

## 3 Mental health-related care in emergency departments

Hospital emergency departments play a role in treating mental illness. The emergency department can be the initial point of care for a range of reasons. For example, a 2004 Victorian study of emergency department presentations found that emergency departments were used as an initial point of care for those seeking mental health-related services for the first time, as well as an alternative point of care for people seeking after-hours mental health care.

State and territory health authorities collect a core set of nationally comparable information on most public hospital [emergency department occasions of service](#) in their jurisdiction which is compiled annually into the National Non-Admitted Patient Emergency Department Care Database (NNAPEDCD). Jurisdictions also collect [principal diagnosis](#) information (in some form) for many emergency department occasions of service reported to the NNAPEDCD, which states and territories have used to identify emergency department occasions of service that were mental health-related for this section.

The definition of [mental health-related emergency department occasions of service](#) in this section has a number of limitations. As a consequence, the data presented in this section are likely to under report the actual number of mental health related emergency department occasions of service. Further information on data collection limitations can be found in the [data source](#) section.

### Key points

- In 2008–09, there were close to 172,000 emergency department occasions of service with a mental health-related principal diagnosis.
- Since 2004–05, there has been an annual average increase of 5.5% in the total number of occasions of service recorded.
- The most common principal diagnosis for mental health-related occasions of service was *neurotic stress-related and somatoform disorders*, followed by *mental and behavioural disorders due to psychoactive substance use* and then *mood (affective) disorders*.
- Over 80% of mental health-related emergency department occasions of service were classified as urgent and semi-urgent.
- In 2008-09, over 60% of the mental health-related emergency department occasions of service were resolved without the need for admission or referral.

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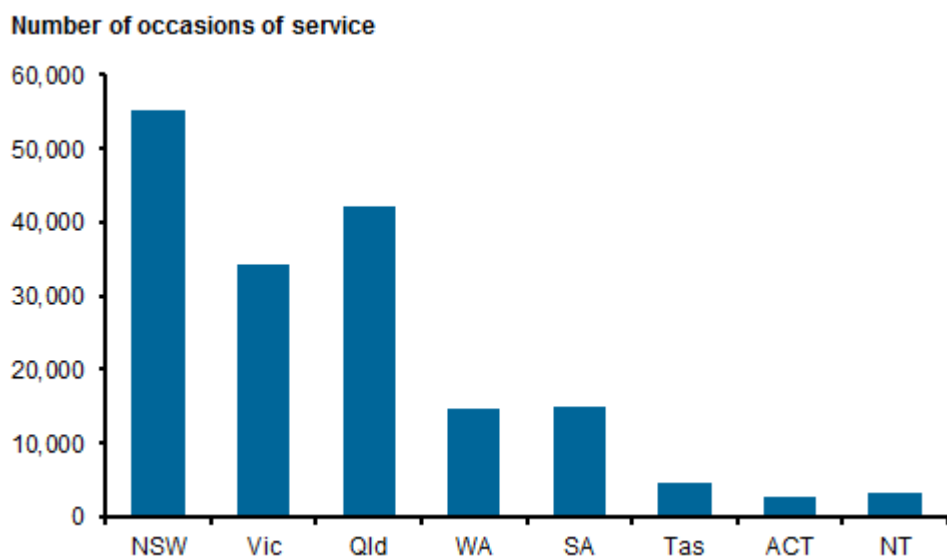
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### References

Victorian Government Department of Human Services 2006. Mental health presentations to the emergency department. Melbourne: Victorian Government. Viewed April 2011, <<http://www.health.vic.gov.au/mentalhealth/emergency/mh-presentations.pdf>>.

## Mental health occasions of service by states and territories

States and territories reported a total of 171,976 public hospital emergency department occasions of service with a mental health-related principal diagnosis in 2008–09. However, once state and territory [coverage estimates](#) and the proportion of occasions of service with a reported principal diagnosis have been taken into account it is estimated that there were 267,300 mental health-related public hospital emergency department occasions of service in 2008–09 (Figure 3.1). This represents an increase of 3% on the estimated number of mental health-related emergency department occasions of service reported in 2007–08 (258,500).



