Australian Longitudinal Study on Women’s Health

1989-95 cohort summary

Surveys 1 and 2
# Table of Contents

1 Executive Summary .................................................................................................................................................. 1

2 Introduction and background to the establishment of a new young cohort ....................................................... 6
  2.1 Objectives .......................................................................................................................................................... 6
  2.2 Participants ..................................................................................................................................................... 7
  2.3 Representativeness ......................................................................................................................................... 7
  2.4 Retention ....................................................................................................................................................... 8
  2.5 Procedure ...................................................................................................................................................... 8

3 Response data from Survey 1 and Survey 2 ........................................................................................................ 9
  3.1 Sociodemographic characteristics ............................................................................................................... 10
    3.1.1 Area of residence ..................................................................................................................................... 10
    3.1.2 Education .............................................................................................................................................. 11
    3.1.3 Employment/job seeking ..................................................................................................................... 12
    3.1.4 Ability to manage on income ............................................................................................................... 13
    3.1.5 Relationship status .............................................................................................................................. 14
    3.1.6 Living arrangements ............................................................................................................................ 15
  3.2 Lifestyle ......................................................................................................................................................... 20
    3.2.1 Smoking ................................................................................................................................................. 20
    3.2.2 Alcohol: ............................................................................................................................................... 21
    3.2.3 Illicit drugs: ........................................................................................................................................... 22
    3.2.4 Body Mass Index (BMI) ..................................................................................................................... 24
    3.2.5 Physical Activity ................................................................................................................................. 25
  3.3 Diet* ............................................................................................................................................................... 27
  3.4 Mental health ................................................................................................................................................. 51
  3.5 Reproductive health ....................................................................................................................................... 67
    3.5.1 Sexual behaviour .................................................................................................................................. 67
    3.5.2 Contraception ...................................................................................................................................... 68
    3.5.3 Pregnancy ............................................................................................................................................ 74
    3.5.4 Sexually transmitted infections .......................................................................................................... 77
  3.6 Physical health ............................................................................................................................................... 81
    3.6.1 Symptoms ............................................................................................................................................ 81
    3.6.2 Health conditions ................................................................................................................................. 100
  3.7 Intimate partner violence ............................................................................................................................... 105
  3.8 Health service use .......................................................................................................................................... 108
Table of Contents (cont.)

3.9 Complementary and alternative medicines* ................................................................. 137
3.10 Aspirations* .................................................................................................................. 143

4 Current activity .................................................................................................................. 147

4.1 Projects using 1989-95 cohort data ................................................................................. 147

Recruitment/methodology: .................................................................................................. 147
Health comparisons – 1973-78 and 1989-95 cohorts ......................................................... 147
Health services .................................................................................................................... 147
Diet and nutrition .................................................................................................................. 147
Mental health ....................................................................................................................... 147
Reproductive health ............................................................................................................. 148
Other ................................................................................................................................ 148

4.2 Outcomes (at July 2015) ............................................................................................... 149

Reports: ................................................................................................................................ 149
Papers published: ................................................................................................................. 149
Papers under review: ............................................................................................................ 149

5 Future directions ................................................................................................................. 150
<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 3-1</td>
<td>Participant area of residence at Survey 1 (N=11,293) and Survey 2 (N=11,197)</td>
</tr>
<tr>
<td>Figure 3-2</td>
<td>Highest educational qualification at Survey 1 (N=11,243) and Survey 2 (N=11,126)</td>
</tr>
<tr>
<td>Figure 3-3</td>
<td>Participation in labour force at Survey 1 (N=11,242) and Survey 2 (N=11,126)</td>
</tr>
<tr>
<td>Figure 3-4</td>
<td>Ability to manage on income at Survey 1 (N=11,240) and Survey 2 (N=11,120)</td>
</tr>
<tr>
<td>Figure 3-5</td>
<td>Marital status at Survey 1 (N=11,244) and Survey 2 (N=11,120)</td>
</tr>
<tr>
<td>Figure 3-6</td>
<td>Women living alone at Survey 1 (N=11,246) and Survey 2 (N=11,123)</td>
</tr>
<tr>
<td>Figure 3-7</td>
<td>Women living with one or both parents at Survey 1 (N=11,243) and Survey 2 (N=11,123)</td>
</tr>
<tr>
<td>Figure 3-8</td>
<td>Women living with other adults at Survey 1 (N=11,243) and Survey 2 (N=11,123)</td>
</tr>
<tr>
<td>Figure 3-9</td>
<td>Women living with their male partner at Survey 1 (N=11,243) and Survey 2 (N=11,123)</td>
</tr>
<tr>
<td>Figure 3-10</td>
<td>Women living with children at Survey 1 (N=11,243) and Survey 2 (N=11,123)</td>
</tr>
<tr>
<td>Figure 3-11</td>
<td>Smoking prevalence at Survey 1 and Survey 2 (N=11,323)</td>
</tr>
<tr>
<td>Figure 3-12</td>
<td>Alcohol consumption at Survey 1 and Survey 2 (N=11,251)</td>
</tr>
<tr>
<td>Figure 3-13</td>
<td>Marijuana use reported at Survey 1 and Survey 2 (N=11,247)</td>
</tr>
<tr>
<td>Figure 3-14</td>
<td>Other illicit drug use reported at Survey 1 and Survey 2 (N=11,247)</td>
</tr>
<tr>
<td>Figure 3-15</td>
<td>Body Mass Index, Survey 1 (N = 11,192) and Survey 2 (N = 10,190)</td>
</tr>
<tr>
<td>Figure 3-16</td>
<td>Physical activity, Survey 1 (N=11,255) and Survey 2 (N=11,134)</td>
</tr>
<tr>
<td>Figure 3-17</td>
<td>Frequency of reading nutrition information on food labels (N=11,215)</td>
</tr>
<tr>
<td>Figure 3-18</td>
<td>Frequency of reading ingredients information on food labels (N=11,236)</td>
</tr>
<tr>
<td>Figure 3-19</td>
<td>Number of meals eaten in a typical day (N=11,246)</td>
</tr>
<tr>
<td>Figure 3-20</td>
<td>Number of snacks eaten in a typical day (N=11,245)</td>
</tr>
<tr>
<td>Figure 3-21</td>
<td>Number of pieces of fresh fruit eaten per day (N=11,238)</td>
</tr>
<tr>
<td>Figure 3-22</td>
<td>Serves of vegetables usually eaten per day (N=11,239)</td>
</tr>
<tr>
<td>Figure 3-23</td>
<td>Women who reported excluding red meat from their diet (N=11,237)</td>
</tr>
<tr>
<td>Figure 3-24</td>
<td>Women who reported excluding fish from their diet (N=11,237)</td>
</tr>
<tr>
<td>Figure 3-25</td>
<td>Women who reported excluding poultry from their diet (N=11,237)</td>
</tr>
<tr>
<td>Figure 3-26</td>
<td>Women who reported excluding eggs from their diet (N=11,237)</td>
</tr>
<tr>
<td>Figure 3-27</td>
<td>Women who reported excluding milk or milk products from their diet (N=11,237)</td>
</tr>
<tr>
<td>Figure 3-28</td>
<td>Women who reported they did not exclude any food groups from their diet (N=11,237)</td>
</tr>
<tr>
<td>Figure 3-29</td>
<td>Consumption of cola drinks over the last 12 months (N=11,225)</td>
</tr>
<tr>
<td>Figure 3-30</td>
<td>Consumption of diet cola drinks over the last 12 months (N=11,224)</td>
</tr>
<tr>
<td>Figure 3-31</td>
<td>Consumption of other carbonated drinks over the last 12 months (N=11,223)</td>
</tr>
<tr>
<td>Figure 3-32</td>
<td>Consumption of diet non-carbonated drinks over the last 12 months (N=11,224)</td>
</tr>
<tr>
<td>Figure 3-33</td>
<td>Consumption of non-carbonated cordials, fruit or sports drinks (not diet) over the last 12 months (N=11,224)</td>
</tr>
<tr>
<td>Figure 3-34</td>
<td>Consumption of non-carbonated diet cordials, fruit or sports drinks over the last 12 months (N=11,220)</td>
</tr>
<tr>
<td>Figure 3-35</td>
<td>Consumption of milk or soya milk (including flavoured varieties) over the last 12 months (N=11,222)</td>
</tr>
<tr>
<td>Figure 3-36</td>
<td>Consumption of fruit or vegetable juices over the last 12 months (N=11,223)</td>
</tr>
<tr>
<td>Figure 3-37</td>
<td>Consumption of tea over the last 12 months (N=11,222)</td>
</tr>
<tr>
<td>Figure 3-38</td>
<td>Consumption of herbal tea over the last 12 months (N=11,222)</td>
</tr>
<tr>
<td>Figure 3-39</td>
<td>Consumption of coffee over the last 12 months (N=11,225)</td>
</tr>
<tr>
<td>Figure 3-40</td>
<td>Consumption of water over the last 12 months (N=11,225)</td>
</tr>
<tr>
<td>Figure 3-41</td>
<td>Self-reported frequency of depression at Survey 1 (N=11,256) and Survey 2 (N=11,306) of the 1989-95 cohort, by age at Survey 1</td>
</tr>
<tr>
<td>Figure 3-42</td>
<td>Self-reported frequency of episodes of intense anxiety at Survey 1 (N=11,253) and Survey 2 (N=11,306) of the 1989-95 cohort, by age at Survey 1</td>
</tr>
<tr>
<td>Figure 3-43</td>
<td>Self-reported frequency of palpitations at Survey 1 (N=11,256) and Survey 2 (N=11,306) of the 1989-95 cohort, by age at Survey 1</td>
</tr>
<tr>
<td>Figure 3-44</td>
<td>Psychological distress at Survey 1 (N=11,249) and Survey 2 (N=11,132) measured on the Kessler Psychological Distress Scale (K-10), by age at Survey 1</td>
</tr>
<tr>
<td>Figure 3-45</td>
<td>Women reporting suicidal ideation, Survey 1 (N=11,225) and Survey 2 (N=11,129)</td>
</tr>
<tr>
<td>Figure 3-46</td>
<td>Women reporting self-harming behaviours, Survey 1 (N=11,218) and Survey 2 (N=11,126)</td>
</tr>
<tr>
<td>Figure 3-47</td>
<td>Women who reported at Survey 1(N=11,254) and Survey 2 (N=11,292) ‘ever’ being diagnosed or treat for depression, by age at Survey 1</td>
</tr>
</tbody>
</table>
TABLE OF FIGURES (cont.)

Figure 3-48  Women who reported at Survey 1 (N=11,253) and Survey 2 (N=11,306) ‘ever’ being diagnosed or treated for anxiety disorder, by age at Survey 1................................................................. 59

Figure 3-49  Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for post-traumatic stress disorder, by age at Survey 1. (N=11,292). .................................................. 60

Figure 3-50  Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for anorexia, by age at Survey 1. (N=11,292)............................................................................. 61

Figure 3-51  Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for bulimia, by age at Survey 1. (N=11,292). ............................................................................. 62

Figure 3-52  Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for another eating disorder (i.e., not anorexia or bulimia), by age at Survey 1. (N=11,292). .................................................. 63

Figure 3-53  Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for bipolar disorder, by age at Survey 1. (N=11,292). .................................................................................. 64

Figure 3-54  Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for post-traumatic stress disorder, by age at Survey 1. (N=11,292). .................................................................................. 65

Figure 3-55  Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for borderline personality disorder, by age at Survey 1. (N=11,292). .......................................................... 66

Figure 3-56  Experience of vaginal sex reported by young women from Survey 1 (N=11,246) to Survey 2 (N=11,276), stratified by age.............................................................. 67

Figure 3-57  Oral contraceptive pill use among women from Survey 1 (N=9,487) to Survey 2 (N=9,807), stratified by age.............................................................. 68

Figure 3-58  Condom use among women from Survey 1 (N=9,487) to Survey 2 (N=9,807), stratified by age.............................................................. 69

Figure 3-59  Implanon use among women from Survey 1 (N=9,487) to Survey 2 (N=9,807), stratified by age.............................................................. 70

Figure 3-60  Mirena use among women from Survey 1 (N=9487) to Survey 2 (N=9,807), stratified by age.............................................................. 71

Figure 3-61  Contraceptive use other than the Pill, Condoms, Implanon or Mirena used by women from Survey 1 (N=9487) to Survey 2 (N=9,807), stratified by age.............................................................. 72

Figure 3-62  Women not using any forms of contraception from Survey 1 (N=9487) to Survey 2 (N=9,807), stratified by age.............................................................. 73

Figure 3-63  Women who reported they had ever been pregnant, Survey 1 and Survey 2.............................................................. 74

Figure 3-64  Women who reported they had ever become pregnant by accident.............................................................. 75

Figure 3-65  Women who reported they had ever had a miscarriage, Survey 1 and Survey 2.............................................................. 76
### TABLE OF FIGURES (cont.)

