

# EXPERIMENTAL COMPLETION AND ATTRITION RATES FOR LATEST COMMENCING APPRENTICES AND TRAINEES



Australian Government  
Department of Education, Employment  
and Workplace Relations



## Experimental completion and attrition rates for latest commencing apprentices and trainees

### Highlights

- Completion rates have increased from 50.8% for apprentices and trainees commencing at the end of 2007 to 56.2% for those commencing at the end of 2009.
- Attrition rates have decreased from 43.5% for apprentices and trainees commencing at the end of 2007 to 38.8% for those commencing at the end of 2009.
- The increases in completion rates and decreases in attrition rates are most dramatic in non-trades occupations, particularly sales workers, clerical and administrative workers, and machinery operators and drivers.



Australian Government

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## Introduction

This publication presents experimental estimates of completion and attrition rates for the latest commencing apprentice and trainee cohorts. Such up-to-date estimates are possible by applying a 'life tables' methodology to simple cross tabulations of commencements, completions and cancellations/withdrawals. The resultant cross-sectional estimates reflect what completion and attrition rates would be if the patterns observed in a particular quarter remain unchanged for the life of the commencing cohort in that quarter. The estimates are derived from the Apprentice and Trainee Collection no. 63 (March 2010 estimates), which is compiled under the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS) for Apprentice and Trainee Collection Specifications, Release 6.0, March 2008.

## Scope

An apprentice or trainee is a person who undertakes a contract of training with an employer and a training provider. This publication presents cross-sectional estimates of completion and attrition rates for apprentices and trainees commencing a contract of training in the December quarters of 2007 to 2009.

## More information

For additional information on the methodology used to derive these experimental estimates, please refer to the supporting technical paper, entitled *Estimating apprentice and trainee completion and attrition rates using a 'life tables' approach*. For additional information on the National Apprentice and Trainee Collection, please refer to the latest quarterly or annual publication, which may be accessed through <http://www.ncver.edu.au/statistic/31250.html>.

## Overview

For apprentices and trainees commencing in the December quarters of 2007 to 2009:

- completion rates have increased from 50.8% to 56.2%
- attrition rates have decreased from 43.5% to 38.8%.

Table 1

Table 1

For apprentices and trainees commencing in the December quarter 2009:

- attrition rates are highest for food preparation assistants and food trades workers (70.1% and 67.1% cancelling/withdrawing within four years, respectively).

Table 2

For apprentices and trainees commencing in the December quarters of 2007 to 2009:

- attrition rates within 12 months of commencement have decreased from 33.6% to 30.2%.

Table 3

## Tables

**Table 1 Cross-sectional completion and attrition rates<sup>1,2</sup> by selected occupation<sup>3</sup> for contracts commencing in December quarter 2007–09**

