

## Cannabis and other drug use in the Australian workforce: findings from the 2007 NDSHS data

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### Key points

- One in ten (10.9%) of the paid workforce reported recent cannabis use, compared with 6.7% of those not in the paid workforce. Of those in the workforce, males were more likely than females to report recent cannabis use (13.3% compared to 7.9%)
- Approximately one in five (21.3%) of the 20-29 year olds in the workforce reported recent cannabis use. Prevalence of recent cannabis use decreased to 1.2% of the 60 year and older age group
- Individuals in the media and telecommunications industry were more likely than any other industry to report recent use of any illicit drug (24.5%) and reported rates of recent cannabis use (17.5%) were second only to the hospitality sector (17.6%). Conversely, individuals in the education sector were less likely than any other industry to report recent illicit drug use (7.3%), including cannabis (5.6%)
- Females in the 14-19 year age group (2.5%) and those working in the media and telecommunications industry (2.0%) and skilled worker occupations (1.0%) were the most likely to take a day off work due to drug use other than alcohol
- Individuals reporting illicit drug use were more likely than non-users to take a day off work due to illness or injury (28% compared with 25.7%); particularly cannabis users (29.3% compared with 25.3%)
- Like cannabis, alcohol was used more frequently by the paid workforce (89.9%) compared to those not in the paid workforce (75%), without great variation between industries, occupations or age groups. The total sample was more likely to report taking at least one day off work due to alcohol use (3.3%) than illicit drug use (0.7%)

### Introduction

Workplace substance use has been defined as any alcohol or other drug use within two hours of starting work, use during work, or during any work breaks.<sup>1</sup> Substance use in the workplace may cause substantial costs to society and employers.<sup>2,3</sup> Society costs include lowered income rates and higher costs of unemployment insurance. Employers face reduced safety in the workplace, reduced productivity or output, lowered return on human capital investments, and increased turnover or absenteeism.<sup>2,3</sup> Unfortunately research on workplace substance use is hampered by numerous conceptual and methodological problems.<sup>1,4,5</sup> Among these problems is the need for

large systematic workforce sampling as a great majority of adults are not involved in workplace substance use.<sup>4</sup>

Despite difficulties in research, several studies have attempted to estimate the costs of workplace substance use. One such large survey of 110 South Australian workplaces found that over 70% (71.8%) of workplaces indicated concerns related to safety, productivity (11.8%), absenteeism (7.3%), or other concerns (27.3%).<sup>6</sup> From 1998 to 1999, alcohol and other drug use resulted in productivity-related costs estimated to exceed \$2.9 billion in Australia.<sup>7</sup> In addition to the financial costs, drug-using employees may be up to four times as likely to be involved in a workplace accident.<sup>8</sup> Further, alcohol was a contributing factor in an estimated 4% of work-related fatalities and between 3-11% of workplace injuries.<sup>9</sup>

The available research, however, falls short of providing good quality and cost effective tools, resources, and assistance to workplaces.<sup>10</sup> Indeed, the scarcity of quality research has resulted in many Australian workplaces taking ill-informed and ill-advised responses to the issue.<sup>11</sup>

Quality prevalence studies can provide a useful means to gauge whether alcohol and illicit drug use is problematic for particular parts of the workforce and provide for effective public health policy.<sup>12,5</sup> Unfortunately very few Australian studies are capable of delineating information across different industries or social and demographic factors.<sup>13</sup> The National Drug Strategy Household Survey (NDSHS) is exceptional in that it collects cross-sectional data every two to three years on awareness, attitudes and behaviour relating to drug use from close to 30,000 Australians aged 14 years and over.<sup>14</sup> Analysis of the 2004 NDSHS reported that approximately 50% of survey respondents were employed.<sup>15</sup> Those in the workforce were found to be significantly more likely than those not in the paid workforce to have used illicit drugs in the previous 12 months (17.3% compared to 11.8%). Males in the workforce were more likely than females to have recently used illicit drugs (20.3% compared to 13.4%). In addition, employees of the hospitality industry were the most likely to have used any illicit drug (31.2%), including cannabis (25.4%). In contrast, employees of the education industry were the least likely to have used any illicit drug (9.2%), including cannabis (6.4%). Using the Australian and New Zealand Standard Industrial Classification (ANZIC) codes to more narrowly define industries showed that commercial fishing (40.5%) had the highest level of use of at least one illicit drug. Conversely, the defense industry had the lowest level of use (4.9%). When observing illicit drug use by occupation, construction trades-people (31.4%) had the highest level of any illicit drug use. In contrast, education professionals (8.2%) had the lowest level of any illicit drug use. Additionally, almost 1% (1.2% males; 0.7% females) of the workforce reporting illicit drug use had taken days off work due to their substance use and almost half (47.4%) had taken days off work due to illness or injury (compared to 37.7% reporting no illicit drug use).