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-66</td>
<td>Women who reported ever being diagnosed or treated for a urinary tract infection, Survey 1 (N=11,254) and Survey 2 (N=11,291).</td>
</tr>
<tr>
<td>3-67</td>
<td>Women who reported ever being diagnosed or treated for chlamydia, Survey 1 (N=11,254) and Survey 2 (N=11,291).</td>
</tr>
<tr>
<td>3-68</td>
<td>Women who reported ever being diagnosed or treated for genital herpes, Survey 1 (N=11,254) and Survey 2 (N=11,291).</td>
</tr>
<tr>
<td>3-69</td>
<td>Women who reported ever being diagnosed or treated for genital warts, Survey 1 (N=11,254) and Survey 2 (N=11,291).</td>
</tr>
<tr>
<td>3-70</td>
<td>Self-reported frequency of allergies, hay fever or sinusitis at Survey 1 (N=11,254) and Survey 2 (N=11,316) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-71</td>
<td>Self-reported frequency of breathing difficulties at Survey 1 (N=11,254) and Survey 2 (N=11,317) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-72</td>
<td>Self-reported frequency of headaches/migraines at Survey 1 (N=11,254) and Survey 2 (N=11,311) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-73</td>
<td>Self-reported frequency of stiff or painful joints at Survey 1 (N=11,254) and Survey 2 (N=11,309) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-74</td>
<td>Self-reported frequency of back pain in the 1989-95 cohort at Survey 1 (N=11,255) and Survey 2 (N=11,311), by age at Survey 1.</td>
</tr>
<tr>
<td>3-75</td>
<td>Self-reported frequency of urine that burns or stings in the 1989-95 cohort at Survey 1 (N=11,252) and Survey 2 (N=11,293), by age at Survey 1.</td>
</tr>
<tr>
<td>3-76</td>
<td>Self-reported frequency of leaking urine at Survey 1 (N=11,252) and Survey 2 (N=11,293) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-77</td>
<td>Self-reported frequency of constipation at Survey 1 (N=11,253) and Survey 2 (N=11,291) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-78</td>
<td>Self-reported frequency of haemorrhoids at Survey 1 (N=11,254) and Survey 2 (N=11,290) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-79</td>
<td>Self-reported frequency of other bowel problems at Survey 1 (N=11,255) and Survey 2 (N=11,291) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-80</td>
<td>Self-reported frequency of vaginal discharge or irritation at Survey 1 (N=11,256) and Survey 2 (N=11,296) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-81</td>
<td>Self-reported frequency of premenstrual tension at Survey 1 (N=11,253) and Survey 2 (N=11,294) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
<tr>
<td>3-82</td>
<td>Self-reported frequency of heavy periods at Survey 1 (N=11,256) and Survey 2 (N=11,296) of the 1989-95 cohort, by age at Survey 1.</td>
</tr>
</tbody>
</table>
TABLE OF FIGURES (cont.)

| Figure 3-83 | Self-reported frequency of irregular periods at Survey 1 (N=11,254) and Survey 2 (N=11,297) of the 1989-95 cohort, by age at Survey 1. ........................................... 94 |
| Figure 3-84 | Self-reported frequency of severe period pain at Survey 1 (N=11,253) and Survey 2 (N=11,297) of the 1989-95 cohort, by age at Survey 1. ........................................... 95 |
| Figure 3-85 | Self-reported frequency of skin problems at Survey 1 (N=11,255) and Survey 2 (N=11,317) of the 1989-95 cohort, by age at Survey 1. ........................................... 96 |
| Figure 3-86 | Self-reported frequency of difficulty sleeping at Survey 1 (N=11,255) and Survey 2 (N=11,306) of the 1989-95 cohort, by age at Survey 1. ........................................... 97 |
| Figure 3-87 | Self-reported frequency of severe tiredness at Survey 1 (N=11,250) and Survey 2 (N=11,311) of the 1989-95 cohort, by age at Survey 1. ........................................... 98 |
| Figure 3-88 | Self-reported frequency of problems with one or both feet at Survey 1 (N=11,256) and Survey 2 (N=11,311) of the 1989-95 cohort, by age at Survey 1. ........................................... 99 |
| Figure 3-89 | Women who had ever been diagnosed or treated for low iron (iron deficiency or anaemia), Survey 1 (N=11,270) and Survey 2 (N=11,291). ........................................... 100 |
| Figure 3-90 | Women who had ever been diagnosed or treated for asthma, Survey 1 (N=11,270) and Survey 2 (N=11,291). ........................................... 101 |
| Figure 3-91 | Women who had ever been diagnosed or treated for bronchitis, Survey 1 (N=11,270) and Survey 2 (N=11,291). ........................................... 102 |
| Figure 3-92 | Women who had ever been diagnosed or treated for endometriosis, Survey 1 (N=11,270) and Survey 2 (N=11,291). ........................................... 103 |
| Figure 3-93 | Women who had ever been diagnosed or treated for polycystic ovary syndrome (PCOS), Survey 1 (N=11,270) and Survey 2 (N=11,291). ........................................... 104 |
| Figure 3-94 | Women who reported ever being in a violent relationship, Survey 1 (N=7,827) and Survey 2 (N=7,929). ........................................... 105 |
| Figure 3-95 | Forms of intimate partner violence reported on the Abbreviated Community Composite Abuse Scale. ........................................... 107 |
| Figure 3-96 | Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – school, university or TAFE. ........................................... 108 |
| Figure 3-97 | Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – friends. ........................................... 109 |
| Figure 3-98 | Sources of health information, Survey 2 (N=11,323) – internet. ........................................... 110 |
| Figure 3-99 | Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – mother/father, sister/brother, other family. ........................................... 111 |
| Figure 3-100 | Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – nurse. ........................................... 112 |
| Figure 3-101 | Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – doctor. ........................................... 113 |
| Figure 3-102 | Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – family planning or sexual health clinic. |
| Figure 3-103 | Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – youth or community services (e.g., mother’s group). |
| Figure 3-104 | Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – TV/radio, magazines, posters, leaflets. |
| Figure 3-105 | Sources of health information, Survey 2 (N=11,323) – journals or textbooks. |
| Figure 3-106 | Sources of health information, Survey 2 (N=11,323) – other health professionals. |
| Figure 3-107 | Preference for a female GP, Survey 1 (N=11,255) and Survey 2 (N=11,322). |
| Figure 3-108 | Women who reported having a pap test within the last 2 years, at Survey 1 (N=11,250) and Survey 2 (N=11,263). |
| Figure 3-109 | Women who reported having their blood pressure checked within the last 2 years, at Survey 1 (N=11,251) and Survey 2 (N=11,263). |
| Figure 3-110 | Women who reported having their blood pressure checked within the last 2 years, at Survey 1 (N=11,251) and Survey 2 (N=11,263). |
| Figure 3-111 | Women who reported at Survey 2 having had their weight checked by a health professional in the last 2 years (N=11,263). |
| Figure 3-112 | Women who reported ever having a vaccination for HPV at Survey 1 (N=11,251). |
| Figure 3-113 | Percentage of women who had their own Medicare card at Survey 1 (N=11,253). |
| Figure 3-114 | Women who reported having a Health Care Card, Survey 1 (N=11,248) and Survey 2 (N=11,263). |
| Figure 3-115 | Number of women who had consulted a midwife in the last 12 months (N=11,279). |
| Figure 3-116 | Number of women who had consulted a mental health worker in the last 12 months (N=11,278). |
| Figure 3-117 | Number of women who had consulted a community nurse, practice nurse or nurse practitioner in the last 12 months (N=11,278). |
| Figure 3-118 | Number of women who had consulted a chiropractor in the last 12 months (N=11,280). |
| Figure 3-119 | Number of women who had consulted a midwife in the last 12 months (N=11,280). |
| Figure 3-120 | Number of women who had consulted a massage therapist in the last 12 months (N=11,282). |
TABLE OF FIGURES (cont.)

| Figure 3-121 | Number of women who had consulted an acupuncturist in the last 12 months (N=11,274). | 133 |
| Figure 3-122 | Number of women who had consulted a naturopath/herbalist in the last 12 months (N=11,280). | 134 |
| Figure 3-123 | Number of women who had consulted any other alternative health practitioner in the last 12 months (N=11,278). | 135 |
| Figure 3-124 | Number of women who had consulted a physiotherapist in the last 12 months (N=11,280). | 136 |
| Figure 3-125 | Usage of vitamins/minerals in the last 12 months (N=11,279). | 137 |
| Figure 3-126 | Usage of yoga or meditation in the last 12 months (N=11,279). | 138 |
| Figure 3-127 | Usage of herbal medicines in the last 12 months (N=11,278). | 139 |
| Figure 3-128 | Usage of aromatherapy oils for own health in the last 12 months (N=11,279). | 140 |
| Figure 3-129 | Usage of Chinese medicine for own health in the last 12 months (N=11,278). | 141 |
| Figure 3-130 | Usage of other alternative medicines for own health in the last 12 months (N=11,278). | 142 |
| Figure 3-131 | Aspirations for employment at age 40 (N=11,115). | 143 |
| Figure 3-132 | Aspirations for relationship status at age 40 (N=11,116). | 144 |
| Figure 3-133 | Aspirations for children at age 40 (N=11,113). | 145 |
| Figure 3-134 | Aspirations for educational qualifications at age 40 (N=11,117). | 146 |
1989 – 95 cohort summary

1 Executive Summary
The Australian Longitudinal Study on Women’s Health (ALSWH) is a longitudinal population-based survey of over 58,000 Australian women in four cohorts. This report is a summary of data from women in the youngest cohort born 1989-95 who completed their first survey in 2013 (aged 18 to 23) and their second survey in 2014 (aged 19-24).

Sociodemographic characteristics:
The women in the 1989-95 cohort showed many changes in their socio-demographic circumstances as they aged and between surveys, as would be expected of women aged 18 to 23 years. These changes included obtaining higher educational qualifications, beginning employment, leaving the family home and forming relationships. Socio-demographic circumstances that showed little change included where they lived (around 90% urban or inner regional) and how they managed on their income (about 65% had some difficulty).

- There was a clear pattern of higher educational attainment with age and between surveys, with around half of women aged 22 and 23 years having obtained university level qualifications by Survey 2.

- At Survey 1, almost twice as many 18 year old women (around 30%) reported looking for work compared to 23 year old women. Between Surveys 1 and 2 there was a steady decrease in the percentages in all age groups who were unemployed or looking for work.

- The prevalence of women getting married or forming de facto relationships increased with age and between Surveys 1 and 2. By the age of 23 years, almost 40% of women reported being in these relationships.

- The majority of women aged 18 to 20 years lived with one or both parents. By 22 or 23 years around 30% of women still lived with one or both parents, 30% lived with other adults, and 40% lived with a male partner.

- Across the surveys, less than 6% of women in all age groups lived alone and less than 9% lived with children, although almost three times as many women aged 23 years lived with children compared to women aged 18 years.
Lifestyle:

- While women in this age group are still starting and stopping smoking, the percentage of ex-smokers increased from 3% of 18 year olds to 10% for those aged 23 to 24 years.
- Patterns of alcohol consumption changed little from 18 to 23 years. Across the age range three per cent of women engaged in alcohol consumption that posed long-term risk.
- Over a quarter (27%) of 19-20 year olds reported using marijuana in the last 12 months, with this percentage declining to 22% of women at age 23 years.
- Use of other illicit drugs (such as Ice, LSD, cocaine) increased from 10% of women aged 18 years to 16% of 23 year olds, while those who had never tried these drugs dropped from 86% to 64%.
- BMI increased progressively both between surveys and across the age groups, with the percentage of women categorised as overweight or obese rising from 24% at age 18 to 36% at age 23 years – this included a rise in the prevalence of obesity from 10% to 16%.
- Just under half the women (46-49%) reported high levels of physical activity, with little variation across the age range. Around 5% of women were categorised as inactive and a quarter (25-27%) as having low activity levels.

Diet (data collected at Survey 2):

- Most women reported that they always or often read nutritional and ingredient information on food labels, with this increasing over the age range. A quarter (26%) of the youngest women (aged 18 years at Survey 1) rarely or never read nutritional information on food labels, compared with 17% of the oldest women (23 year olds at Survey 1) in the cohort. Similarly the percent who rarely or never read ingredient information was smaller for younger women (20%) than for the oldest women (26%).
- More than 70% of women had three of more meals on a typical day, with a similar percentage reporting that they had two or more snacks on a typical day.
- While 30% of the women met dietary guidelines for fruit consumption (two or more pieces), more than a third (33%-38%) across the age range did not eat fruit or reported that they usually had less than one piece per day.
- Consumption of vegetables increased slightly across the cohort age range, with 45% of the oldest women in the cohort reported having three or more serves daily. Less than 8% of women ate the recommended 5 of more serves of vegetables per day.
- Consumption of cola and other carbonated (but not diet) drinks declined across the age range, with a small group having one of more of these drinks every day (5% for cola and 3% or less for other drinks).
The consumption of tea varied little across the age range, with more than 30% of the women reporting that they drank tea at least once per day. In contrast, coffee consumption increased across the age range – with 18% of the youngest reporting that they had coffee at least once per day rising to 38% of the oldest (aged 23 years at Survey 1).

Mental health:

Overall, the women in the 1989-95 cohort reported medium to high levels of psychological distress, in particular depression and anxiety, although the prevalence of distress declined with age. Self-harm and suicidal ideation were also reported by a significant proportion of women. Mental health conditions with low prevalence (less than 5%) across the age groups and between surveys were post-traumatic stress disorder, bipolar disorder, obsessive compulsive disorder, borderline personality disorder, and eating disorders (anorexia, bulimia).

- Scores on the Kessler Psychological Distress Scale (K-10) revealed at least 55% of the 18 year old women recorded high/very high scores (indicative of worse mental health). By contrast, at age 23 years, approximately 60% had moderate to low scores. These findings were reinforced by the results for self-reported depression and anxiety: by age 23 years 40% and 30% of women respectively reported depression and anxiety ‘often’ or ‘sometimes’ in the last 12 months.

