



Australian Government

Asbestos Safety and Eradication Agency

# National Asbestos Exposure Register Data Analysis Report

1 July 2015 to 31 December 2015

*Towards an asbestos-free Australia*

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## Overview

The period 1 July to 31 December 2015 is the first reporting period in which no amendments have been made to the online NAER. The introduction of additional questions in January 2015 and June 2015 have been successful in providing more refined information for analysis and simpler registration through the introduction of skip logic in the questions and validation for entries such as dates which helps reduce the possibility of errors in data entry.

The manual form has been updated to reflect the changes to the electronic NAER questionnaire. This still gives registrants the ability to fill out forms manually and forward them to the agency for entry into the online system. Although this allows flexibility to registrants, it also means that registrations may be incomplete due to omissions of answers to some questions. This, however, is infrequent and has had no significant impact on data analysis.

## Criteria for analysis

The following are the main criteria used for analysis of the data collected from the NAER:

- Monthly registration numbers
- Number of registrations for each state or territory of exposure
- Number of male to female registrations
- Whether exposure occurred at the workplace or was non-workplace
- If exposure occurred at the workplace, whether it was directly related to the type of employment undertaken or was incidental to the job
- Age range of registrants at the time of exposure
- whether exposure was at the workplace, at a private residence, at an educational establishment, was environmental or domestic or another type of exposure
- The job type if exposed at work
- Whether exposure was to loose-fill asbestos insulation (Mr Fluffy)
- Decade in which first exposure occurred
- Frequency of exposure/time period over which exposure occurred

## Observations

- The total number of registrations on the NAER for the period 1 July 2015 to 31 December was 922
- NSW has the greatest proportion of the 922 registrations at approximately 30%. This proportion of registrations has remained stable for the entire period of the register. Proportions for WA and Victoria have fluctuated, while the other jurisdictions have remained stable. ACT has consistently had a proportion of approximately 13% to 15% of registrations since the register came into existence. This relatively high amount is reflective of the focus on loose-fill asbestos issues in the territory (Table 1)
- The proportion of male to female registrations for the period was approximately 66% to 34%. This compares to 74% to 26% for the full period of the register and indicates growing interest in the register from females (Table 2)
- The proportion of male to female registrations in the ACT for the period under review is equal. This is reflective of the high reporting rate of loose-fill asbestos exposure in the territory
- The proportion of male to female reporting of first exposures ranges from 67%/33% to 73%/27% for the age ranges below 40 years; for those in the 40 to 59 years age range the proportions are roughly 53%/47% (Table 3). These differences reflect a higher percentage of workplace exposures among the 40 to 59 years age range which are not directly related to the registrant's job type and possibly a greater awareness that asbestos exposure is not solely related to a person's profession
- Exposures at the workplace for the period were almost 63% compared to exposures occurring outside the workplace of approximately 37%. This is an increase in reporting of exposures outside the workplace compared to the full period of the register and possibly indicates a growing understanding that asbestos exposure may occur in a number of different settings (Table 4)
- Of those responding that their exposure occurred at the workplace, 68.80% responded it was directly related to their work; the remaining 31.20% responded the exposure was not directly related to their jobs
- Almost 63% of exposures occurred at the place of work, approximately 24% were reported in the residential setting, approximately 10% in a school or educational establishment and just under 2% were reported as domestic or environmental exposures (Table 5)
- Of those respondents answering the question on job category, almost 12% of the total stated they were electricians and a further 11% stated they were in the construction industry; 12.6% of respondents were in other trades, 7.5% in mining or resources occupations and 4% in the asbestos removal or disposal sector. The remaining 53% responded 'other' to this question (Table 6)
- Exposure to loose-fill asbestos was reported by 20.72% of registrants (191 out of 922 registrations) of whom 63.35% reported exposure in the ACT. Comments from registrants reporting loose-fill exposure in jurisdictions other than the ACT indicate that in most instances exposure was to forms of asbestos containing materials other than loose-fill (Table 7)
- The highest frequency of exposure at the workplace is for exposures over 5 years with approximately 35%, followed by up to 6 months with almost 30%. All other exposure frequencies are from approximately 11% to 12%
- Exposures of 5 years or more in the workplace accounted for just over 27% of exposure frequencies. Almost 39% of workplace exposures were of a frequency of 6 months or less. By comparison

frequencies of 5 years or more in schools or educational establishments accounted for just over 62% in this category (Table 8)