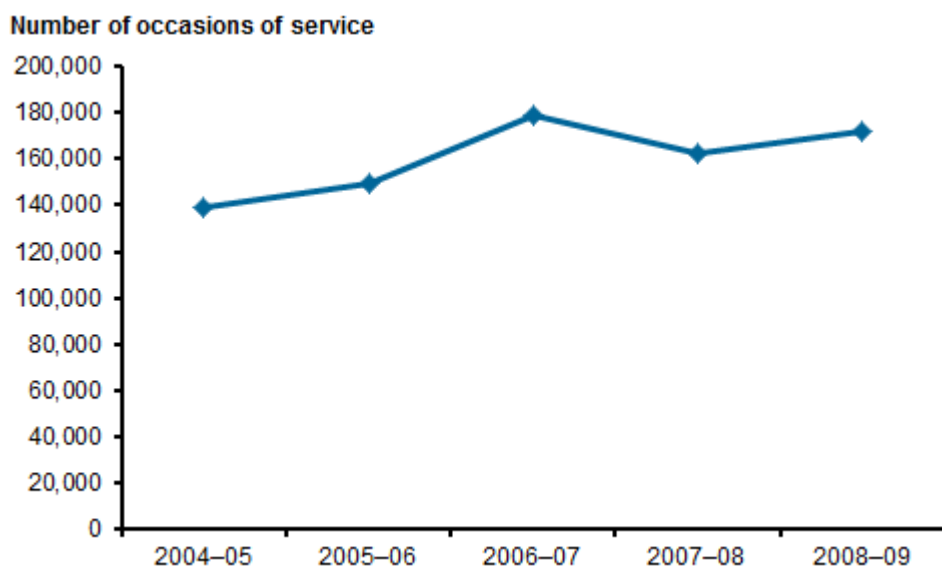
Source: Data provided by state and territory health authorities.

**Figure 3.1: Mental health-related emergency department occasions of service in public hospitals, by states and territories, 2008–09**

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## Mental health occasions of service over time

The number of mental health-related emergency department occasions of service has increased over the 5 years to 2008-09, at an annual average rate of 5.5% per year (Figure 3.2). In 2007-08 there was a decrease in the number of occasions of service reported compared with the previous year. This was largely due to one jurisdiction implementing a new emergency department information system, which impacted their reporting of activity in 2007-08.



Source: Data provided by state and territory health authorities.

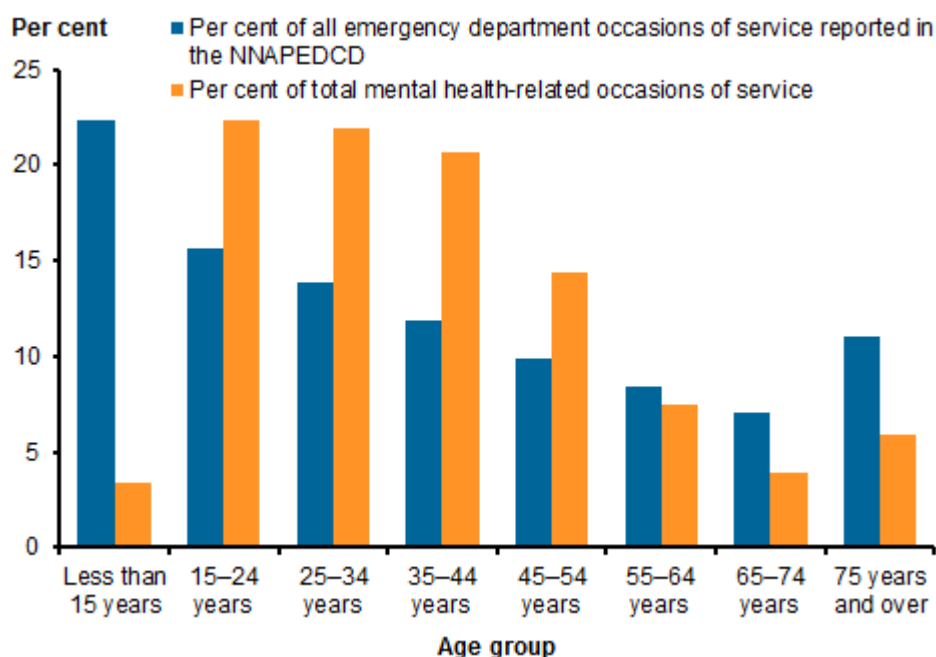
**Figure 3.2: Mental health-related emergency department occasions of service in public hospitals over time, 2004-05 to 2008-09**