- Palpitations (i.e., feeling that their heart was racing/fluttering in the chest) were experienced ‘often’ or ‘sometimes’ in the last 12 months by 30% of women aged 18 years. This decreased to about 25% of women aged 23 years.

- Suicidal ideation in the previous 12 months was reported by 40% of 18 year old women with this decreasing to 25% of 23 year old women. Self-harm in the previous 12 months was reported by 20% of 18 year old women with this decreasing to less than 10% of 23 year old women.

Reproductive health:

- The majority of women were sexually active and most used contraception the last time they had vaginal sex.

- Contraceptive use changed slightly from Survey 1 to Survey 2. Among young women aged 18 years in 2013, condom use decreased from 54% to 48%, and Implanon use increased slightly, from 11% to 12%.

- At Survey 2, around 15% of women who were aged 23 in 2013 did not use any contraception the last time they had vaginal sex. In this age-group, one in five women had ever been pregnant and 15% reported an unplanned pregnancy.

- Sexually transmitted infections (STIs) were most common among 23 year olds. Among this age-group, around 12% of women reported a diagnosis of chlamydia and more than half reported being diagnosed or treated for a urinary tract infection.
Among women who were aged 20-22 in 2013, levels of STIs changed slightly across Surveys 1 and 2. Among women who were aged 20 in 2013, chlamydia increased from 7% to 9%.

Physical health:

- Anaemia (low iron) was the most common health condition, with one third of women in all age-groups reporting they had ever had the condition.
- Asthma and bronchitis were also fairly common, and the prevalence of each increased with age. Women reporting ever having asthma rose from 20% among the 18 year age-group to 30% in the 23 year age-group, and bronchitis increased similarly from 10% to 14%.
- Polycystic ovary syndrome (PCOS) increased with age and from Survey 1 to Survey 2, with approximately 7.5% of the oldest age-group (aged 23 at Survey 1) reporting the condition by Survey 2.
- Constipation also increased with age, rising from 24% in the youngest women to 30% in the oldest women. Haemorrhoids increased with age as well, with prevalence rising from less than 4% of the 18 year age-group at Survey 1 to 7.5% of the 23 year age-group at Survey 2.
- Heavy periods, irregular periods, and severe period pain were all more common among the youngest women and decreased with age. (The opposite occurred for vaginal discharge/irritation, which increased with age, from 15% in the youngest women to 20% in the oldest women).
- At least 60% of women in all age-groups reported ‘sometimes’ or ‘often’ having had headaches/migraines in the last 12 months, with prevalence decreasing slightly with age.
- Severe tiredness was reported ‘often’ or ‘sometimes’ by at least 60% of each age-group. Sleeping problems were similarly reported. Both were slightly more common in younger women, and decreased with age.

Intimate partner violence:

- Approximately 15% of women reported they had been in a violent relationship with a partner/spouse. The most common forms of intimate partner violence involved harassment and emotional abuse.

Health services use:

Survey questions covered non-medical professionals the women consulted about their health, as well as tests and screening, and sources of information about their health.

- Overwhelmingly women of all ages preferred to see a female doctor, with this rising from 60% of the youngest women (aged 18 at Survey 1) to 70% of women aged 23 at Survey 1.
- About half of the youngest women were still included on their parent’s Medicare card. This proportion decreased over the age groups, with 85% of the 23 year old women holding their own Medicare card. The percentage with a health care card dropped with age.
• The non-medical professionals most consulted by women were counsellors/mental health workers (around 30% of all age groups) and physiotherapists (around 25%).

Tests and Screening – the proportion of women reporting tests or screening generally increased with age rather than between surveys.

• About 20% of 18 year olds in Survey 1 had a pap test compared to almost 70% of 23 year olds in Survey 2.
• At least 78% of women reported having had their blood pressure checked in the last 2 years. The prevalence of having had a blood pressure check increased with increasing age, and from Survey 1 to Survey 2.
• About 25% of 18 year olds and about 33% of 23 year olds reported having their skin checked.
• 40% of 18 year olds and 45% of 23 year olds reported having their body weight measured.
• Over 80% of women reported they had ever had a vaccination for HPV.

Women were asked about the health services they used, as well as about the sources of information they used to obtain health information.

• For women aged 18 to 19 years the principal sources of information about health were the internet (80%), doctors (75%), family members (70%), higher education institutions (50%) and friends (45%). Women aged 23-24 years primarily used the internet (80%), doctors (80%), and family members (55%) and friends (45%).

Complementary and Alternative Medicines:

The most widely reported complementary medicines and approaches used by the women were vitamins/minerals (55-60%), yoga (25-35%) and herbal medicines (10-15%). Usage was slightly higher in older women.

Future Aspirations:

The women were asked about their future aspirations for employment, education, relationships and children when they were aged 40.

• More than 60% of women aspired to be undertaking full time paid work and about 20% aspired to self-employment. Part time paid work was a more popular choice among older women than those in their late teens and early twenties.
• Over 90% of women aged 18 years aspired to more educational qualifications compared to 75% of women aged 23 years. This is to be expected given the results presented above showing the dramatic increase in educational qualifications between the ages of 18 and 23 years.
• Relationship aspirations were similar across all ages, with most women aspiring to be married by the time they were 40, and less than 1% aspiring to be single.
2 Introduction and background to the establishment of a new young cohort

The Australian Longitudinal Study on Women’s Health (ALSWH) assesses the physical and mental health of Australian women, as well as psychosocial aspects of their health (such as lifestyle and socio-demographic factors) and their use of health services. ALSWH is funded by the Australian Government Department of Health and has been collecting data since 1996 from the Study’s original three cohorts, born 1973-78, 1946-51 and 1921-26, who were recruited via random sampling of the Health Insurance Commission (now Medicare Australia) database.

By 2010, ALSWH participants were aged 32 to 37 (1973-78 cohort), 59 to 64 (1946-51 cohort) and 84 to 89 (1921-26 cohort). Since women in the youngest cohort were no longer young adults, in 2011 the Department of Health and Ageing (now the Department of Health) provided ALSWH with funding to establish a new, fourth cohort of young women aged 18 to 23 (born 1989-95). It is important to ensure young women are represented in national longitudinal studies as they are at a key stage in their lifespan with respect to reproductive and lifestyle decisions that will affect future demographic trends and demand for health services.

2.1 Objectives

The broad objectives for establishing a new young cohort were:

- To collect scientifically valid information about the current health and health service use of young women, which will provide an evidence base for the development and evaluation of health policy and practice relevant to a new generation of Australian women;
- To add health information from young women to the information from existing cohorts, in order to create a dataset which can be used to examine the health and health service use of Australian women across the lifespan.

The specific aims of establishing a new young cohort were:

- To examine health risk factors including weight, physical activity, and use of tobacco and alcohol;
- To examine risk taking behaviour, such as use of illicit drugs, and sexual behaviour;
- To gather information about social experiences and environmental influences on young women, including information about families of origin, traumatic or stressful events, neighbourhood characteristics, and social inclusion;
- To examine patterns of contraceptive use, experiences of pregnancy and childbirth, and other reproductive health issues;
- To examine young women’s access to sources of information about, and use of health services and preventive health activities;
- To record the aspirations for the future and life goals of young women in relation to education, travel, area of residence, work, family and children.
Recent research demonstrated that using the recruitment methods that had been used with the original ALSWH cohorts would be ineffective and costly. Therefore, an open recruiting protocol was developed to encourage women from across Australia to complete an online survey. Recruitment activities included:

- Using the internet and social media platforms as the main recruitment method, with over two thirds of responses related to Facebook;
- Referral and traditional media;
- Use of incentives;
- A dynamic recruitment review process with targeted advertising, for instance to ensure recruitment from regional and remote areas.

Eligibility criteria included living in Australia, being a female aged 18-23, and possessing a Medicare number (Australian and New Zealand citizens and permanent residents living in Australia are eligible for a Medicare number). Consenting to have survey data linked with administrative data (e.g., records of health service use) was also required for inclusion in the cohort. More details about the recruitment process can be found in Health and wellbeing of women aged 18 to 23 in 2013 and 1996: Findings from the Australian Longitudinal Study on Women’s Health (2015, Report prepared for the Australian Government) and a paper by Loxton and colleagues, ‘Online and offline recruitment of young women for a longitudinal health survey: Findings from the Australian Longitudinal Study on Women’s Health 1989-95 cohort (2015, Journal of Medical Internet Research, 17; e109).

2.2 Participants

A total of 17,567 women met the inclusion criteria – that is, they completed survey information, provided a valid and verified Medicare number, and consented to linkage of survey data with administrative databases. A pilot study group of 498 women was formed, leaving a total of 17,069 women in the 1989-95 main cohort.

2.3 Representativeness

Representativeness of the cohort enables generalisation of findings from the study to support the development of national health policy and healthcare planning. Compared to the Australian Census data, study participants were broadly representative in terms of geographical distribution across Australia, marital status (96% had never been married), and age distribution. A higher percentage had attained university (22%) and trade/certificate/diploma qualifications (26%) compared with this age group of women in the national population (9% and 22% respectively). Among study participants, 22% were not in paid employment with 35% studying 16 or more hours a week. A higher percentage of study participants rated their health in the online survey as fair or poor (rather than good, very good, or excellent) compared with those participating in face-to-face interviews in the AHS (18% vs 10%). A higher percentage of study participants were current smokers (22% in ALSWH vs 16% in AHS) and physically active (59% in ALSWH were classified as sufficiently active vs
48% in AHS) but alcohol consumption was lower (60% in ALSWH reported drinking alcohol at least once per month vs 66% in the AHS).

While some overrepresentation in tertiary-educated women is apparent and was unable to be fully mitigated by the multiple techniques employed, the sample is broadly representative across other demographic measures and has sufficient size and diversity to allow for subgroup comparisons (Loxton et al, 2015).

2.4 Retention

In 2014, the second survey of the 1989-95 cohort was deployed. The Survey 2 response rate was 66.7% (n=11,384). Of the 17,069 women who completed the first survey, 678 women (4.0%) withdrew from the longitudinal study and 766 (4.5%) were contacted but did not complete the survey. The remaining 4,241 women (24.8%) could not be contacted by email, telephone, mail or Facebook. Compared with women who completed Survey 1 only, women who completed Survey 2 were older and more educated, and more likely to be studying and to report being able to manage on their available income.

2.5 Procedure

Standard validated questions from Australian and overseas sources have been used in the surveys, to allow findings to be compared directly with information from other studies. All surveys are pilot tested with the 1989-95 cohort pilot group, approximately five months before the main survey is deployed. All surveys of the 1989-95 cohort are conducted online and participants are currently completing Survey 3. Full details of survey development are available in the ALSWH annual technical reports that are available on the ALSWH website.

Results from Survey 1 and Survey 2 are included in this report. Copies of all surveys, and accompanying databooks, are available on the Study website.
3 Response data from Survey 1 and Survey 2

Figures in this section show responses to questions asked on the first two surveys of the cohort, conducted in 2013 and 2014.

For each figure, an example survey question has been included. To provide maximum information, responses have been divided into six categories according to age at Survey 1 (e.g., 18 at Survey 1, 19 at Survey 1, 20 at Survey 1 etc.). Figures show how each age-group responded to a question at Survey 1 and Survey 2. (Some questions were only asked at one survey, and these are noted).

Complete data for every survey, including questions and responses, are available in the ALSWH databooks, available at: www.alswh.org.au
3.1 Sociodemographic characteristics

3.1.1 Area of residence
Area of residence is determined from the latitudes and longitudes of participants’ residential addresses, which are linked with geographical information (geocoded). In those few cases where address information is unreliable, postcode information gathered in the survey is used.

![Area of residence chart]

Figure 3-1 Participant area of residence at Survey 1 (N=11,293) and Survey 2 (N=11,197).

At both surveys, the majority of women (>70%) lived in major cities, with another 15-20% living in inner regional areas. Change in area of residence between the two surveys was small: the largest change being for the women aged 18 at Survey 1. By Survey 2 around 5% of these women had moved to major cities from more remote areas.
3.1.2 Education

QUESTION: What is the highest level of education you have completed?

- Year 10 or below
- Year 11 or equivalent
- Year 12 or equivalent
- Certificate I/II
- Certificate III/IV
- Advanced Diploma/Diploma
- Bachelor Degree
- Graduate diploma/Graduate certificate
- Postgraduate degree

Figure 3-2 Highest educational qualification at Survey 1 (N=11,243) and Survey 2 (N=11,126).

The figure shows the clear pattern of higher educational attainment with age and between surveys. Notably, half of the women aged 18 at Survey 1 who had not yet finished high school had done so by Survey 2, and there was a doubling of the proportion of 18 year old women who had obtained a certificate/diploma/university level qualification by Survey 2. Around half of women aged 22 and 23 years had obtained university level qualifications by Survey 2.
3.1.3 Employment/job seeking

QUESTION: Are you currently unemployed and actively seeking work? (Response options: No; Yes, unemployed for less than 6 months; Yes, unemployed for more than 6 months)

![Chart showing participation in labor force at Survey 1 (N=11,242) and Survey 2 (N=11,126).]

More younger women reported being unemployed and looking for work compared to older women: Almost twice as many women (around 30%) aged 18 years in survey 1 reported looking for work compared to 23 year old women. By age 23 years, around 85% of women reported that they were not unemployed or looking for work. In all age groups there was a steady decrease in the proportions who reported they were unemployed or looking for work between Surveys 1 and 2.
3.1.4 Ability to manage on income

QUESTION: How do you manage on the income you have available? (Response options: It is impossible, It is difficult all of the time, It is difficult some of the time, It is not too bad, It is easy).