Occupation (ANZSCO) group <sup>3</sup>	Completion and attrition rates (%) by commencing cohort <sup>1,2</sup>					
	Completion rates			Attrition rates		
	2007	2008	2009	2007	2008	2009
<b>Managers</b>	59.9	51.8	62.0	33.6	38.8	29.8
<b>Professionals</b>	*	76.0	77.3	*	22.2	19.3
<b>Technicians and trades workers</b>	43.3	44.7	44.5	52.3	51.7	52.5
31 Engineering, ICT and science technicians	62.1	64.0	67.5	34.4	30.6	26.4
32 Automotive and engineering	46.6	48.5	47.1	50.0	49.1	51.0
33 Construction trades workers	44.2	43.6	42.2	52.0	52.5	54.8
34 Electrotechnology and telecommunications trades	54.6	55.4	52.5	40.5	40.3	44.3
35 Food trades workers	25.2	26.9	29.1	70.9	68.8	67.1
36 Skilled animal and horticultural workers	49.1	48.9	52.6	44.0	45.3	41.7
39 Other technicians and trades workers	41.7	43.1	44.1	54.8	54.4	53.7
391 Hairdressers	38.1	37.2	34.2	59.6	61.3	64.9
392 Printing trades workers	52.6	62.8	52.2	32.9	32.1	39.9
394 Wood trades workers	38.0	37.9	39.6	59.0	59.4	57.5
399 Miscellaneous	60.9	64.3	69.4	35.5	31.7	25.0
<b>Community and personal service workers</b>	58.8	57.1	59.8	37.9	38.9	34.5
41 Health and welfare support workers	69.6	71.8	59.9	25.5	24.5	29.8
42 Carers and aides	65.9	64.5	67.4	31.7	32.1	29.3
43 Hospitality workers	49.1	50.8	51.7	47.6	45.0	41.6
45 Sports and personal service workers	57.3	56.8	66.7	40.6	40.5	30.3
<b>Clerical and administrative workers</b>	57.5	61.1	64.0	36.3	32.8	27.8
51 Office managers and program administrators	58.7	61.1	64.8	30.7	27.2	21.3
53 General clerical workers	61.1	63.4	66.3	37.3	35.2	31.7
54 Inquiry clerks and receptionists	47.9	51.9	54.7	47.3	43.9	40.5
55 Numerical clerks	51.5	61.8	66.4	38.9	32.1	27.4
59 Other clerical and administrative workers	62.0	61.8	60.1	31.9	29.6	28.2
<b>Sales workers</b>	46.0	51.0	55.8	46.9	42.7	37.0
61 Sales representatives and agents	39.7	51.7	65.3	46.2	43.5	28.1
62 Sales assistants and salespersons	46.3	50.8	55.4	47.0	42.5	37.5
<b>Machinery operators and drivers</b>	60.6	62.8	62.3	35.7	33.3	28.2
71 Machine and stationary plant operators	62.6	65.8	67.4	33.8	31.5	21.5
72 Mobile plant operators	60.5	62.9	58.8	36.4	35.6	33.8
73 Road and rail drivers	56.6	61.3	54.2	39.7	33.9	35.1
74 Storepersons	62.4	59.7	68.0	33.3	34.3	25.5
<b>Labourers</b>	51.0	52.0	55.0	44.8	45.5	42.0
81 Cleaners and laundry workers	62.4	63.9	71.3	31.8	33.6	25.4
82 Construction and mining labourers	47.8	50.8	51.1	48.2	46.5	46.3
83 Factory process workers	45.0	48.1	46.0	50.6	49.4	51.0
84 Farm, forestry and garden workers	56.8	54.8	66.7	41.0	43.0	31.6
85 Food preparation assistants	37.3	20.7	28.0	57.2	76.2	70.1
89 Other labourers	51.0	52.1	48.9	46.2	45.2	47.7
<b>Total</b>	<b>50.8</b>	<b>53.2</b>	<b>56.2</b>	<b>43.5</b>	<b>42.1</b>	<b>38.8</b>

\* Estimate not shown due to there being too few commencements to derive a reliable estimate.

For notes on tables, see page 7.

**Table 2 Cross-sectional attrition rates by selected occupation<sup>3</sup> and time of cancellation/withdrawal for contracts commencing in December quarter 2009**