- Most of the over 5 years exposure at the workplace were directly related to the type of job undertaken; most of the residential exposures of this frequency related to loose-fill exposure. By comparison 58% of workplace exposures up to 6 months were directly related to work whereas the majority of residential exposures of up to 6 months related to loose-fill exposure. These figures tend to indicate that occupations which bring workers directly into contact with asbestos containing materials need to have a high awareness of exposure risks. At the same time there appears to be a growing number of potential exposures in the other settings, therefore raising awareness in all sectors of the community is vital
- During the period under review 26% of registrants responded they found out about the register from their employer with a further 16.5% stating they found out about it through a union. This is an increase on the average for the period of the register and indicates that the message about the register is being heard (Table 9). Family and friends are also a significant means of finding out about the register at 15%
- There were 25 reported disease diagnoses among registrants for the period under review. Pleural plaques accounted for 13 of these; mesothelioma accounted for 2. Both cases of mesothelioma related to residential exposure. Over 80% of exposures were reported as having occurred in the workplace (Table 10). All but one of these was directly related to the work of the registrant
- The majority of registrants responded that they had been diagnosed at the age of 60 or more after a minimum of 20 to 25 from the time of first exposure, but most commonly after 40 years or more

**Table 1 - Monthly responses by jurisdiction of exposure**

Month	Jurisdiction								Total
	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	
<b>2015</b>	<b>141</b>	<b>286</b>	<b>10</b>	<b>90</b>	<b>49</b>	<b>13</b>	<b>91</b>	<b>242</b>	<b>922</b>
July	106	28		20	23	2	6	99	284
August	14	45	1	16	4	4	34	6	124
September	6	28	1	13	4		16	4	72
October	3	46	3	10	3	1	11	11	88
November	7	62		18	8	2	5	21	123
December	5	77	5	13	7	4	19	101	231
<b>Total</b>	<b>141</b>	<b>286</b>	<b>10</b>	<b>90</b>	<b>49</b>	<b>13</b>	<b>91</b>	<b>242</b>	<b>922</b>
	<b>15.29%</b>	<b>31.02%</b>	<b>1.08%</b>	<b>9.76%</b>	<b>5.31%</b>	<b>1.41%</b>	<b>9.87%</b>	<b>26.25%</b>	

**Table 2 - Gender breakdown - jurisdiction of exposure**

Gender	Jurisdiction of exposure								Total	% Gender
	ACT	NSW	NT	QLD	SA	TAS	VIC	WA		
Female	73	77	3	40	4	5	27	83	312	33.84%
Male	68	208	7	50	45	8	64	159	609	66.05%
Not specified		1							1	
<b>Total</b>	<b>141</b>	<b>286</b>	<b>10</b>	<b>90</b>	<b>49</b>	<b>13</b>	<b>91</b>	<b>242</b>	<b>922</b>	
	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Total	
Female	51.77%	26.92%	30.00%	44.44%	8.16%	38.46%	29.67%	34.30%	33.84%	
Male	48.23%	72.73%	70.00%	55.56%	91.84%	61.54%	70.33%	65.70%	66.05%	
Not specified	0.00%	0.35%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.11%	

*Note: Jurisdiction of exposure available from 4 January 2015*

**Table 3 - Age range by gender at 1st exposure**

Age range	Gender			Total	Gender			% of total
	Female	Male	Not specified		Female	Male	Not specified	
<20	67	138		205	32.68%	67.32%	0.00%	22.23%
20-29	68	183	1	252	26.98%	72.62%	0.40%	27.33%
30-39	56	133		189	29.63%	70.37%	0.00%	20.50%
40-49	77	85		162	47.53%	52.47%	0.00%	17.57%
50-59	38	42		80	47.50%	52.50%	0.00%	8.68%
60+	6	28		34	17.65%	82.35%	0.00%	3.69%
<b>Total</b>	<b>312</b>	<b>609</b>	<b>1</b>	<b>922</b>	<b>33.84%</b>	<b>66.05%</b>		

**Table 4 - Proportion of workplace exposure to not workplace exposure**

Age Range	Exposure type		Total	Exposure type	
	Not workplace	Workplace		Not workplace	Workplace
<20	105	100	205	51.22%	48.78%
20-29	76	176	252	30.16%	69.84%
30-39	72	117	189	38.10%	61.90%
40-49	57	105	162	35.19%	64.81%
50-59	26	54	80	32.50%	67.50%
60+	9	25	34	26.47%	73.53%
<b>Total</b>	<b>345</b>	<b>577</b>	<b>922</b>	<b>37.42%</b>	<b>62.58%</b>

**Table 5 - Location of exposure**

Location of exposure	Count	% of total
Environmental/Domestic	15	1.63%
Other	15	1.63%
Residential	222	24.08%
School/Educational	93	10.09%
Work	577	62.58%
<b>Total</b>	<b>922</b>	<b>100.00%</b>