![Bar chart](image)

**Figure 3-4 Ability to manage on income at Survey 1 (N=11,240) and Survey 2 (N=11,120).**

In all age groups, a majority of women reported that it was either not too bad (around 30%) or difficult sometimes (around 35%) to manage on their income at Survey 1, with this also the case in Survey 2. Fairly consistently, only about 10% of women in each age group found it easy to manage on their income. There appeared to be a small difference between the age groups on the proportions reporting that it was impossible or difficult all the time, with around 20% of women in the older age groups reporting this compared to 25% of those who were 18, 19 or 20 years of age.
3.1.5 Relationship status

QUESTION: What is your current relationship status?

- I am single
- I am in a relationship (not living together)
- I am living with a partner
- I am engaged
- I am married
- I am divorced
- I am separated
- I am widowed

Figure 3-5 Marital status at Survey 1 (N=11,244) and Survey 2 (N=11,120).

Note: Never married includes ‘single’, ‘engaged’ and ‘in a relationship, but not living together’ responses.

The prevalence of women getting married or forming de facto relationships increased with age and between Survey 1 to Survey 2. By the age of 23 years, almost 40% of women reported being in these relationships.
3.1.6 Living arrangements

The living arrangements of the women are separately reported in the next five figures.

QUESTION: What are your living arrangements?

- I live alone

The figure shows that less than 6% of women in all age groups reported living alone. Although small, there was an increase in the proportions of women living alone between Surveys 1 and 2, except for women aged 22 years.

Figure 3-6 Women living alone at Survey 1 (N=11,246) and Survey 2 (N=11,123).

The figure shows that less than 6% of women in all age groups reported living alone. Although small, there was an increase in the proportions of women living alone between Surveys 1 and 2, except for women aged 22 years.
QUESTION: What are your living arrangements?

- I live with one or both parents

Figure 3-7 Women living with one or both parents at Survey 1 (N=11,243) and Survey 2 (N=11,123).

The majority of women aged 18 to 20 lived with one or both parents. By 23 years around 30% of women still lived with one or both parents. In all age groups, proportion living with one or both parents decreased between surveys.
QUESTION: What are your living arrangements?

- I live with other adults

Figure 3-8 Women living with other adults at Survey 1 (N=11,243) and Survey 2 (N=11,123).

The proportion of women living with other adults gradually increased with age and between surveys. By age 22 or 23 years of age around 30% lived with other adults.
QUESTION: What are your living arrangements?

- I live with my male partner

Figure 3-9 Women living with their male partner at Survey 1 (N=11,243) and Survey 2 (N=11,123).

There was a clear and consistent increase in the proportion of women living with a male partner with age and between surveys. By 23 years, around 40% of women lived with a male partner, compared to around 10-15% of women aged 18.
QUESTION: What are your living arrangements?

- I live with children

Figure 3-10 Women living with children at Survey 1 (N=11,243) and Survey 2 (N=11,123).

The figure shows that less than 9% of women in all age groups reported living with children. Although small, there was an increase in the proportions of women living with children between Surveys 1 and 2, except for women aged 22 years. Almost three times as many women aged 23 years lived with children compared to women aged 18 years.
3.2 Lifestyle

3.2.1 Smoking:

QUESTION: How often do you currently smoke cigarettes or any tobacco products? (Response options: Daily, at least weekly (but not daily), less often than weekly, not at all)

QUESTION: In your lifetime, would you have smoked at least 100 cigarettes (or equivalent)? Yes/No

Responses to each question are used to classify women as having never smoked, or being an ex-smoker, or a current smoker.

Figure 3-11 Smoking prevalence at Survey 1 and Survey 2 (N=11,323).

Women in this age group are still starting and stopping smoking. The change in percentages of women smoking was minor over the year between Surveys 1 and 2. For example, at the first survey 23% of the youngest women were current smokers and 3% were ex-smokers and at Survey 2, 22% were current smokers and 5% were ex-smokers. Percentages of women who were current smokers declined from 22%-23% in the youngest women to 18% in the oldest women, and the percentages who were ex-smokers increased from 3%-5% to 9%-10%.
3.2.2 Alcohol:

QUESTION: How often do you usually drink alcohol? Never, less than once a month, less than once a week, 1-2 days a week, 3-4 days a week, 5-6 days a week, every day.

QUESTION: On a day when you drink alcohol, how many standard drinks do you usually have? 1-2 drinks per day, 3 or 4 drinks per day, 5-8 drinks per day, 9 or more drinks per day.

QUESTION: How often do you have 5 or more drinks on one occasion? Never, less than once a month, about once a month, about once a week, more than once a week.

Alcohol consumption is calculated from responses to each question.

Figure 3-12 Alcohol consumption at Survey 1 and Survey 2 (N=11,251).

Risk is based on the 2009 NHMRC guidelines. Episodic risk is defined as drinking 5 or more drinks on one occasion, with low episodic risk occurring less than once a month. High episodic risk is drinking the same quantity once a month or more often. Long-term risk is drinking more than 2 standard drinks per day on average. Low risk is drinking less than these amounts. There was little change in alcohol consumption between surveys. Most women drank at some risk: 44%-45% at low episodic risk, 29%-31% at high episodic risk, and 3% at long-term risk.
3.2.3 **Illicit drugs:**

**QUESTION:** Have you tried Marijuana/cannabis?* (pot, grass, weed, yandi, rope, mull, dope, skunk, bhang, ganja, hash, chronic, reefer, joint, cone or spliff)

- In the last 12 months
- More than 12 months ago
- Never

*Women were asked to select as many responses as applied, so four categories are possible:

- Women who selected only ‘never’
- Women who selected only ‘more than 12 months ago’
- Women who selected ‘more than 12 months ago’ AND ‘in the last 12 months’
- Women who selected only ‘in the last 12 months’

---

**Figure 3-13** Marijuana use reported at Survey 1 and Survey 2 (N=11,247).

In the last 12 months, the use of marijuana increased slightly in the youngest women (28% to 31%), with a corresponding decrease in the oldest women (26% to 24%). Past use of marijuana (more than 12 months ago) increased with age from 11% to 34% at survey 1 and 15% to 38% at Survey 2. Past use increased at all ages over time.
QUESTION: Have you tried any other illicit drugs?* (Ice, speed, GHB, amphetamines, LSD, natural hallucinogens, tranquillisers, ketamine, cocaine, ecstasy, inhalants, heroin, barbituates)

- In the last 12 months
- More than 12 months ago
- Never

*Women were asked to select as many responses as applied, so four categories are possible:

- Women who selected only ‘never’
- Women who selected only ‘more than 12 months ago’
- Women who selected ‘more than 12 months ago’ AND ‘in the last 12 months’
- Women who selected only ‘in the last 12 months’

Figure 3-14 Other illicit drug use reported at Survey 1 and Survey 2 (N=11,247).

In the last 12 months, the use of other illicit drugs increased from 11% to 14% in the youngest women, otherwise usage increased only slightly or remained steady. Past use of other illicit drugs increased steadily from 3% to 19% at Survey 1 and from 5% to 21% at Survey 2. Over the year between Surveys 1 and 2, women were more likely to stop using other illicit drugs.
3.2.4 Body Mass Index (BMI)

QUESTION: How tall are you without shoes? + QUESTION: How much do you weigh without clothes or shoes? If you are pregnant now, write in the weight you were in the month prior to pregnancy. (if you are not sure, please estimate)

BMI \[\text{weight (kg)/height (m)}^2\] is calculated from responses to both questions.

Figure 3-15 Body Mass Index, Survey 1 (N = 11,192) and Survey 2 (N = 10,190)

BMI increased across the age-groups. At Survey 1, 62% of the youngest women (aged 18) were in the ‘healthy’ weight category, about 17% were ‘overweight’, 10% were ‘obese’, and 11% were ‘underweight’. Amongst the oldest women (aged 23) similar proportions were included in the ‘healthy’ and ‘overweight’ categories - approximately 60%, and 20% respectively - but at this age fewer women (approximately 5%) were included in the ‘underweight’ category, and more (approximately 15%) were categorised as ‘obese’. At Survey 2, in all age groups, slightly less women (approximately 1%) were categorised as ‘underweight’ or ‘healthy weight’, and slightly more women (approximately 1.5%) were categorised as ‘overweight’ or ‘obese’.
3.2.5 Physical Activity

Women have been asked about their physical activity at both surveys. Questions have assessed frequency (how often) and duration (how much time) of physical activity. Level of physical activity is categorised as ‘inactive’, ‘low’, ‘moderate’, or ‘high’ and has been calculated from responses to both questions.

FREQUENCY QUESTION: Please state how many times you did each type of activity last week. Only count activities that lasted for 10 minutes or more. (If you did not do an activity, please type ‘0’)

- Walking briskly (for recreation or exercise, or to get from place to place) ______
- Moderate leisure activity (like social tennis, moderate exercise classes, recreational swimming, dancing) ______
- Vigorous leisure activity (that makes you breath harder or puff and pant like aerobics, competitive sport, vigorous cycling, running, swimming) ______
- Vigorous household or garden chores (that make you breathe harder or puff and pant)

DURATION QUESTION: Please state how much time you spent altogether doing each type of activity last week.

Add up all the times you spent in each activity to get the total time for each activity. (Response options: Hours, Minutes).

- Walking briskly (for recreation or exercise, or to get from place to place) ______
- Moderate leisure activity (like social tennis, moderate exercise classes, recreational swimming, dancing) ______
- Vigorous leisure activity (that makes you breath harder or puff and pant like aerobics, competitive sport, vigorous cycling, running, swimming) ______
- Vigorous household or garden chores (that make you breathe harder or puff and pant)
Approximately half of the women in the cohort reported high levels of physical activity, about one quarter reported low levels of physical activity, and around 20% were in the ‘moderate’ category. Roughly 5% were sedentary, or included in the ‘inactive’ category. Little change was observed across the age-groups, or from Survey 1 to Survey 2.

**Figure 3-16 Physical activity, Survey 1 (N=11,255) and Survey 2 (N=11,134).**
3.3 Diet*

*Diet questions were not asked at Survey 1

QUESTION: Thinking about the last 6 months, how frequently do you read the nutrition information/panel on food labels? (Response options: Always, often, occasionally, rarely, never)

![Figure 3-17 Frequency of reading nutrition information on food labels (N=11,215).](image)

There was a small increase across the age range in the percentage of women who read nutritional information on food labels, with the majority (51-58%) of women aged 20 years or more at Survey 1 reporting that they always or often read this information. One in four women (26%) aged 18 years at Survey 1 reported that they rarely or never read nutritional information on food labels, whereas 17% of the oldest women (aged 23 years at Survey 1) were in this group.
QUESTION: Thinking about the last 6 months, how frequently do you read the information on ingredients (e.g., ingredient lists, quantity of ingredients) on food labels? (Response options: Always, often, occasionally, rarely, never)

Figure 3-18 Frequency of reading ingredients information on food labels (N=11,236).

The percentage of women who read ingredient information on food labels increased slightly across the age range. The majority (51-56%) of women reported that they always or often read the ingredient information. Of the youngest women (aged 18 at Survey 1), 26% responded that they rarely or never read this information, compared with less than 20% of the older women (aged 21 to 23 years at Survey 1).
QUESTION: How many MEALS (including breakfast, lunch and dinner) do you usually eat in a typical day, including evenings?

- None
- One
- Two
- Three
- Four
- Five

Figure 3-19 Number of meals eaten in a typical day (N=11,246).

The percentage of women who reported having three or more meals in a typical day increased across the age range, from 69% of the youngest to 77% of the oldest women. Of women aged 18 at Survey 1, 4% reported that they had just one meal a day compared with 2% of women aged 23 years at Survey 1.
QUESTION: How many SNACKS do you usually eat in a typical day, including evenings?

- None
- One
- Two
- Three
- Four
- Five

![Figure 3-20 Number of snacks eaten in a typical day (N=11,245).](image)

Although 75% or more of the women reported that they ate two or more snacks on a typical day, the frequency of snacking showed a slight decrease across the cohort age range. Of the youngest women, 20% responded that they had at most one snack on a typical day compared with 25% of the oldest women.
QUESTION: How many pieces of fresh fruit do you usually eat per day? (count ½ cup of diced fruit, berries or grapes as one piece)

- I don’t eat fruit
- Less than 1 piece of fruit a day
- 1 piece of fruit a day
- 2 pieces of fruit a day
- 3 pieces of fruit a day
- 4 or more pieces of fruit a day

Figure 3-21 Number of pieces of fresh fruit eaten per day (N=11,238).

There was little difference in the consumption of fruit across the age range. Although almost one third (32-34%) of women reported that they had two or more pieces of fruit per day and so met dietary guidelines, another third (34-38%) responded that they did not eat fruit or that they usually had less than one piece per day.
QUESTION: How many serves of vegetables do you usually eat each day? (A serve = half a cup of cooked vegetables or a cup of salad)

- None
- Less than one serve
- 1 serve
- 2 serves
- 3 serves
- 4 serves
- 5 or more serves

Figure 3-22 Serves of vegetables usually eaten per day (N=11,239).