Occupation (ANZSCO) group <sup>3</sup>	Attrition rates (%), cancelling/withdrawing within <sup>4</sup> :						
	Same quarter	1 quarter	2 quarters	1 year	2 years	3 years	4 years
<b>Managers</b>	2.5	8.7	16.0	23.0	28.8	29.8	29.8
<b>Professionals</b>	1.9	5.1	9.5	15.8	18.9	19.2	19.3
<b>Technicians and trades workers</b>	4.5	16.1	23.9	34.1	46.8	51.4	52.5
31 Engineering, ICT and science technicians	2.5	6.8	10.5	20.4	25.3	26.4	26.4
32 Automotive and engineering	3.4	14.2	20.5	29.7	43.5	49.5	51.0
33 Construction trades workers	5.0	16.8	24.6	34.7	48.4	53.7	54.7
34 Electrotechnology and telecommunications trades	2.5	8.5	14.6	23.3	35.8	42.3	44.3
35 Food trades workers	6.5	23.8	36.4	50.5	63.1	66.7	67.1
36 Skilled animal and horticultural workers	5.5	15.9	22.1	29.8	38.8	40.9	41.7
39 Other technicians and trades workers	4.6	17.5	25.1	36.7	50.0	53.1	53.6
391 Hairdressers	5.2	21.3	32.1	46.2	61.2	64.4	64.8
392 Printing trades workers	6.1	14.8	22.0	27.3	37.1	39.1	39.9
394 Wood trades workers	6.7	23.0	28.1	36.6	51.7	56.0	57.5
399 Miscellaneous	0.7	5.7	9.3	16.3	23.0	24.7	25.0
<b>Community and personal service workers</b>	5.0	15.8	23.4	30.4	33.7	34.4	34.5
41 Health and welfare support workers	3.0	8.3	16.4	23.8	28.3	29.6	29.8
42 Carers and aides	5.1	14.4	20.0	26.1	29.0	29.3	29.3
43 Hospitality workers	6.1	18.9	27.9	36.2	40.7	41.5	41.6
45 Sports and personal service workers	2.2	15.0	21.8	28.1	30.0	30.3	30.3
<b>Clerical and administrative workers</b>	3.6	12.3	18.5	24.2	27.2	27.7	27.7
51 Office managers and program administrators	2.4	7.5	12.0	16.8	20.8	21.2	21.3
53 General clerical workers	4.1	15.4	24.2	29.7	31.6	31.7	31.7
54 Inquiry clerks and receptionists	6.9	24.0	31.7	38.7	40.4	40.5	40.5
55 Numerical clerks	2.6	10.7	17.8	23.8	26.2	27.2	27.4
59 Other clerical and administrative workers	2.8	11.6	16.3	22.0	26.6	27.9	28.0
<b>Sales workers</b>	4.8	16.6	25.5	32.8	36.5	36.9	37.0
61 Sales representatives and agents	2.4	11.1	18.2	25.2	28.1	28.1	28.1
62 Sales assistants and salespersons	5.0	17.1	26.1	33.4	36.9	37.3	37.5
<b>Machinery operators and drivers</b>	3.6	10.1	16.1	23.1	27.4	28.1	28.2
71 Machine and stationary plant operators	1.8	5.3	10.1	16.5	20.3	21.5	21.5
72 Mobile plant operators	3.8	10.4	17.3	24.8	31.8	33.4	33.8
73 Road and rail drivers	5.7	14.1	21.9	29.9	34.5	35.0	35.1
74 Storepersons	3.1	10.3	15.1	21.4	25.3	25.5	25.5
<b>Labourers</b>	7.5	20.5	30.7	39.3	41.9	42.0	42.0
81 Cleaners and laundry workers	2.9	10.6	17.1	22.8	25.1	25.3	25.4
82 Construction and mining labourers	5.3	17.7	31.2	41.9	46.0	46.3	46.3
83 Factory process workers	11.4	28.7	41.0	49.0	51.0	51.0	51.0
84 Farm, forestry and garden workers	5.5	15.7	23.0	29.8	31.5	31.6	31.6
85 Food preparation assistants	5.8	38.3	53.9	60.7	69.5	70.1	70.1
89 Other labourers	5.4	14.9	26.5	41.9	47.6	47.7	47.7
<b>Total</b>	<b>4.5</b>	<b>14.6</b>	<b>22.2</b>	<b>30.2</b>	<b>36.5</b>	<b>38.4</b>	<b>38.8</b>

For notes on tables, see page 7.



**Table 3 Cross-sectional attrition rates within 12 months of commencement<sup>5</sup> by selected occupation<sup>3</sup> for contracts commencing in December quarter 2007–09**