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# Mental health occasions of service client characteristics

## Patient demographics

There were marked differences in age distribution when comparing mental health-related emergency department occasions of service with all emergency department occasions of service, featuring a higher percentage in the 15–54 year age bracket (79.3% and 51.2%, respectively) and a much lower percentage aged less than 15 years (3.4% and 22.3%, respectively)(Figure 3.3).



Source: Data provided by state and territory health authorities.

**Figure 3.3: Emergency department occasions of service in public hospitals, by age group, 2008-09**

In 2008–09, males and females showed roughly similar proportions of mental health-related emergency department occasions of service (51.1% compared with 48.9%).

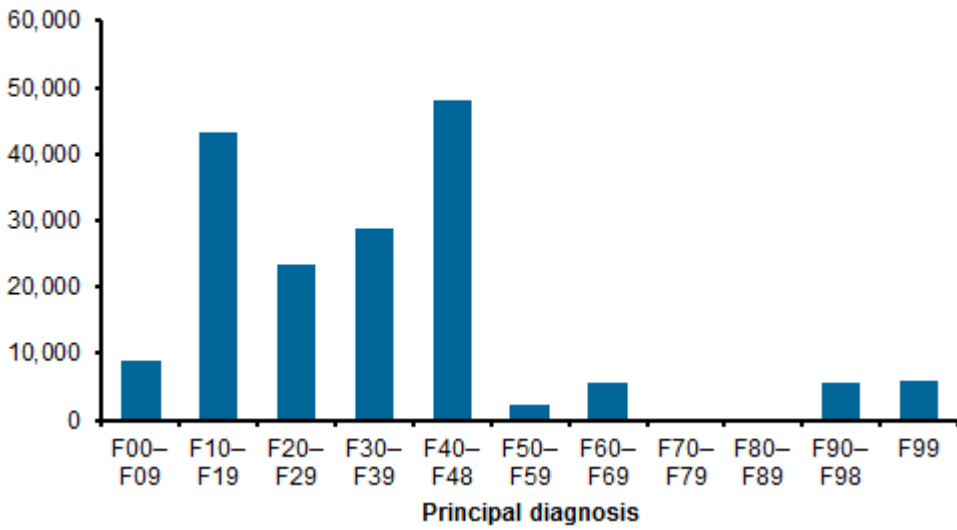
Aboriginal and Torres Strait Islander people represent 2.5% of the Australian population. However, they accounted for 6.1% of the mental health-related emergency department occasions of service, and 4.5% of all emergency department occasions of service.

## Principal diagnosis

Data on mental health-related occasions of service by principal diagnosis is based on the broad categories within the Mental and behavioural disorders chapter (Chapter 5) in the ICD-10-AM.

In 2008–09, four diagnosis categories accounted for the majority (83.3%) of mental health-related emergency department occasions of service (Figure 3.4). These were *Neurotic, stress related and somatoform disorders* (F40–F48; 27.9%), *Mental and behavioural disorders due to psychoactive substance use* (F10–F19; 25.1%), *Mood (affective) disorders* (F30–F39; 16.7%) and *Schizophrenia, schizotypal and delusional disorders* (F20–F29; 13.6%).

Number of occasions of service



Source: Data provided by state and territory health authorities.