Vegetable consumption increased slightly across the age range, such that 45% of the oldest women reported having three or more serves daily (compared with 41% of the youngest). The guidelines of eating five or more serves of vegetables per day were met by 8% or less of women. 30% of the women aged 18 years at Survey 1 responded that they usually had one daily serve or less of vegetables each day, compared with 24% of women aged 23 years.
QUESTION: Do you EXCLUDE red meat (beef, pork, lamb) from your diet?

Figure 3-23 Women who reported excluding red meat from their diet (N=11,237).

The percentage of women who excluded red meat from their diet ranged from over 15% for the youngest women to just under 12% for the oldest.
QUESTION: Do you EXCLUDE fish from your diet?

Figure 3-24 Women who reported excluding fish from their diet (N=11,237).

The percentage of women who excluded fish from their diet ranged from over 17% for women aged 18 to 19 years at Survey 1 to just under 14% of the oldest women (age 23 years at Survey 1).
QUESTION: Do you EXCLUDE poultry from your diet?

Figure 3-25 Women who reported excluding poultry from their diet (N=11,237).

The percentage of women who reported that they excluded poultry from their diet ranged between 10% of those aged 21 at Survey 1 to 8% of the oldest (aged 23 years at Survey 1).
QUESTION: Do you EXCLUDE eggs from your diet?

Figure 3-26 Women who reported excluding eggs from their diet (N=11,237).

Across the age range, around 5% to 6% of women in the cohort reported that they excluded eggs from their diet.
QUESTION: Do you EXCLUDE milk and milk products from your diet?

Figure 3-27 Women who reported excluding milk or milk products from their diet (N=11,237).

The percentage of women who reported excluding milk or milk products from their diet varied from 10% to 13% across the age range.
QUESTION: I do not exclude any food groups from my diet.

Figure 3-28 Women who reported they did not exclude any food groups from their diet (N=11,237).

Across the age range, over two thirds of women reported that they did not exclude any food group from their diet, with the highest percentage (72%) for women aged 23 years at Survey 1.
QUESTION: Over the last 12 months, on average, how often did you drink Cola drinks – not diet (e.g. Coke™)? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

Figure 3-29 Consumption of cola drinks over the last 12 months (N=11,225).

The consumption of Cola drinks (not diet) showed a slight decrease across the age range, with the percentage who reported they never consumed these drinks or had them less than once per month going from 52% of the youngest to 60% of the oldest women. Around 5% of women across the age range had Cola drinks (not diet) once or more per day.
QUESTION: Over the last 12 months, on average, how often did you drink diet cola drinks (e.g., Diet Coke™)? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

Figure 3-30 Consumption of diet cola drinks over the last 12 months (N=11,224).

Although just over 50% of women reported that they never consumed diet Cola drinks, there was a slight increase in the rate of consumption across the age range. Around 5% or less had diet Cola once or more per day.
QUESTION: Over the last 12 months, on average, how often did you drink other carbonated drinks – not diet (i.e., fizzy /soft drinks)? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

![Bar chart showing consumption of other carbonated drinks over the last 12 months](image)

Figure 3-31 Consumption of other carbonated drinks over the last 12 months (N=11,223).

The consumption of other carbonated drinks (not diet and not Cola) decreased across the age range, with the percentage who reported they never consumed these drinks or had them less than once per month going from 46% of the youngest to 58% of the oldest (age 23 at Survey 1). Less than 3% of the women reported having these drinks once or more per day.
QUESTION: Over the last 12 months, on average, how often did you drink other diet carbonated drinks (e.g., diet lemonade)? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

Figure 3-32 Consumption of diet non-carbonated drinks over the last 12 months (N=11,224).

The consumption of other carbonated diet drinks (not Cola) showed little variation across the age range, with more than 80% of women reporting that they never consumed these drinks or had them less than once per month. Across the cohort age range, less than 2% of the women reported having these drinks once or more per day.
QUESTION: Over the last 12 months, on average, how often did you drink non-carbonated cordials, fruit or sports drinks – not diet? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

![Bar chart showing consumption of non-carbonated cordials, fruit or sports drinks over the last 12 months](image)

**Figure 3-33 Consumption of non-carbonated cordials, fruit or sports drinks (not diet) over the last 12 months (N=11,224).**

The consumption of non-carbonated cordials, fruit or sports drinks (not diet) showed little variation across the age range, with 56% of the youngest and 62% of women at aged 22 and 23 years at Survey 1 reporting that they never consumed these drinks or had them less than once per month. Across the cohort age range, less than 3% of the women reported having these drinks once or more per day.
QUESTION: Over the last 12 months, on average, how often did you drink non-carbonated diet cordials, fruit or sports drinks? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

Figure 3-34 Consumption of non-carbonated diet cordials, fruit or sports drinks over the last 12 months (N=11,220).

Across the age range, more than two thirds of the women reported that they never consumed non-carbonated diet cordials, fruit, or sports drinks and more than 90% had them less than once per week.
QUESTION: Over the last 12 months, on average, how often did you drink milk or soya milk (including flavoured varieties)? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

Figure 3-35 Consumption of milk or soya milk (including flavoured varieties) over the last 12 months (N=11,222).

Across the age range, most women reported drinking milk or soya milk three or more times per week, with less than 10% responding that they never had these drinks. Consumption of milk or soya milk once or more times per day, increased from around 32% of the youngest women to 40% of the oldest women in the cohort.
QUESTION: Over the last 12 months, on average, how often did you drink fruit or vegetable juices? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

Figure 3-36 Consumption of fruit or vegetable juices over the last 12 months (N=11,223).

The consumption of fruit or vegetable juices decreased across the age range, with the percentage who reported they never consumed these drinks or had them less than once per week going from 41% of the youngest women to 54% of the oldest women in the cohort. Across the age range, 10% or less of the women reported having these drinks once or more per day.
QUESTION: Over the last 12 months, on average, how often did you drink tea? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

![Survey chart showing consumption of tea](chart.png)

Figure 3-37 Consumption of tea over the last 12 months (N=11,222).

Tea consumption varied little across the age range, with around 20% of women responding that they never consumed tea. In contrast, more than 30% of the women drank tea at least once per day.
QUESTION: Over the last 12 months, on average, how often did you drink herbal tea? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

Figure 3-38 Consumption of herbal tea over the last 12 months (N=11,222).

The consumption of herbal tea increased across the age range, with the percentage who reported that they never consumed these drinks or had them less than once per month declining from 54% of the youngest to 44% of the oldest women. Almost 20% of women aged 22 to 23 years at Survey 1 reported having herbal tea once or more per day.
QUESTION: Over the last 12 months, on average, how often did you drink coffee? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

Figure 3-39 Consumption of coffee over the last 12 months (N=11,225).

Although more than 28% of women across the age bands responded that they never drank coffee, overall the rate of consumption showed a clear increasing trend across the cohort age range. The percentage who reported drinking coffee at least once per day more than doubled from 18% of the youngest to 38% of the oldest women, and the majority (54%) of the oldest group consumed coffee three or more times per week.
QUESTION: Over the last 12 months, on average, how often did you drink water? (Response options: never, less than once per month, 1 to 3 times per month, 1 time per week, 2 times per week, 3 to 4 times per week, 5 to 6 times per week, 1 time per day, 2 times per day, 3 or more times per day)

Figure 3-40 Consumption of water over the last 12 months (N=11,225).

More than 90% of women reported that they drank water at least once per day, and more than two thirds (68%) consumed it three or more times per day.
3.4 Mental health

QUESTION: In the last 12 months, have you had depression?  (Response options: Never, Rarely, Sometimes, Often).

Approximately half of the youngest women (aged 18 at Survey 1) reported having had depression ‘often’ or ‘sometimes’ in the last 12 months. This proportion gradually decreased across the age-groups, until only around 40% of the women aged 23 reported having had depression ‘often’ or ‘sometimes’ in the last 12 months. From Survey 1 to Survey 2, the proportions of women who reported having had depression ‘never’ or ‘sometimes’ did not change much, but the proportions who reported having depression ‘rarely’ increased by around 3% and the proportion who had depression ‘often’ dropped by approximately 3.5%.

Figure 3.41 Self-reported frequency of depression at Survey 1 (N=11,256) and Survey 2 (N=11,306) of the 1989-95 cohort, by age at Survey 1.
QUESTION: In the last 12 months, have you had episodes of intense anxiety? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-42: Self-reported frequency of episodes of intense anxiety at Survey 1 (N=11,253) and Survey 2 (N=11,306) of the 1989-95 cohort, by age at Survey 1.

Episodes of intense anxiety were more common among younger women, with about one in four of the youngest women (aged 18 at Survey 1) reporting they had experienced such episodes ‘sometimes’ in the last 12 months, and one in five reporting having them ‘often’ in the last 12 months. Episodes of intense anxiety became less common with increasing age.
QUESTION: In the last 12 months, have you had palpitations (feeling that your heart is racing/fluttering in your chest)? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-43 Self-reported frequency of palpitations at Survey 1 (N=11,256) and Survey 2 (N=11,306) of the 1989-95 cohort, by age at Survey 1.

At each survey, about one third of the youngest women reported they had felt palpitations (i.e., feeling that their heart was racing/fluttering in their chest) either ‘often’ or ‘sometimes’ in the last 12 months. This proportion decreased gradually across the age-groups, with about one quarter of the oldest women (those aged 23 at Survey 1) reporting feeling palpitations ‘often’ or ‘sometimes’ in the last 12 months.
Both surveys of the cohort have included the Kessler Psychological Distress Scale (K-10). The K-10 is a 10-item questionnaire designed to produce a global measure of distress based on questions about anxiety and depressive symptoms that a person has experienced in the most recent 4-week period\(^1\).

Items included on the K-10 are:

- In the past 4 weeks about how often did you feel tired out for no good reason?
- In the past 4 weeks about how often did you feel nervous?
- In the past 4 weeks about how often did you feel so nervous that nothing could calm you down?
- In the past 4 weeks about how often did you feel hopeless?
- In the past 4 weeks about how often did you feel restless or fidgety?
- In the past 4 weeks about how often did you feel so restless you could not sit still?
- In the past 4 weeks about how often did you feel depressed?
- In the past 4 weeks about how often did you feel that everything is an effort?
- In the past 4 weeks about how often did you feel so sad that nothing could cheer you up?
- In the past 4 weeks about how often did you feel worthless?

There are five response options, and each is given a score from 1 to 5 as follows - None of the time (1), A little of the time (2), Some of the time (3), Most of the time (4), All of the time (5).

Each person’s responses to the 10 items are added up to provide a score out of 50, with lower scores indicating better mental health.
Figure 3-44 Psychological distress at Survey 1 (N=11,249) and Survey 2 (N=11,132) measured on the Kessler Psychological Distress Scale (K-10), by age at Survey 1.

Rated on the K-10, younger women again had the poorest mental health, with at least 55% of the youngest women (aged 18 at Survey 1) recording scores in the very high or high categories (indicative of worse mental health). Ratings of mental health improved with age, with approximately 60% of the oldest age-group (women aged 23 at Survey 1) recording K-10 scores in the moderate to low categories.
QUESTION: Have you ever felt that life isn’t worth living? (Response options: yes, in the last 12 months; yes, more than 12 months ago; never)

*Women were asked to select as many responses as applied, so four categories are possible:

- women who selected only ‘never’
- women who selected only ‘yes, more than 12 months ago’
- women who selected ‘yes, more than 12 months ago’ AND ‘yes, in the last 12 months’
- women who selected only ‘yes, in the last 12 months’

Figure 3-45 Women reporting suicidal ideation, Survey 1 (N=11,225) and Survey 2 (N=11,129).

Approximately 40% of the youngest women (aged 18 at Survey 1) reported feeling in the last 12 months that ‘life wasn’t worth living’. This decreased to approximately 25% amongst the oldest women (aged 23 at Survey 1).
QUESTION: Have you ever deliberately hurt yourself or done anything that you knew might have harmed or even killed you? (Response options: yes, in the last 12 months; yes, more than 12 months ago; never)

*Women were asked to select as many responses as applied, so four categories are possible:

- women who selected only ‘never’
- women who selected only ‘yes, more than 12 months ago’
- women who selected ‘yes, more than 12 months ago’ AND ‘yes, in the last 12 months’
- women who selected only ‘yes, in the last 12 months’

![Figure 3-46 Women reporting self-harming behaviours, Survey 1 (N=11,218) and Survey 2 (N=11,126).](image)

Self-harming behaviour decreased with age and between surveys. At Survey 1, 25% of women aged 18 and 10% of women aged 23 reported that in the last 12 months they had deliberately hurt themselves or done something that they knew might have harmed or even killed them. At Survey 2, these behaviours had decreased to 19% amongst the 18 year age-group, and 8% amongst the 23 year age-group.
QUESTION: Have you ever been diagnosed or treated for depression:

Figure 3-47 Women who reported at Survey 1 (N=11,254) and Survey 2 (N=11,292) ‘ever’ being diagnosed or treat for depression, by age at Survey 1.

At Survey 1, approximately 35% of the cohort reported ever having been diagnosed or treated for depression. At Survey 2, this proportion increased to approximately 37% of the cohort. There was little difference observed between age-groups.
QUESTION: Have you ever been diagnosed or treated for anxiety disorder?

Figure 3-48 Women who reported at Survey 1 (N=11,253) and Survey 2 (N=11,306) ‘ever’ being diagnosed or treated for anxiety disorder, by age at Survey 1.