Using the most recent data from the 2007 NDSHS, this bulletin presents the current prevalence data on substance use in the Australian workforce.

## Data analysis

The 'substance use' data presented refers to the use of: alcohol, cannabis, ecstasy, methamphetamine, cocaine and/or other drugs (the collapsing of any heroin, hallucinogen, ketamine, GHB, inhalants or non-medical pharmaceutical drug use). The 'workforce' illustrated here refers to Australians over the age of 14 years who reported being in paid employment at the time the 2007 NDSHS was completed. The workforce was broken down into industry and occupation. The industry breakdown was done in accordance with the ANZSIC codes as compiled by the Australian Bureau of Statistics (ABS).<sup>16</sup> The occupation breakdown was done in accordance with the Australian Standard Classification of Occupations (ASCO).<sup>16</sup> The sub-category, 'Skilled workers', refers to category 5 (Advanced Clerical and Service workers), category 6 (Intermediate Clerical Sales and Service workers) and category 7 (Intermediate Production and Transport

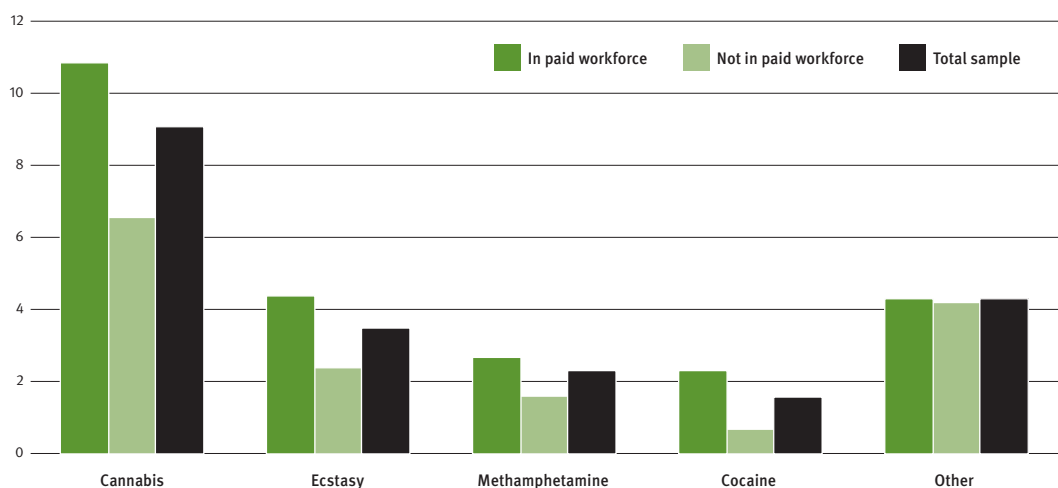
workers) occupations. The sub-category, ‘Unskilled workers’, refers to category 8 (Elementary Clerical, Sales and Service workers) and category 9 (Labourers and Related workers) occupations. The qualitative data were analysed using SAS (version 9.2)<sup>17</sup> to produce appropriate descriptive output. Individual cases where the question was not asked of the participant have been excluded in these analyses.

### Substance use in the Australian workforce by age and gender

Among participants in the 2007 NDSHS, 56.2% (64.6% of males and 48.1% of females) reported being in current paid employment. Those in the paid workforce were more likely to have used illicit drugs in the past twelve months (‘recent use’) compared to those not in the paid workforce (14.7% compared to 10.2%). As shown in Figure 1, this was particularly the case for cannabis, with one in ten (10.9%) of the paid workforce and 6.7% of those not in the paid workforce reporting recent cannabis use. Alcohol was also used more frequently by the paid workforce (89.9%) compared to those not in the paid workforce (75%).