**Figure 3.4: Mental health-related emergency department occasions of service in public hospitals, by principal diagnosis, 2008-09**

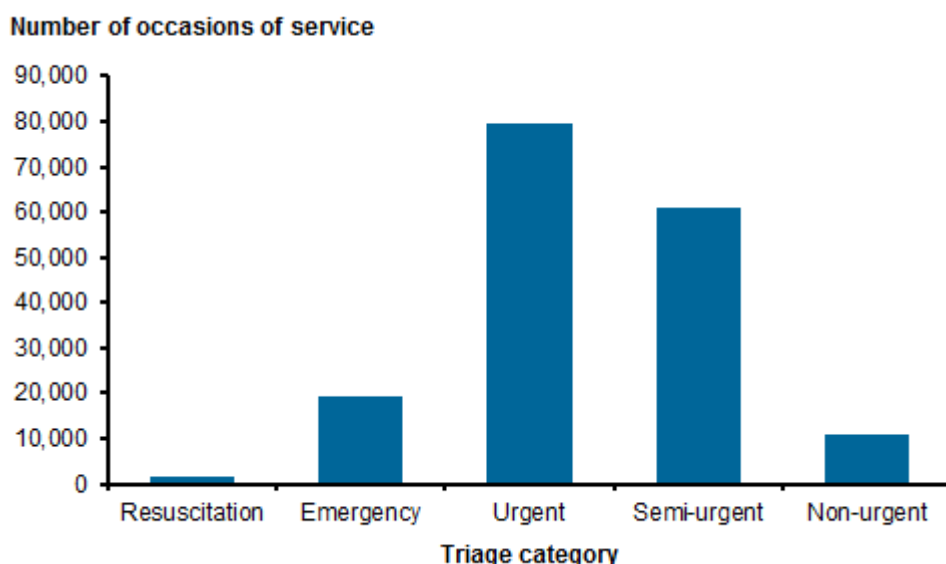
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# Mental health occasions of service characteristics

## Triage category

The urgency of a patient’s need for medical and nursing care is assessed when a patient is triaged in the emergency department and an appropriate *triage* category is assigned to reflect priority for care. For example, patients triaged to the emergency category are assessed as requiring care within 10 minutes. However, care may or may not actually be received within the designated time frames.

In 2008–09, the majority of mental health-related emergency department occasions of service (81.6%) were classified as urgent and semi-urgent. The breakdown in Figure 3.5 shows that 6.3% of mental health-related occasions of service in emergency departments were considered non-urgent (requiring care within 120 minutes), 35.4% were recorded as semi-urgent (within 60 minutes) and 46.2% as urgent (within 30 minutes) A further 11.1% were classified as emergency (requiring care within 10 minutes) and 0.9% as resuscitation (immediate care). In addition, mental health-related occasions of service (57.3%) were more likely than all emergency department occasions of service (45.6%) to be assessed as urgent or emergency (AIHW 2010).



Source: Data provided by state and territory health authorities.

**Figure 3.5: Mental health-related emergency department occasions of service in public hospitals, by triage category, 2008-09**

## Episode end status

In 2008–09, the episode end status for 61.1% of the mental health-related emergency department occasions of service was recorded as completed, indicating service resolution within the emergency department without admission or referral to another hospital. Admission to the presenting hospital occurred in 32.1% of mental health-related occasions of service, showing a higher proportion of admissions for mental health-related occasions of service than recorded for all emergency department occasions of service (26.5%) (AIHW 2010). Referrals to other hospitals for admission occurred in a further 3.6% of mental health-related occasions of service, with another 2.9% ending with the patient leaving the emergency department before episode completion.

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## Data source

### Mental health related emergency department data

While there is no national agreement on the collection of information on mental health-related services provided by emergency departments in hospitals in Australia, states and territories have agreed to provide the AIHW with aggregate data to compile national information on mental health-related occasions of service provided by emergency departments in public hospitals.

All state and territory health authorities collect a core set of nationally comparable information on most of the emergency department occasions of service in public hospitals within their jurisdiction. The AIHW compiles these episode-level data annually to form the National Non-Admitted Patient Emergency Department Care Database (NNAPEDCD) (AIHW 2010). The data are collected by state and territory health authorities according to definitions in the Non-admitted Patient Emergency Department NMDs and cover occasions of service provided in emergency departments of public hospitals categorised in the previous financial year as peer groups A (that is, principal referral and specialist women's and children's hospitals) and B (large hospitals). For 2008–09, data were also collected by some states and territories for hospitals in peer groups other than A and B.