Anxiety disorder was more common among younger women, with 30% of 18 year old women reporting ever having been diagnosed or treated for the condition at Survey 1, compared to only 26% of 23 year old women. At Survey 2, in every age-group there was an approximate 2% increase in women reporting a diagnosis or treatment for anxiety.
QUESTION: Have you ever been diagnosed or treated for post-traumatic stress disorder (PTSD)?
(Note: this question was not asked at Survey 1)

Figure 3-49 Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for post-traumatic stress disorder, by age at Survey 1. (N=11,292).

Overall, approximately 5% of the women had been diagnosed or treated for post-traumatic stress disorder. Prevalence was highest (6%) in the women aged 20 (at Survey 1) and lowest (4.5%) in the women aged 23 (at Survey 1).
QUESTION: Have you ever been diagnosed or treated for anorexia? 
(Note: this question was not asked at Survey 1)

![Diagram showing percentages of women diagnosed or treated for anorexia by age at Survey 1.]

Figure 3-50 Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for anorexia, by age at Survey 1. (N=11,292).

Diagnosis or treatment for anorexia was highest in younger women (approximately 4.4% of the 18 and 19 year old age-groups) and lowest (3%) in the 22 year old age-group.
QUESTION: Have you ever been diagnosed or treated for bulimia?  
(Note: this question was not asked at Survey 1)

Figure 3-51 Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for bulimia, by age at Survey 1. (N=11,292).

Similarly, diagnosis or treatment for bulimia was highest amongst the younger women (approximately 3.4% of the 18 and 19 year old age-groups) and lowest (2%) amongst the 22 year old age-group.
QUESTION: Have you ever been diagnosed or treated for any other eating disorder? (Note: this question was not asked at Survey 1)

Figure 3-52 Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for another eating disorder (i.e., not anorexia or bulimia), by age at Survey 1. (N=11,292).

Diagnosis or treatment with another eating disorder (i.e., not anorexia or bulimia) did not differ much between age-groups, ranging from a high of 3.8% of the 19 year old age-group to a low of 2.7% of the 23 year old age-group.
QUESTION: Have you ever been diagnosed or treated for bipolar disorder?  
(Note: this question was not asked at Survey 1)

Figure 3-53 Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for bipolar disorder, by age at Survey 1. (N=11,292).

Diagnosis or treatment for bipolar disorder was reported by less than 3% of women. Prevalence was highest (3%) amongst the youngest women (aged 18 at Survey 1) and lowest (2%) amongst the 22 year old age-group.
QUESTION: Have you ever been diagnosed or treated for obsessive compulsive disorder?
(Note: this question was not asked at Survey 1)

Figure 3-54 Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for obsessive compulsive disorder, by age at Survey 1. (N=11,292).

Diagnosis or treatment for obsessive compulsive disorder was reported by less than 4% of women. Prevalence was highest (3.8%) amongst the 19 year old age-group and lowest (2.7%) amongst the 22 year old age-group.
QUESTION: Have you ever been diagnosed or treated for borderline personality disorder? (Note: this question was not asked at Survey 1)

Unlike the other mental health conditions, diagnosis or treatment for borderline personality disorder tended to increase with age, with prevalence of 2.4% in the 18 and 19 year old age-groups rising to approximately 3.5% in the 21 and 23 year old age-groups. However, the 22 year old age-group did not follow this trend, recording 2.1% prevalence for borderline personality disorder.

Figure 3-55 Women who reported (at Survey 2) ‘ever’ being diagnosed or treated for borderline personality disorder, by age at Survey 1. (N=11,292).
3.5 Reproductive health

QUESTION: At what age did you have your first menstrual period?

On the first survey, women were asked how old they were when they had their first period (i.e., menarche). The average age of menarche was 12 years. The youngest age was seven years and the oldest was 18 years.

3.5.1 Sexual behaviour

QUESTION: Have you ever had vaginal sex? Yes/No/Prefer not to answer

QUESTION: How old were you when you first had vaginal sex? ___

Figure 3-56. Experience of vaginal sex reported by young women from Survey 1 (N=11,246) to Survey 2 (N=11,276), stratified by age.

The proportion of women who had experienced vaginal sex increased with age and also between Surveys 1 and 2. At Survey 1, approximately 67% of women aged 18 years had experienced vaginal sex and this proportion increased to 75% at Survey 2.
3.5.2 Contraception

QUESTION: Thinking about the last time you had vaginal sex, did you use the Pill?

Figure 3-57 Oral contraceptive pill use among women from Survey 1 (N=9,487) to Survey 2 (N=9,807), stratified by age.

The oral contraceptive pill (OCP) was the most common form of contraception, used by more than 50% of women. However, the overall proportion of women using the OCP decreased from 57% at Survey 1 to 54% at Survey 2 but increased slightly among women aged 18 years during this period.
QUESTION: Thinking about the last time you had vaginal sex, did you use condoms?

Figure 3-58 Condom use among women from Survey 1 (N=9,487) to Survey 2 (N=9,807), stratified by age.

The prevalence of condom use as a contraceptive remained relatively stable from Survey 1 to Survey 2 for women who were aged 22-23 in 2013, but decreased among women who were aged 18-19 years in 2013 during the same period. The decline in condom use was most apparent among women who were aged 18 years; around 54% used condoms as a method of contraception at Survey 1 and this proportion declined to 48% at Survey 2.
QUESTION: Thinking about the last time you had vaginal sex, did you use Implanon?

![Figure 3-59 Implanon use among women from Survey 1 (N=9,487) to Survey 2 (N=9,807), stratified by age.](chart)

Implanon use varied across the age range but was most common among younger women aged 18-21 years. The prevalence of the Implanon as a contraceptive slightly increased among women aged 18-21 years from 6.9% at Survey 1 to 7.5% at Survey 2.
QUESTION: Thinking about the last time you had vaginal sex, did you use Mirena?

Figure 3-60 Mirena use among women from Survey 1 (N=9487) to Survey 2 (N=9,807), stratified by age.

Fewer than 5% of women used the Mirena as a contraceptive but the prevalence increased across the age range and from Survey 1 to Survey 2.
QUESTION: Thinking about the last time you had vaginal sex, did you use other contraceptive (i.e., not the Pill, condoms, Implanon, Mirena)?

Figure 3-61 Contraceptive use other than the Pill, Condoms, Implanon or Mirena used by women from Survey 1 (N=9487) to Survey 2 (N=9,807), stratified by age.

Fewer than 5% of women were using other forms of contraception (e.g., Depo-Provera, Nuva-Ring, and the Copper IUD). The pattern of use varied across the age groups; use of other contraceptives decreased slightly from Survey 1 to Survey 2 for women who were aged 19-20 years in 2013 whereas use increased for all other women during the same period.
QUESTION: Thinking about the last time you had vaginal sex, did you not use any contraceptive?

Figure 3-62 Women not using any forms of contraception from Survey 1 (N=9487) to Survey 2 (N=9,807), stratified by age.

At Survey 2, almost 15% of women who were aged 22 to 23 in 2013 did not use any contraception the last time they had vaginal sex, compared with 9% of women who were aged 18 years in 2013.
3.5.3 Pregnancy

QUESTION: Have you ever been pregnant? Yes/No (Survey 1 only)

QUESTION: How many times have you been pregnant (please type “0” if you have never been pregnant)*

*asked at Survey 2 only.

Figure 3-63 Women who reported they had ever been pregnant, Survey 1 (N=11,245) and Survey 2 (N=11,144).

The number of women who had ever been pregnant increased with age and from Survey 1 (8%) to Survey 2 (13%). At Survey 2, one in five women who were aged 23 years in 2013 had ever been pregnant.
QUESTION: Have you ever become pregnant by accident?*
*asked at Survey 2 only

![Figure 3-64](image-url)

Figure 3-64 Women who reported they had ever become pregnant by accident (N=11,266).

At Survey 2, 11% of women reported that they had become pregnant by accident. The proportion of women reporting an unplanned pregnancy increased with age from 8% of the youngest women to 15% of the oldest women (who were aged 23 at Survey 1).
QUESTION: Have you ever had a miscarriage?

Figure 3-65 Women who reported they had ever had a miscarriage, Survey 1 (N=11,244) and Survey 2 (N=11,144).

Fewer than 5% of women reported ever having had a miscarriage at Survey 1 and Survey 2.
3.5.4 Sexually transmitted infections

QUESTION: Have you ever been diagnosed or treated for urinary tract infection?

Figure 3-66 Women who reported ever being diagnosed or treated for a urinary tract infection, Survey 1 (N=11,254) and Survey 2 (N=11,291).

The proportion of women who had experienced urinary tract infections (UTIs) increased with age and across the surveys. At Survey 2, 37% of women who were aged 18 years in 2013 reported UTIs compared to 52% of women who were aged 23 years in 2013.
QUESTION: Have you ever been diagnosed or treated for chlamydia?

Figure 3-67 Women who reported ever being diagnosed or treated for chlamydia, Survey 1 (N=11,254) and Survey 2 (N=11,291).

The proportion of women who had been diagnosed or treated for chlamydia increased with age and also from Survey 1 to Survey 2. The increase in diagnosis was most apparent among women who were aged 20 years in 2013, rising from 7% at Survey 1 to 9% at Survey 2.
QUESTION: Have you ever been diagnosed or treated for genital herpes?

Figure 3-68 Women who reported ever being diagnosed or treated for genital herpes, Survey 1 (N=11,254) and Survey 2 (N=11,291).

The proportion of women who had been diagnosed or treated for genital herpes remained stable (2%) from Survey 1 to Survey 2. However, there was a slight increase in diagnoses across the surveys for women who were aged 20-22 years in 2013.
QUESTION: Have you ever been diagnosed or treated for genital warts?

Figure 3-69 Women who reported ever being diagnosed or treated for genital warts, Survey 1 (N=11,254) and Survey 2 (N=11,291).

There was a slight increase in the proportion of women reporting genital warts from Survey 1 (0.9%) to Survey 2 (1.3%). The increase was most apparent among women who were aged 20-22 in 2013.

At both surveys, approximately 1% of women reported ever being diagnosed or treated for other sexually transmitted infections (i.e., not urinary tract infection, chlamydia, genital herpes, genital warts).
3.6 Physical health

3.6.1 Symptoms

QUESTION: In the last 12 months, have you had any of the following: allergies, hay fever, sinusitis? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-70 Self-reported frequency of allergies, hay fever or sinusitis at Survey 1 (N=11,254) and Survey 2 (N=11,316) of the 1989-95 cohort, by age at Survey 1.

These conditions are fairly commonly reported, but the prevalence or severity do not vary much with age and did not change much between surveys.
QUESTION: In the last 12 months, have you had breathing difficulties? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-71  Self-reported frequency of breathing difficulties at Survey 1 (N=11,254) and Survey 2 (N=11,317) of the 1989-95 cohort, by age at Survey 1.

The proportion of women reporting breathing difficulties ‘sometimes’ or ‘often’ did not vary with age. However, proportions reporting experiencing breathing problems ‘never’ decreased between the surveys and the proportion responding ‘rarely’ increased. As this pattern was consistent across the age range, but not for other symptoms, it could have been due to differences in weather or other external conditions as the survey times.
QUESTION: In the last 12 months, have you had headaches/migraines? (Response options: Never, Rarely, Sometimes, Often).

![Bar chart showing self-reported frequency of headaches/migraines at Survey 1 (N=11,254) and Survey 2 (N=11,311) of the 1989-95 cohort, by age at Survey 1.](image)

The reported prevalence of headaches/migraines ‘sometimes’ or ‘often’ decreased with increasing age and decreased slightly from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had stiff or painful joints? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-73 Self-reported frequency of stiff or painful joints at Survey 1 (N=11,254) and Survey 2 (N=11,309) of the 1989-95 cohort, by age at Survey 1.

The proportion of women who reported ‘never’ experiencing stiff or painful joints changed very little. However, the proportions who reported having the symptom ‘rarely’ or ‘sometimes’ increased with increasing age, but varied little from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had back pain? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-74  Self-reported frequency of back pain in the 1989-95 cohort at Survey 1 (N=11,255) and Survey 2 (N=11,311), by age at Survey 1.

The reported prevalence of back pain changed little with age from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had urine that burns or stings? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-75 Self-reported frequency of urine that burns or stings in the 1989-95 cohort at Survey 1 (N=11,252) and Survey 2 (N=11,293), by age at Survey 1.

The reported prevalence of urine that burns or stings ‘sometimes’ or ‘often’ was less than 15%. This varied little with age and decreased from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had leaking urine? (Response options: Never, Rarely, Sometimes, Often).

![Chart](image.png)

Figure 3-76  Self-reported frequency of leaking urine at Survey 1 (N=11,252) and Survey 2 (N=11,293) of the 1989-95 cohort, by age at Survey 1.

Similarly, the prevalence of leaking urine ‘sometimes’ or ‘often’ was just over 10% and varied little with age or from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had constipation? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-77  Self-reported frequency of constipation at Survey 1 (N=11,253) and Survey 2 (N=11,291) of the 1989-95 cohort, by age at Survey 1.

The prevalence of constipation ‘rarely’, ‘sometimes’ or ‘often’ increased with increasing age and from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had haemorrhoids (piles)? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-78 Self-reported frequency of haemorrhoids at Survey 1 (N=11,254) and Survey 2 (N=11,290) of the 1989-95 cohort, by age at Survey 1.