**Figure 1**

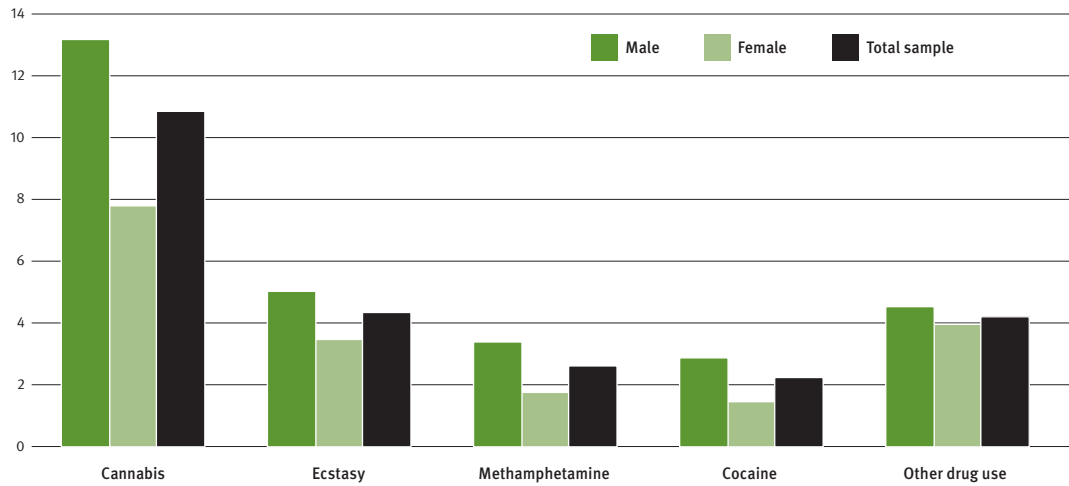
**Percentage of recent illicit drug use, by employment status and drugs used**



Figures 2 and 3 present data specific to those in the paid workforce who recently used an illicit drug. As shown in Figure 2, males used the majority of illicit drugs more frequently than females. This difference was most evident regarding recent cannabis use in the workforce with almost twice as many male to female users (13.3% compared to 7.9%). Recent alcohol use in the workforce was also more commonly reported by males (90.9%) than females (88.6%).

Figure 2

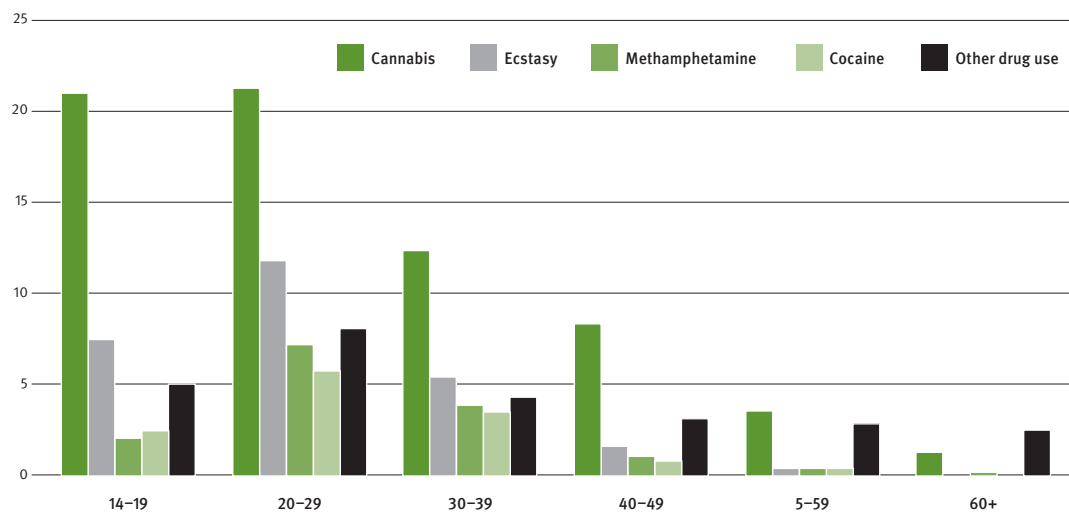
Percentage of workforce who recently used illicit drugs, by gender and illicit drug used



As shown in Figure 3, illicit drug use peaked in the 20–29 year age group and steadily declined as age increased. The difference between the reported recent illicit drug use in the 20–29 age group and those in the 60 and older age group was greatest for the use of cannabis in particular. Approximately one in five (21.3%) of the 20–29 year olds reported recent cannabis use compared to 1.2% of the 60 year and older group. The reported rates of recent alcohol use followed a similar pattern with those in the 20–29 year age group being the most likely to mention recent alcohol use (91.5%) and those in the 60 year and older age group the least likely (86.7%).