**Table 6 - Exposure by job category**

Job category	Total	% of total
Asbestos Removal / Disposal	16	4.03%
Boilermaker	9	2.27%
Building / Construction	44	11.08%
Electrician	47	11.84%
Fitter and Machinist	24	6.05%
Mining / Resources Occupations	30	7.56%
Other	210	52.90%
Plumber	17	4.28%
<b>Total</b>	<b>397</b>	<b>100.00%</b>



**Table 7 – Loose-fill asbestos exposure by jurisdiction of residence at time of exposure**

Jurisdiction	Loose fill exposure type						Total
	Owner – no work done on house	Owner having done DIY on house	Owner having had work done on house	Tenant	Tradesperson worker	Visitor to residence of family friends	
ACT	5	30	35	41	2	8	121
NSW	3	7	6	16	1	7	40
NT				1			1
QLD	6	6		3	1		16
SA			1	1			2
TAS		1					1
VIC	2	2		6			10
<b>Total</b>	<b>16</b>	<b>46</b>	<b>42</b>	<b>68</b>	<b>4</b>	<b>15</b>	<b>191</b>

**Table 8 - Frequency of exposure**

Frequency	Location of exposure					Total
	Environmental/Domestic	Other	Residential	School/Educational	Work	
> 5 years	6	6	96	58	157	323
>2 years to 5 years	1	1	35	14	57	108
>6 months to 2 years		2	33	15	62	112
0-6 months	7	4	35	4	224	274
Once only	1	2	23	2	77	105
<b>Total</b>	<b>15</b>	<b>15</b>	<b>222</b>	<b>93</b>	<b>577</b>	<b>922</b>

**Frequency by exposure location**

Frequency	Environmental/Domestic	Other	Residential	School/Educational	Work	Total
> 5 years	40.00%	40.00%	43.24%	62.37%	27.21%	35.03%
>2 years to 5 years	6.67%	6.67%	15.77%	15.05%	9.88%	11.71%
>6 months to 2 years	0.00%	13.33%	14.86%	16.13%	10.75%	12.15%
0-6 months	46.67%	26.67%	15.77%	4.30%	38.82%	29.72%
Once only	6.67%	13.33%	10.36%	2.15%	13.34%	11.39%
<b>% of total exposure types</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>

**Frequency as % of location**

Frequency	Environmental/Domestic	Other	Residential	School/Educational	Work	Total
> 5 years	1.86%	1.86%	29.72%	17.96%	48.61%	35.03%
>2 years to 5 years	0.93%	0.93%	32.41%	12.96%	52.78%	11.71%
>6 months to 2 years	0.00%	1.79%	29.46%	13.39%	55.36%	12.15%
0-6 months	2.55%	1.46%	12.77%	1.46%	81.75%	29.72%
Once only	0.95%	1.90%	21.90%	1.90%	73.33%	11.39%
<b>% of total exposure types</b>	<b>1.63%</b>	<b>1.63%</b>	<b>24.08%</b>	<b>10.09%</b>	<b>62.58%</b>	<b>100.00%</b>

**Table 9 - Means of finding out about NAER**

Means of finding out	Jurisdiction								Total	% of total
	ACT	NSW	NT	QLD	SA	TAS	VIC	WA		
ASEA Website		2		4	1		2	2	11	1.19%
Employer	2	77	3	16	21	7	29	85	240	26.03%
Friends/Family	14	57	2	18	7	2	21	18	139	15.08%
Internet Search	15	25	3	13	4	2	8	11	81	8.79%
Local Council	2		1	3			2		8	0.87%
Medical Practitioner	1	13		2	3		3		22	2.39%
Newspaper/Television Report	17	11	1	7			4	4	44	4.77%
Other	21	53	3	25	8	1	16	13	140	15.18%
Pamphlet/Leaflet	2	3		2	1	1	1	1	11	1.19%
State/Territory Regulator	29	14		9	2		9	1	64	6.94%
Training Course	2	1		2		2	2	1	10	1.08%
Union	1	25		10	2		6	108	152	16.49%
<b>Total</b>	<b>106</b>	<b>281</b>	<b>13</b>	<b>111</b>	<b>49</b>	<b>15</b>	<b>103</b>	<b>244</b>	<b>922</b>	<b>100.00%</b>

**Table 10 - Proportion of workplace to non-workplace disease diagnoses**

Disease	Not workplace	Workplace	Total
Asbestosis		5	5
Cancer	1	2	3
Mesothelioma	2		2
Pleural Plaques	1	12	13
Unknown		2	2
<b>Total</b>	<b>4</b>	<b>21</b>	<b>25</b>
	<b>16.00%</b>	<b>84.00%</b>	