Similarly, the prevalence of haemorrhoids, though small, increased with age and between surveys – from less than 10% among women aged 18 at Survey 1 to nearly 20% for the oldest women at Survey 2 (i.e., those reporting the condition ‘rarely’, ‘sometimes’, or ‘often’ and aged 23 at Survey 1).
QUESTION: In the last 12 months, have you had any other bowel problems? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-79 Self-reported frequency of other bowel problems at Survey 1 (N=11,255) and Survey 2 (N=11,291) of the 1989-95 cohort, by age at Survey 1.

Likewise, the prevalence of ‘other bowel problems’ ‘rarely’, ‘sometimes’ or ‘often’ increased with increasing age and from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had vaginal discharge or irritation? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-80 Self-reported frequency of vaginal discharge or irritation at Survey 1 (N=11,256) and Survey 2 (N=11,296) of the 1989-95 cohort, by age at Survey 1.

The prevalence of vaginal discharge or irritation ‘rarely’, ‘sometimes’ or ‘often’ also increased with age and from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had premenstrual tension? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-81  Self-reported frequency of premenstrual tension at Survey 1 (N=11,253) and Survey 2 (N=11,294) of the 1989-95 cohort, by age at Survey 1.

On average, about 1 in 4 of women reported experiencing premenstrual tension ‘rarely’, 1 in 3 reported ‘sometimes’ and less than 1 in 5 reported having the symptom ‘often’. These numbers varied little with age or from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had heavy periods? (Response options: Never, Rarely, Sometimes, Often).

![Bar chart showing self-reported frequency of heavy periods at Survey 1 (N=11,256) and Survey 2 (N=11,296) of the 1989-95 cohort, by age at Survey 1.]

The prevalence of experiencing heavy periods ‘sometimes’ or ‘often’ decreased substantially with age and slightly from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had irregular periods? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-83 Self-reported frequency of irregular periods at Survey 1 (N=11,254) and Survey 2 (N=11,297) of the 1989-95 cohort, by age at Survey 1.

Similarly, the prevalence of experiencing irregular periods ‘often’ decreased with increasing age.
QUESTION: In the last 12 months, have you had severe period pain? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-84 Self-reported frequency of severe period pain at Survey 1 (N=11,253) and Survey 2 (N=11,297) of the 1989-95 cohort, by age at Survey 1.

Severe period pain also decreased with increasing age.
QUESTION: In the last 12 months, have you had skin problems? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-85  Self-reported frequency of skin problems at Survey 1 (N=11,255) and Survey 2 (N=11,317) of the 1989-95 cohort, by age at Survey 1.

Skin problems ‘rarely’ or ‘sometimes’ (but not often) were reported more frequently at Survey 2 than at Survey 1.
QUESTION: In the last 12 months, have you had difficulty sleeping? (Response options: Never, Rarely, Sometimes, Often)

The prevalence of sleeping problems did not differ much with age or between Survey 1 and Survey 2. Overall 10-15% of women reported ‘never’ experiencing sleeping problems, about 30% experienced problems ‘rarely’, 30% experienced sleeping problems ‘sometimes’, whereas 20-30% experienced problems ‘often’.

Figure 3-86 Self-reported frequency of difficulty sleeping at Survey 1 (N=11,255) and Survey 2 (N=11,306) of the 1989-95 cohort, by age at Survey 1.
QUESTION: In the last 12 months, have you had severe tiredness? (Response options: Never, Rarely, Sometimes, Often).

Figure 3-87  Self-reported frequency of severe tiredness at Survey 1 (N=11,250) and Survey 2 (N=11,311) of the 1989-95 cohort, by age at Survey 1.

Younger women were more likely to report severe tiredness ‘sometimes’ or ‘often’ than older women (i.e., those aged 23 at Survey 1) and correspondingly, the prevalence of severe tiredness decreased slightly from Survey 1 to Survey 2.
QUESTION: In the last 12 months, have you had problems with one or both feet? (Response options: Never, Rarely, Sometimes, Often).

![Bar chart]

Figure 3-88  Self-reported frequency of problems with one or both feet at Survey 1 (N=11,256) and Survey 2 (N=11,311) of the 1989-95 cohort, by age at Survey 1.

Although more than 20% of women reported ‘sometimes’ or ‘often’ having problems with their feet, this pattern did not change with age or from Survey 1 to Survey 2.
3.6.2 Health conditions

QUESTION: Have you ever been diagnosed or treated for low iron (iron deficiency or anaemia)?

Figure 3-89 Women who had ever been diagnosed or treated for low iron (iron deficiency or anaemia), Survey 1 (N=11,270) and Survey 2 (N=11,291).

Approximately one third of women reported ‘low iron’ and this did not vary much with age or from Survey 1 to Survey 2.
QUESTION: Have you ever been diagnosed or treated for asthma?

Figure 3-90 Women who had ever been diagnosed or treated for asthma, Survey 1 (N=11,270) and Survey 2 (N=11,291).

The reported prevalence of asthma increased with age from just over 20% among women who were aged 18 at Survey 1 to almost 30% among women those aged 23 at Survey 1. These findings were similar for Survey 1 and Survey 2. This finding is surprising, as it may indicate some temporal change in risk factors for asthma or in diagnostic practice.
QUESTION: Have you ever been diagnosed or treated for bronchitis?

Figure 3-91 Women who had ever been diagnosed or treated for bronchitis, Survey 1 (N=11,270) and Survey 2 (N=11,291).

As with asthma, the reported prevalence of bronchitis increased with age from just over 10% among women who were aged 18 at Survey 1 to almost 14% among women those aged 23 at Survey 1. These findings were similar for Survey 1 and Survey 2.
QUESTION: Have you ever been diagnosed or treated for endometriosis?

Figure 3-92 Women who had ever been diagnosed or treated for endometriosis, Survey 1 (N=11,270) and Survey 2 (N=11,291).

Prevalence of endometriosis is low, less than 5%, with little consistent pattern with age or between surveys.
QUESTION: Have you ever been diagnosed or treated for Polycystic Ovary Syndrome?

Figure 3-93 Women who had ever been diagnosed or treated for polycystic ovary syndrome (PCOS), Survey 1 (N=11,270) and Survey 2 (N=11,291).

Prevalence of PCOS increased with age and from Survey 1 to Survey 2.
3.7 Intimate partner violence

QUESTION: Have you ever been in a violent relationship with a partner/spouse?

Figure 3-94 Women who reported ever being in a violent relationship, Survey 1 (N=7,827) and Survey 2 (N=7,929).

From Survey 1 to Survey 2 there was a general increase in the number of women reporting that they had lived with a violent partner or spouse. The increase was most apparent among women who were 19 and 20 at Survey 1.
QUESTION: This question asks about situations you may have experienced with current or past partners. Response options are ‘Never’; ‘In the last 12 months’; More than 12 months ago’

My partner:

- Told me I was ugly, stupid or crazy, or that I wasn’t good enough, or that no one would ever want me
- Followed or harassed me around my neighbourhood/work
- Tried to turn my family, friends or children against me, or tried to convince them I was crazy
- Kicked, bit, slapped or hit me with a fist, or tried to hit me with something
- Forced me to take part in unwanted sexual activity
- Tried to keep me from seeing or talking to my family, friends or children, or didn’t want me to socialise
- Pushed, grabbed, shoved, shook or threw me
- Blamed me for causing their violent behaviour
- Harassed me over the telephone, email, Facebook or the internet
- Used a knife or gun or other weapon or beat me up
- Became upset if dinner/housework/wasn’t done when they thought it should be
- Refused to let me work outside the home or took my wallet and left me stranded
(Responses at Survey 2 only are shown here)

Figure 3-95 Forms of intimate partner violence reported on the Abbreviated Community Composite Abuse Scale.

The least common form of intimate partner violence reported on the concerned the use of severe physical violence (use of weapon, being beaten up). The most commonly reported acts of intimate partner violence were those that involved harassment and emotional abuse.
3.8 Health service use

QUESTION: Where do you get information about your health? (Mark all that apply)

- School, University, TAFE

Figure 3-96 Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – school, university or TAFE.

At Survey 1, School, University or TAFE was a source of health information for approximately half of 18 year old women, but was a less common source among older women, at only 40% of 21 year old women, and 32% of 23 year old women. At Survey 2, less women in each age group reported getting health information from School, University or TAFE, but the decrease was only slight, and the pattern across the age groups remained the same.
QUESTION: Where do you get information about your health? (Mark all that apply)

- Friends

About 45% of women in the cohort reported getting health information from friends. There was little variation between age groups, and from Survey 1 to Survey 2.

Figure 3-97 Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – friends
QUESTION: Where do you get information about your health? (Mark all that apply)

- Internet

Figure 3-98 Sources of health information, Survey 2 (N=11,323) – internet.

Around 80% of women reported getting health information from the internet, with little variation between age-groups. (Survey 1 data has been excluded, as this question was asked in a non-comparable format).
QUESTION: Where do you get information about your health? (Mark all that apply)

- Mother/father, sister/brother or other family member

Figure 3-99 Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – mother/father, sister/brother, other family.

At Survey 1, 70% of 18 and 19 year old women and around 60% of 22 and 23 year old women got health information from family. At Survey 2, fewer women in every age reported getting health information from family.
QUESTION: Where do you get information about your health? (Mark all that apply)

- Nurse

Figure 3-100 Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – nurse.

Nurses were a source of health information for between 15-20% of women in the cohort. This proportion did not change with age, or from Survey 1 to Survey 2.
QUESTION: Where do you get information about your health? (Mark all that apply)
- Doctor

Figure 3-101 Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – doctor.

At least three quarters of women in the cohort reported getting health information from their doctor. The likelihood of women getting information from the doctor increased slightly with age and from Survey 1 to Survey 2.
QUESTION: Where do you get information about your health? (Mark all that apply)

- Family planning or sexual health clinic

![Survey Age at S1 vs Percent diagram](image)

*Figure 3-102 Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – family planning or sexual health clinic.*

Between 6-8% of young women reported getting health information from family planning or sexual health clinics. Little difference was observed between surveys, or across age groups.
QUESTION: Where do you get information about your health? (Mark all that apply)

- Youth or community services (e.g., mother’s group)

Figure 3-103 Sources of health information, Survey 1 (N=11,270) and Survey 2 (N=11,323) – youth or community services (e.g., mother’s group).

At Survey 1, 3.5% of 18 year old women got health information from youth or community services and this decreased across age groups to about 2.5% of 23 year old women. Getting health information from youth or community services decreased in every age group at Survey 2.
QUESTION: Where do you get information about your health? (Mark all that apply)

- TV/radio, magazines, posters, leaflet

Roughly one third of the cohort reported getting information about their health from TV/radio, magazines, posters or leaflets. Younger women (i.e., those aged 18 or 19 at Survey 1) reported slightly higher rates than older women (i.e., those aged 20+ at Survey 1). From Survey 1 to Survey 2 there was a drop of about 4% in every age group.
Where do you get information about your health? (Mark all that apply)

- Journals, textbooks (not asked at Survey 1)

![Figure 3-105 Sources of health information, Survey 2 (N=11,323) – journals or textbooks.](image)

At Survey 2, women were asked if they used journals and textbooks as a source of health information. Around 30% of younger women (aged 18 or 19 at Survey 1) reported they did use journals and textbooks, and this increased to about 35% for older women (aged 21-23 at Survey 1).
QUESTION: Where do you get information about your health? (Mark all that apply)

- Other health professionals (not asked at Survey 1)

Figure 3-106 Sources of health information, Survey 2 (N=11,323) – other health professionals.

A question asking whether health information was obtained from ‘other health professionals’ was also included on Survey 2. Around 12% of the youngest women (aged 18 at Survey 1) reported they did consult other health professionals, and this increased steadily with age, with approximately 22% of the oldest women (age 23 at Survey 1) answering yes to this question.
In general, do you prefer to see a female doctor?

- Yes, always
- Yes, but only for certain things
- No
- Don’t care

Figure 3-107 Preference for a female GP, Survey 1 (N=11,255) and Survey 2 (N=11,322).

At Survey 1 about 60% of women preferred to see a female GP ‘always’ or ‘for certain things’, and this increased to approximately 70% at Survey 2.
QUESTION: Within the last two years, have you had a pap test?

Figure 3-108 Women who reported having a pap test within the last 2 years, at Survey 1 (N=11,250) and Survey 2 (N=11,263).

Younger women were least likely to have had a pap test in the last 2 years, with less than 20% of 18 year olds and 35% of 19 year olds reporting having had a pap test at Survey 1. However, at Survey 2 about 10% more women in both age groups reported having had a pap test in the last 2 years (28% of women who were 18 at Survey 1, and 46% of women who were 19 at Survey 1). By Survey 2, more than 50% of women aged 21 and older reported having had a pap-test in the last 2 years, with the oldest age group (women aged 23 at Survey 1) recording the highest levels (almost 70% at Survey 2).
QUESTION: Within the last two years, have you had your blood pressure checked?

Figure 3-109 Women who reported having their blood pressure checked within the last 2 years, at Survey 1 (N=11,251) and Survey 2 (N=11,263).

At least 78% of women reported having had their blood pressure checked in the last 2 years. The prevalence of having had a blood pressure check increased with increasing age, and from Survey 1 to Survey 2.
QUESTION: Within the last two years, have you had your skin checked (e.g., spots, lesions, moles)?

Figure 3-110 Women who reported having their skin checked within the last 2 years, at Survey 1 (N=11,251) and Survey 2 (N=11,263).

Women were more likely to have their skin checked for spots, lesions or moles as they got older. About 25% of the 18 year old women reported having their skin checked, and this increased to 33% of 23 year old women.
QUESTION: Within the last two years, have you had your weight checked by a health professional?