Figure 3

Percentage of workforce who recently used illicit drugs, by age group and illicit drug used

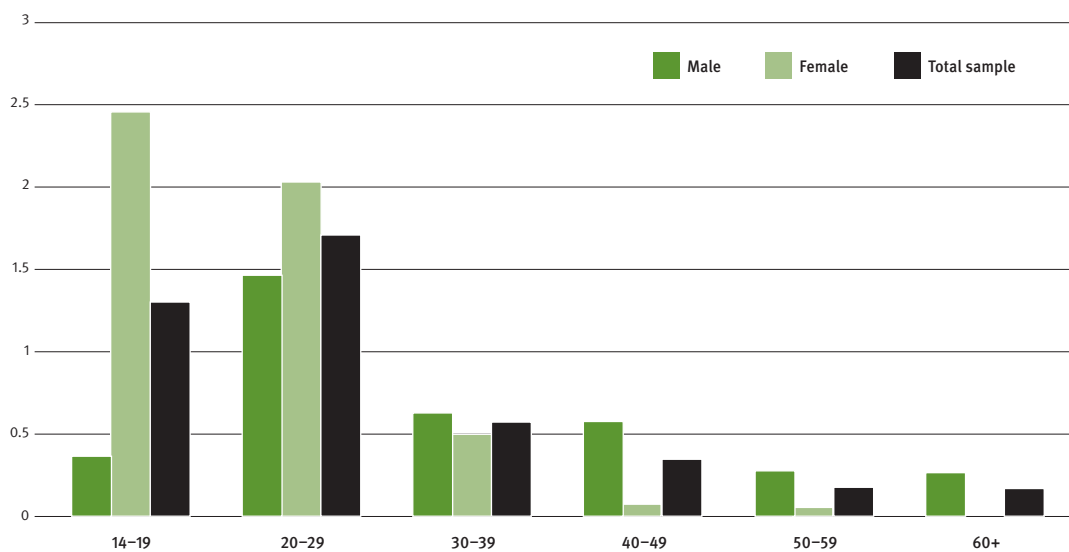


The 2007 NDSHS also identifies those who report going to work under the influence of ‘any’ illicit drug (participants were not asked to report which drug(s) was used). Reported rates of going to work under the influence of an illicit drug were highest for the 14–19 year age group (5.8%) and reduced by approximately one percent between each subsequent older age group (4.1% in 20–29 years, 2.6% in 30–39 years, 1.4% in 40–49 years, 1.6% in 50–59 years and 0% in 60 years or older).

Figure 4 shows the proportion of male and female workers that reported missing at least one day of work in the past three months due to illicit drug use (participants were not asked to report which drug(s) was responsible). Although approximately equivalent numbers of females and males reported missing a day of work due to illicit drug use (0.7%), differences were found between age groups. Females were more likely than males to report a day of work missed due to illicit drug use in the 14–19 year age group (2.5% compared to 0.4%) and the 20–29 year age group (2.0% compared to 1.5%). This trend was reversed for each of the older age groups (30+ years). Additionally, a minority of participants reported taking at least one day off work due to their own use of alcohol in the three months previous to interview (3.3%).

**Figure 4**

**Percentage of the workforce reporting days missed in past three months due to illicit drug use, by age group and gender**

