonly believed that every child needed to be checked by a doctor, even if they appeared well (51% in 18 <30 year olds vs 30% in 50 years and over; 45% other language vs 31% English at home; 48% single parents vs 31% partnered parents).

Use of OTC medication to treat fever was very common in all demographic groups and the false belief that giving medication helped children with fever to get better was also widespread. This belief did not differ markedly by language spoken at home and family structure but was more prevalent among younger parents (92% in 18–30 year olds vs 81% in 40–50 years) and those who had a lower level of education (92% certificate, 87% Year 12 or less vs 79% with undergraduate degree or higher).

Implications

Fevers are common in childhood, particularly in preschool-aged children. Fever is a normal response to many illnesses, most typically an infection in the body. Despite how commonly children experience a fever, many parents hold misbeliefs or misunderstandings about the cause of fever and how to care for a child with a fever at home.

Parents are concerned about harm caused by fevers, with many subscribing to myths about the height of the fever being related to the seriousness of illness. This may be why parents are commonly giving medication and seeking medical care when many fevers can be managed at home.

One in three parents say they would often or always see a GP if their child had a fever and one in ten would attend an emergency department. While many parents will appropriately care for their child with a fever at home, there are a number of common practices, such as tepid bathing and stripping off clothing, that are unhelpful and in some cases can be harmful. If a child has a fever and is otherwise well, parents should focus on keeping them comfortable and well hydrated, and allow time to rest.

Treatment of fever at home with OTC medications is very common, with two thirds of parents often or always giving medication to their child when they have a fever. Misbeliefs such as fever is harmful and that lowering the body temperature is important are widely held and likely contribute to the frequent use of medications. Of concern, four in five parents held the misbelief that treating a fever with temperature-lowering medication would help a child to get better. Lowering a fever will not assist with treating an underlying illness and it is not necessary to 'treat' a fever if the child is otherwise well and comfortable.

The findings of this report highlight the need to educate Australian parents about the role of fever in the body's immune response and how to safely care for a child with fever at home when appropriate. Parents would benefit from advice on the signs and symptoms that suggest a child is unwell and needs medical attention, rather than relying on fever alone. Education for parents and caregivers about when medication is needed might help reduce unnecessary use of medication in children with fever.

One in three
parents mistakenly
believe fever is
always a sign of
serious illness.



Data source and methods



This report presents findings from a nationally representative household survey conducted exclusively by the Online Research Unit for The Royal Children's Hospital, Melbourne. The survey was administered from 11–21 April, 2023, to a randomly selected stratified by age, sex and state of residence, nationally representative sample of Australian parents aged 18 and older ($n = 2,014$). Among Online Research Unit panel members contacted to participate the completion rate was 77%.

Parents provided data on a collective total of 3,324 children aged between one month to 17 years about fever in children. Parents also provided information on their knowledge and management of childhood fever and the prevalence of fever in their children.

The estimates were subsequently weighted to reflect Australian population figures from the Australian Bureau of Statistics.

References



1. Fever in children. KHI fact sheet. The Royal Children's Hospital rch.org.au/kidsinfo/fact_sheets/fever_in_children
2. Fever in children. Healthdirect fact sheet. Australian Government Department of Health healthdirect.gov.au/fever-and-high-temperature-in-children

Suggested citation



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