The total number of emergency department occasions of service for all public hospitals in 2008–09 was 7.2 million. Episode-level data were collected by state and territory health authorities departments for 80% of these occasions of service (a total of 5.7 million occasions of service) (AIHW 2010). Episode-level data were available for 100% of all emergency department occasions of service for public hospitals in peer groups A and B, and about 37% of emergency department occasions of service for other public hospitals.

### Definition of mental health related emergency department occasions of service

While there is a national data compilation of episode-level data on emergency department occasions of service (NNAPEDCD), there is currently no national agreement to collect information on the principal diagnosis for emergency department occasions of service. In addition, there is no standard or agreed classification for diagnoses in use across emergency departments that could be used uniformly to identify mental health-related care, or any other data item (for example, reason for the occasion of service, intentional self harm codes and mental health flags) collected in a nationally consistent manner that would allow for the identification of mental health-related occasions of service in emergency departments. Thus it is difficult to identify and report on mental health-related emergency department occasions of service in a comparable manner across jurisdictions.

However, in 2008–09, all jurisdictions did collect some information on the principal diagnosis of an estimated 90% of emergency service department occasions of service for which they reported episode-level data to the NNAPEDCD. As a result, it was determined that a definition of 'mental health-related' based on the collected diagnosis information could be applied nationally, for the purposes of compiling data for this publication.

Data on mental health-related emergency department occasions of service reported in Section 3 of this report have been provided by the state and territory health authorities according to the following definition: occasions of service in public hospital emergency departments that have a principal diagnosis of Mental and behavioural disorders (that is, codes F00–F99) in ICD 10 AM or the equivalent codes in ICD 9 CM.

### Mental health-related emergency department occasions of service, principal diagnosis codes included, ICD-10-AM and ICD-9-CM

ICD-10-AM <sup>(a)</sup> codes	ICD-9-CM <sup>(b)</sup> codes
F00–F09   Organic, including symptomatic,	290, 293, 294, 310



	mental disorders	
F10–F19	Mental and behavioural disorders due to psychoactive substance use	291, 292, 303, 304, 305 (excluding 305.8 and 305.9)
F20–F29	Schizophrenia, schizotypal and delusional disorders	295, 297, 298 (excluding 298.0, 298.1, 298.2), 301.22
F30–F39	Mood (affective) disorders	296, 298.0, 298.1, 300.4, 301.1, 311
F40–F48	Neurotic, stress-related and somatoform disorders	298.2, 300 (excluding 300.4, 300.19), 306 (excluding 306.3, 306.51, 306.6), 307.53, 307.80, 307.89, 308, 309 (excluding 309.21, 309.22)
F50–F59	Behavioural syndromes associated with physiological disturbances and physical factors	302.7, 305.8, 305.9, 306.3, 306.51, 306.6, 307.1, 307.4, 307.5 (excluding 307.53), 316, 648.44
F60–F69	Disorders of adult personality and behaviour	300.19, 301 (excluding 301.1, 301.22), 302 (excluding 302.7), 312.3
F70–F79	Mental retardation	317, 318, 319
F80–F89	Disorders of psychological development	299, 315, 330.8
F90–F98	Behavioural and emotional disorders with onset usually occurring in childhood and adolescence	307.0, 307.2, 307.3, 307.6, 307.7, 307.9, 309.21, 309.22, 312 (excluding 312.3), 313, 314
F99	Unspecified mental disorder	. .

. . Not applicable.

(a) International Statistical Classification of Diseases and Related Health Problems, 10th revision, Australian Modification.

(b) International Classification of Diseases and Related Health Problems, 9th revision, Clinical Modification.

This definition does not capture all mental health-related presentations to emergency departments, and the caveats listed below should be taken into consideration when interpreting the data presented on mental health-related emergency department occasions of service.