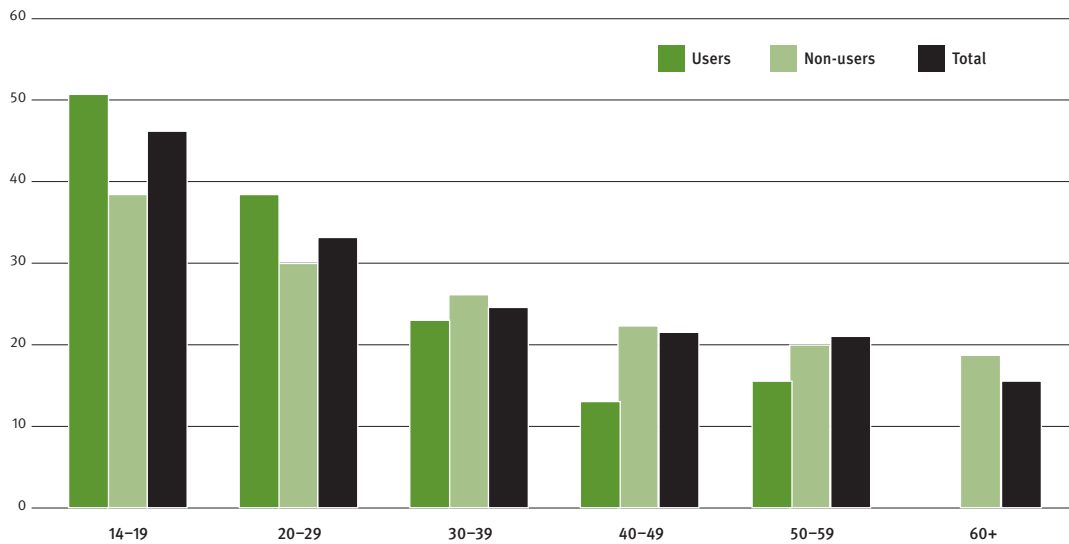


NDSHS data also includes the number of males and females in the workforce who reported days missed in the past three months due to illness or injury (25.9% of total sample). Illicit drug users more commonly reported this kind of absenteeism than non-users (28% compared with 25.7%). Females were more likely than males to report taking at least one day off work due to illness or injury regardless of whether they reported recent illicit drug use (30.4% compared to 26.7%) or were non-users (26.1% compared to 25.5%). More specific comparisons between recent cannabis users and non-users show similar results. Those who reported recently using cannabis were more likely than those not reporting use to also report days missed in the past three months due to illness or injury (29.3% compared with 25.3%). Females were again more likely than males to report taking at least one day off work due to illness or injury regardless of if they reported recent cannabis use (33.6% compared to 27.4%) or were non-users (26.1% compared to 24.7%).

Reported days missed due to illness or injuries are broken down by age group and user status in Figure 5. As age increased, the percentage of individuals reporting illness or injury decreased. The majority of those over 30 years who reported illicit drug use were less likely than non-users to indicate missing a day of work due to illness or injury. Comparisons specific to recent cannabis use or non-use were made. Those who reported cannabis use were more likely than non-users to also report days of work missed in the past three months due to illness or injury in the 14–19 (51.1% compared to 38.8%) and 20–29 (38.5% compared to 30.1%) year age groups. This trend was reversed in each other older age group with cannabis users less likely than non-users to report at least one day missed in the past three months due to illness or injury (0–23.1% compared to 18.9–26.4%).

**Figure 5**

**Percentage of the workforce reporting days missed in past three months due to illness/injury, by user status and age group**



### Substance use in the Australian workforce by industry and occupation

Table 1 details recent illicit drug and alcohol use within individual industries and occupations. Individuals in the media and telecommunications (24.5%), hospitality (23.2%) and construction (22.9%) industries were more likely than any other industry to report recent use of any illicit drug, although those in the construction sector more commonly reported recent cannabis use (18.1% compared to 17.5% and 17.6% of the media and telecommunications and hospitality industries). Conversely, individuals in the education sector were less likely than any other industry to report recent illicit drug use (7.3%), including cannabis (5.6%). In terms of alcohol use, individuals in the finance industry were the most likely to report recent alcohol use (94.7%). Although there was little variation between industries, the agriculture industry was the least likely to report recent alcohol use (86.5%). As also shown in Table 1, individuals in the hospitality and construction industries were the most likely to report going to work under the influence of any drug (7.2% and 5.6% respectively) with relatively lower rates in each of the other industries (0% to 2.8%).