Occupation (ANZSCO) group <sup>3</sup>	Attrition rates (%) within 12 months <sup>5</sup> by commencing cohort		
	2007	2008	2009
<b>Managers</b>	24.0	29.4	23.0
<b>Professionals</b>	*	17.0	15.8
<b>Technicians and trades workers</b>	33.2	33.6	34.1
31 Engineering, ICT and science technicians	25.3	22.3	20.4
32 Automotive and engineering	29.5	29.6	29.7
33 Construction trades workers	32.4	33.7	34.7
34 Electrotechnology and telecommunications trades workers	20.8	20.7	23.3
35 Food trades workers	50.6	51.2	50.5
36 Skilled animal and horticultural workers	31.1	33.5	29.8
39 Other technicians and trades workers	37.3	37.3	36.7
391 Hairdressers	41.7	43.1	46.2
392 Printing trades workers	20.3	19.1	27.3
394 Wood trades workers	38.5	42.0	36.6
399 Miscellaneous	21.8	21.6	16.3
<b>Community and personal service workers</b>	33.0	34.3	30.4
41 Health and welfare support workers	18.6	19.1	23.8
42 Carers and aides	27.8	28.1	26.1
43 Hospitality workers	42.3	39.8	36.2
45 Sports and personal service workers	35.1	35.6	28.1
<b>Clerical and administrative workers</b>	31.2	28.2	24.2
51 Office managers and program administrators	23.7	20.6	16.8
53 General clerical workers	35.1	33.0	29.7
54 Inquiry clerks and receptionists	44.1	40.8	38.7
55 Numerical clerks	28.3	24.4	23.8
59 Other clerical and administrative workers	25.9	23.1	22.0
<b>Sales workers</b>	39.8	36.4	32.8
61 Sales representatives and agents	42.9	36.9	25.2
62 Sales assistants and salespersons	39.7	36.4	33.4
<b>Machinery operators and drivers</b>	28.8	27.8	23.1
71 Machine and stationary plant operators	26.2	26.4	16.5
72 Mobile plant operators	26.9	26.9	24.8
73 Road and rail drivers	32.6	28.2	29.9
74 Storepersons	27.9	29.4	21.4
<b>Labourers</b>	40.3	42.0	39.3
81 Cleaners and laundry workers	27.7	29.1	22.8
82 Construction and mining labourers	41.5	41.1	41.9
83 Factory process workers	46.6	46.8	49.0
84 Farm, forestry and garden workers	36.8	40.4	29.8
85 Food preparation assistants	48.7	69.3	60.7
89 Other labourers	38.2	40.4	41.9
<b>Total</b>	<b>33.6</b>	<b>33.0</b>	<b>30.2</b>

\* Estimate not shown due to there being too few commencements to derive a reliable estimate.

For notes on tables, see page 7.

## Terms

**Attrition rates** refer to the proportion of apprentices and trainees who commence a contract of training in a given period and who then go on to cancel or withdraw from that contract.

**Australian and New Zealand Standard Classification of Occupations (ANZSCO)** is a classification of the occupation of individuals. The classification is based on the Australian Bureau of Statistics (ABS), Australian and New Zealand Standard Classification of Occupations (1st edition, ABS cat.no.1220.0).

**Cancellations and withdrawals** refer to apprentices and trainees whose contract of training has been terminated prior to a successful completion. Cancellations and withdrawals also include contracts which have been transferred due to a change in employer. 'Transferred' is a new contract status which was historically reported as a cancellation or withdrawal.

**Commencements** refer to apprentices and trainees starting a program of training. The date of commencement is the date that an apprentice or trainee's contract of training is registered or approved under the provisions of the relevant state/territory legislation.

**Completions** refer to apprenticeship or traineeship contracts of training in which all of the prescribed requirements have been met.

**Completion rates** refer to the proportion of apprentices and trainees who commence a contract of training in a given period and who then go on to complete the requirements of training for that contract.

**Expired contracts** refer to contracts for which the anticipated completion date has passed without the apprentice or trainee attaining the required competency standard, or for where the outcome of the contract is unknown.

## Technical notes

### Apprentice and Trainee Collection

Due to lags in processing, recent activity levels in the Apprentice and Trainee Collection are estimated (for training activity from June quarter 2008 to December quarter 2009). The estimation method involves weighting recently processed numbers based on average reporting lags. As estimates are revised up to seven quarters, figures for the last two years may differ from those published in earlier or subsequent reports. For further details on the estimation methodology, please see the supporting documents for the latest quarter apprentice and trainee publication.

## Notes on tables

- 1 Completion and attrition rates do not take into account expired contracts of training. Therefore, the completion and attrition rates presented in table 1 will not sum to 100% within each occupation.
- 2 Completion and attrition rates presented in table 1 show the proportion of apprentices and trainees completing and cancelling/withdrawing within 19 quarters of commencement. These represent the stable or final rates for completion and attrition, respectively.
- 3 A number of occupations at the sub-major group level are not presented due to there being too few commencements to derive a reliable estimate.
- 4 An assumption of the model used to derive completion and attrition rates is that all commencements in the first quarter begin exactly half way through the quarter. This means that cumulative attrition rates are calculated for points corresponding to within half a quarter, within 1.5 quarters, within 2.5 quarters and so on. For simplicity, table 2 labels the points as same quarter, 1 quarter, 2 quarters and so on.
- 5 Attrition rates presented in table 3 show the proportion of apprentices and trainees cancelling/withdrawing within four quarters of commencement (see table note 4).



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