Most jurisdictions had coded the principal diagnosis of emergency department occasions of service in 2008–09 using ICD-10-AM. However, for those using ICD-9-CM, mapping of the relevant ICD-10-AM codes to ICD-9-CM codes was undertaken by the relevant state or territory (see table above).

Aggregate data on the demographic characteristics of the patients, the triage category, episode end status and the diagnosis category were provided by all states and territories to AIHW for occasions of service that met the definition of a mental health-related occasion of service.

## Caveats

To ensure that the data on emergency department mental health-related occasions of service are interpreted correctly, the following limitations should be noted:

- There is no nationally agreed upon method of identifying mental health-related occasions of service in emergency departments.
- There is no standard diagnosis classification in use across states and territories for emergency department data.
- There is no standard way to disaggregate those occasions of service identified as mental health-related into subcategories of mental health conditions.
- Not all potential mental health-related emergency department occasions of service are represented in the data, for the following reasons:



Peer group A and B <sup>(b)(c)</sup>	100	100	100	100	100	100	100	100	100
Other hospitals <sup>(c)</sup>	50	35	17	36	21	61	..	100	37
<b>Total estimated per cent<sup>(c)</sup></b>	<b>83</b>	<b>88</b>	<b>72</b>	<b>72</b>	<b>67</b>	<b>89</b>	<b>100</b>	<b>100</b>	<b>80</b>
Estimated per cent of occasions of service reported at episode-level that have a principal diagnosis code <sup>(d)</sup>	89	93.3	100	76	63	100	100	98	90
Estimated per cent of total emergency department occasions of service with a principal diagnosis <sup>(e)</sup>	59	82	72	55	42	89	100	98	72
Number of emergency department occasions of service with a mental health-related principal diagnosis <sup>(f)</sup>	55,173	34,161	42,216	14,634	15,064	4,554	2,793	3,381	171,976
Estimated actual number of emergency department occasions of service with a mental health-related principal diagnosis <sup>(g)</sup>	93,152	41,607	58,633	26,849	35,688	5,117	2,793	3,450	267,290

.. Not applicable

(a) The proportion of all occasions of service in emergency departments in public hospitals in 2008–09 that are reported at episode-level to the NNAPEDCD.

(b) Peer group A: Principal referral and specialist women's and children's hospitals; Peer group B: Large hospitals.

(c) The number of presentations reported to NNAPEDCD divided by the number of accident and emergency (A+E) occasions of service reported to the National Public Hospital Establishments Database (NPHEd) as a percentage. This may underestimate the NNAPEDCD coverage because some A+E occasions of service are for other than emergency presentations. As A+E occasions of service may have been under enumerated for some jurisdictions, coverage may also be overestimated. The coverage has been adjusted to 100% for jurisdictions where the number of presentations reported to the NNAPEDCD exceeded the number of A+E occasions of service reported to the NPHEd. See Australian hospital statistics 2008–09 (AIHW 2010).

(d) The proportion of emergency department occasions of service reported at episode-level to the NNAPEDCD that had a diagnosis. Total is estimated based on state and territory proportions and numbers.

(e) Calculated by multiplying the total percentage of all occasions of service in emergency departments in public hospitals in 2008–09 that are reported at episode-level to the NNAPEDCD by the percentage of emergency department occasions of service reported at episode-level to the NNAPEDCD that had a diagnosis (divided by 100).

(f) Number of Mental health related emergency department occasions of service as defined for the purposes of this publication, and provided by state and territory health authorities.

(g) Estimate of the actual number of mental health related emergency department occasions of service, as defined for the purposes of this publication, if coverage were 100%.

Sources: Data provided by state and territory health authorities, Australian hospital statistics 2008–09 (AIHW 2010).

## References

ABS 2010. Private hospitals, Australia, 2008–09. ABS cat.no. 4390.0. Canberra: ABS.

AIHW 2010. Australian hospital statistics 2008–09. Health services series no. 34. Cat. No. HSE 84. Canberra: AIHW.