Table 1

## Proportion of the Australian workforce reporting recent substance use by industry

	Any illicit (%) <sup>†</sup>	Cannabis (%) <sup>†</sup>	Ecstasy (%) <sup>†</sup>	Methamphetamine (%) <sup>†</sup>	Cocaine (%) <sup>†</sup>	Other (%)	Alcohol (%) <sup>†</sup>	WUI* (%) <sup>†</sup>
Media and Telecommunications (n=298)	24.5	17.5	9.6	5.0	5.5	5.3	91.6	3.9
Hospitality (n=530)	23.2	17.6	10.2	6.1	4.7	8	89.4	7.2
Construction (n=814)	22.9	18.1	5.8	5.5	3.2	5.4	90.9	5.6
Manufacturing (n=886)	15.5	12.5	2.9	2.8	1.3	2.9	92	1.3
Finance (n=410)	15.1	9.8	6.9	4.0	5.1	5.0	94.7	0
Administration (n=1279)	14.6	8.9	4	3.2	1.4	6	92.9	2.1
Retail (n=1044)	14.3	10.8	3.9	1.6	2.5	3.7	87.8	2.8
Transport (n=539)	14.1	10.6	3.5	2.4	1.4	4.2	91.1	2.8
Wholesale (n=212)	13.1	8.1	2.9	2.4	0.7	2.7	88.6	0.5
Mining (n=205)	10.6	8.2	4.9	4.4	1.7	2.7	93.5	2.7
Agriculture (n=352)	10.3	6.5	2.7	1.2	0.6	4.2	86.5	0.4
Healthcare (n=1640)	10	6.7	2.4	1.0	1.3	2.9	88.5	0.9
Education (n=1119)	7.3	5.6	1.2	0.6	0.2	2.1	88.5	0.6

\* per cent of the sample that went to work under the influence of any illicit drug (WUI)

† As some participants were not asked this question, the total 'n' may vary in this column

Table 2 presents the recent use of illicit drugs in the workforce broken down by occupation. Tradespeople (19.1%) and unskilled workers (18.7%) were the most likely to report recent use of any illicit drug, including cannabis (15.8% and 13.1% respectively). Conversely, managers were the least likely to report recent use of any illicit drug (12.9%), including cannabis (7.8%). However, in terms of alcohol use, managers were the most likely to report recent use (93.5%). Although there was little variation between occupations, unskilled workers were the least likely to report recent alcohol use (84.9%). Tradespeople (4.3%) and unskilled workers (3.1%) were also the most likely to report going to work under the influence of any drug with relatively lower rates in all other occupations (1.4% to 1.9%).

Table 2

## Proportion of the Australian workforce reporting recent substance use by occupation

	Any (%) <sup>†</sup>	Cannabis (%) <sup>†</sup>	Ecstasy (%) <sup>†</sup>	Methamphetamine (%) <sup>†</sup>	Cocaine (%) <sup>†</sup>	Other (%)	Alcohol (%) <sup>†</sup>	WUI (%) <sup>†</sup>
Tradespeople (n=1164)	19.1	15.8	5.8	5.1	2.4	4.4	92	4.3
Unskilled (n=1730)	18.7	13.1	4.2	2.7	1.8	5.2	84.9	3.1
Skilled (n=3001)	13.8	9.8	4.5	2.9	2.1	4	90.5	1.9
Professionals (n=4093)	13.2	9.7	3.8	1.9	2.3	3.6	91.2	1.6
Managers (n=959)	12.9	7.8	4.5	2.1	3	4.9	93.5	1.4

† As some participants were not asked this question, the total 'n' may vary in this column

The reported rates of absenteeism due to any illicit drug use were compared by industry and occupation (participants were not asked to specify which drug(s) were used). The media and telecommunications industry (2%) and skilled worker occupations (1%) most commonly reported taking a day off work due to illicit drug use. Conversely, the wholesale (0%) and education industry (0.1%) as well as the unskilled worker occupations (0.4%) and managers (0.3%) were less likely to report taking a day off due to illicit drug use.

## Conclusion

Data from the 2007 NDSHS show that alcohol and illicit drug use is more common among Australian individuals in paid employment than those not in the paid workforce. Alcohol and cannabis use are particularly prevalent in the Australian workforce. Workplaces most affected include the hospitality and construction industries and those in tradespeople and unskilled worker occupations. Workplaces least affected include the education industry and those in managerial (with the exception of alcohol use) or professional occupations. Costs to Australian employers due to drug-related absenteeism and going to work under the influence of an illicit drug continue to be significant. Absenteeism and going to work under the influence of an illicit drug is more likely for those aged 14–29 years, with greater absenteeism reported by females in these younger age groups.

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