*Not asked at Survey 1

Figure 3-111 Women who reported at Survey 2 having had their weight checked by a health professional in the last 2 years (N=11,263).

Women were also more likely to have their body weight measured as they got older. About 40% of the 18 year old women reported having their weight measured, and this increased to 45% of 23 year old women.
QUESTION: Have you ever had a vaccination for HPV (genital warts, cervical cancer)?

*Asked at Survey 1 only

**Figure 3-112 Women who reported ever having a vaccination for HPV at Survey 1 (N=11,251).**

Between 80 and 85% of young women reported they had ever had a vaccination for HPV.
QUESTION: Do you have your own Medicare card?

*Asked at Survey 1 only

Figure 3-113 Percentage of women who had their own Medicare card at Survey 1 (N=11,253).

About half of the youngest women were still included on their parent’s Medicare card, and did not have a card of their own. This proportion decreased over the age groups, with 85% of the 23 year old women holding their own Medicare card.
QUESTION: Do you have a Health Care card? This is a card that entitles you to discounts and assistance with medical expenses. This is not the same as a Medicare card.

Figure 3-114 Women who reported having a Health Care Card, Survey 1 (N=11,248) and Survey 2 (N=11,263).

Holding a health care card was more common in younger women, with between 35-40% of women aged 18 or 19 at Survey 1 reporting having a card at Survey 1 and Survey 2. Holding a health care card was less common amongst older women (i.e., those aged 22-23 at Survey 1). 33% of 22 year olds and 28% of 23 years olds reported having a card at Survey 1, and this dropped to 29% and 26% respectively at Survey 2.
QUESTION: Have you consulted a midwife for your own health in the last 12 months?

*Not asked at Survey 1

Figure 3-115 Number of women who had consulted a midwife in the last 12 months (N=11,279).

The proportion of women who had consulted with a midwife in the last 12 months increased with age, from 2.25% of the youngest women (aged 18 at Survey 1) to 5% of the oldest age group (aged 23 at Survey 1).
QUESTION: Have you consulted a counsellor or other mental health worker for your own health in the last 12 months? (Not asked at Survey 1)

Figure 3-116 Number of women who had consulted a mental health worker in the last 12 months (N=11,278).

At Survey 2, approximately 30% of women reported consulting a mental health worker in the last 12 months. Prevalence was highest (32%) in the youngest women (i.e., those who were aged 18 at Survey 1) and lowest (27%) in the oldest women (aged 23 at Survey 1).
QUESTION: Have you consulted a community nurse, practice nurse or nurse practitioner for your own health in the last 12 months? (Not asked at Survey 1)

![Bar chart showing the number of women who consulted a community nurse, practice nurse or nurse practitioner in the last 12 months.]

**Figure 3-117** Number of women who had consulted a community nurse, practice nurse or nurse practitioner in the last 12 months (N=11,278).

At Survey 2, around 18% of women aged 18 or 19 at Survey 1 reported having consulted a community nurse, practice nurse or nurse practitioner in the last 12 months. About 15% of women aged 20 to 22 at Survey 1 and 13% of women aged 23 at Survey 1 reported seeing a nurse in the previous 12 months at Survey 2.
QUESTION: Have you consulted a chiropractor for your own health in the last 12 months? (Not asked at Survey 1)

Figure 3-118 Number of women who had consulted a chiropractor in the last 12 months (N= 11,280).

At Survey 2, about 14% of the women in the cohort had consulted a chiropractor in the last 12 months. There was little variation by age group.
QUESTION: Have you consulted an osteopath for your own health in the last 12 months? (Not asked at Survey 1)

Figure 3-119 Number of women who had consulted an osteopath in the last 12 months (N=11,280).

Less than 6% of women in the cohort had consulted an osteopath in the last 12 months, with the lowest rates reported by younger women.
QUESTION: Have you consulted a massage therapist for your own health in the last 12 months? (Not asked at Survey 1)

Figure 3-120 Number of women who had consulted a massage therapist in the last 12 months (N= 11,282).

Massage therapy was more common among the older age groups. Around 40% of women aged 22 or 23 (at Survey 1) reported visiting a massage therapist in the last 12 months, while only 25-30% of women aged 18 to 20 (at Survey 1) did so.
QUESTION: Have you consulted an acupuncturist for your own health in the last 12 months? (Not asked at Survey 1)

Figure 3-121 Number of women who had consulted an acupuncturist in the last 12 months (N=11,274).

With the exception of women aged 20 at Survey 1, use of acupuncture increased with age. Five percent of women who were aged 18 at Survey 1 reported consulting an acupuncturist in the last 12 months, and this increased to 8% of women aged 23 at Survey 1.
QUESTION: Have you consulted a naturopath/herbalist for your own health in the last 12 months? (Not asked at Survey 1)

Figure 3-122 Number of women who had consulted a naturopath/herbalist in the last 12 months (N=11,280).

The proportion of women consulting with a naturopath increased with age. At Survey 2, around 7% of women aged 18 at Survey 1 reported visiting a naturopath in the last 12 months and this increased to 10% of the women aged 23 at Survey 1.
QUESTION: Have you consulted another alternative health practitioner (e.g., aromatherapist, homeopath, iridologist, reflexologist) for your own health in the last 12 months? (Not asked at Survey 1)

Figure 3-123 Number of women who had consulted any other alternative health practitioner in the last 12 months (N=11,278).

Consultations with other alternative health practitioners (e.g., aromatherapist, homeopath, iridologist, reflexologist) increased with age. Three and a half per cent of the women who were aged 18 at Survey 1 reported consulting with other alternative health practitioners in the last 12 months, and this increased to 5.5% of the women who were aged 23 at Survey 1.
QUESTION: Have you consulted a physiotherapist for your own health in the last 12 months? (Not asked at Survey 1).

![Figure 3-124 Number of women who had consulted a physiotherapist in the last 12 months (N=11,280).](image)

Although there were slight decreases for women aged 20 and 22 (at Survey 1), the proportion of women consulting a physiotherapist increased over the age-groups. At Survey 2, approximately 20% of the women aged 18 at Survey 1 reported having seen a physiotherapist in the last 12 months and this increased to approximately 28% of the women aged 23 at Survey 1.
3.9 Complementary and alternative medicines*

*(not asked at Survey 1)

QUESTION: How often have you used vitamins/minerals for your own health in the last 12 months?

Figure 3-125 Usage of vitamins/minerals in the last 12 months (N=11,279).

More than half of the women reported using vitamins and minerals ‘sometimes’ or ‘often’. Usage was highest in the oldest age group (aged 23 at Survey 1), where approximately 30% reported they used vitamins/minerals ‘often’ and 30% responded they used them ‘often’.
QUESTION: How often have you used yoga or meditation for your own health in the last 12 months?

![Usage of yoga or meditation in the last 12 months](image)

**Figure 3-126 Usage of yoga or meditation in the last 12 months (N=11,279).**

About 25% of the youngest women (aged 18 at Survey 1) reported using yoga or meditation ‘sometimes’ or ‘often’ in the last 12 months, and this increased to 35% of the oldest women (aged 23 at Survey 1).
QUESTION: How often have you used herbal medicines for your own health in the last 12 months?

Figure 3-127  Usage of herbal medicines in the last 12 months (N=11,278).

Consistent with usage of other complementary and alternative medicines, herbal medicines were used the most by the oldest age-group, with almost 20% reporting they used them ‘sometimes’ or ‘often’, and used least by the youngest women, where 13% reported using herbal medicines ‘sometimes’ or ‘often’ in the last 12 months.
QUESTION: How often have you used aromatherapy oils for your own health in the last 12 months?

At least 75% of the cohort had not used aromatherapy oils for their own health in the last 12 months, but approximately 10% had used them either ‘sometimes’ or ‘often’.

Figure 3-128 Usage of aromatherapy oils for own health in the last 12 months (N=11,279).

At least 75% of the cohort had not used aromatherapy oils for their own health in the last 12 months, but approximately 10% had used them either ‘sometimes’ or ‘often’.
QUESTION: How often have you used Chinese medicines for your own health in the last 12 months?

Around 90% of the cohort had not used Chinese medicines for their own health in the last 12 months, but between 3% (the youngest age-group) and 5% (the oldest age-group) reported they had used them ‘sometimes’ or ‘often’.

Figure 3-129  Usage of Chinese medicine for own health in the last 12 months (N=11,278).

Around 90% of the cohort had not used Chinese medicines for their own health in the last 12 months, but between 3% (the youngest age-group) and 5% (the oldest age-group) reported they had used them ‘sometimes’ or ‘often’.
QUESTION: How often have you used other alternative medicines for your own health in the last 12 months?

Figure 3-130 Usage of other alternative medicines for own health in the last 12 months (N=11,278).

Three to five per cent of women reported using other alternative medicines (i.e., not vitamins/minerals, yoga or meditation, herbal medicines, aromatherapy oils, or Chinese medicines) ‘sometimes’ or ‘often’ in the last 12 months, but most women had not used them.
3.10 Aspirations*

*(not asked at Survey 1)

When you are 40, would you like to be in:

- Full-time paid employment
- Part-time paid employment
- Full-time unpaid work in the home
- Self-employment/own business

![Figure 3-131 Aspirations for employment at age 40 (N=11,115).](image)

The majority of women aspired to be in some form of employment outside of the home when they were 40, with less than 2% of women selecting this option across all ages. More than 60% of women aspired to be undertaking full time paid work and about 20% aspired to self-employment. Part time paid work was a more popular choice among older women than those in their late teens and early twenties.
When you are 40, would you like to be:

- Married
- In a stable relationship, but not married
- Single (not in a stable relationship)

![Graph showing relationship aspirations at age 40](image)

**Figure 3-132 Aspirations for relationship status at age 40 (N=11,116).**

Relationship aspirations were similar across all ages, with most women aspiring to be married by the time they were 40, and less than 1% aspiring to be single.
When you are 40, would you like to have:

- No children
- 1 child
- 2 children
- 3 or more children

As with relationship status, aspirations for children differed little across the different ages. More than 90% of women had aspirations for at least one child, with around half aspiring to have two children and about a third aspiring to have three or more children.

Figure 3-133 Aspirations for children at age 40 (N=11,113).
When you are 40, would you like to have more educational qualifications than you have now?
Yes/No/Not sure

<table>
<thead>
<tr>
<th>Age at S1</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td>19</td>
<td>2</td>
</tr>
<tr>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>2</td>
</tr>
</tbody>
</table>

When you are 40, would you like to have more educational qualifications than you have now?

![Figure 3-134 Aspirations for educational qualifications at age 40 (N=11,117).](image)

As might be expected, the older women were the less likely they were to aspire to more education, and the more likely they were to indicate that they were unsure as to whether they would like to have more education by the time they were 40. Of women aged 24 when they completed the second survey, 19% indicated that they did not aspire to more education by the time they were 40.
4  Current activity

4.1  Projects using 1989-95 cohort data

Recruitment/methodology:

- How to recruit and retain a new cohort of women aged 18-23 years for an online longitudinal survey (Project leader: Deborah Loxton, University of Newcastle).
- Recruiting young women to a longitudinal health study in the 21st century (Project leader: Deborah Loxton, University of Newcastle).
- Consent to data linkage in women aged 18-23 in 2012-13 (Project leader: Deirdre McLaughlin, University of Queensland).
- Attrition in the 1989-95 cohort (Project leader: Deborah Loxton, University of Newcastle).

Health comparisons – 1973-78 and 1989-95 cohorts

- Comparison of health behaviours of 18-23 year olds 1996 and 2012-13. Health behaviours include smoking, alcohol consumption, illicit drug use, patterns of physical activity and height, weight and body mass index (Project leader: Jennifer Powers, University of Newcastle).
- Comparison of violence among 18-23 year old women in 1996 and 2012-13 (Project leader: Deborah Loxton, University of Newcastle).
- Changes over time in the sexual and reproductive health of 18-23 year women: Comparison of key indicators between ALSWH 1973-78 cohort in 1996 and the New Young Cohort in 2013 (Project leader: Jayne Lucke, La Trobe University).
- Then and now differences in socio-demographic characteristics among young women born in 1989-95 and 1973-78 (Project leader: Leigh Tooth, University of Queensland).
- Differences in physical health symptoms among young women born in 1989-95 and 1973-78 (Project leader: Gita Mishra, University of Queensland).

Health services

- Access to and use of health services and health information by women in the New Young Cohort in 2013 (Project leader: Annette Dobson, University of Queensland).

Diet and nutrition

- Are women who drink more caffeinated drinks engaging in more physical activity? (Project leader: Tina Skinner, University of Queensland).
- Dietary behaviours among young women: Associations with socio-demographics, health behaviours and stress (Project leader: Ingrid Rowlands, University of Queensland).

Mental health

- The reliability and validity of the Kessler Psychological Distress Scale (K-10) for the New Young Cohort (Project leader: Ingrid Rowlands, University of Queensland).
- Lifestyle variables as a major correlate of depression among young Australian women (Project leader: Deborah Loxton, University of Newcastle).
- Contributing factors of self-harm in young Australian women (Project leader: Deborah Loxton, University of Newcastle).
• Factors contributing to diagnosed anxiety among Australian females aged 18-23 (Project leader: Deborah Loxton, University of Newcastle).

• Factors associated with suicidal ideation in young Australian females aged 18-23 (Project leader: Deborah Loxton, University of Newcastle).

Reproductive health
• The impact of gynaecological conditions on young women’s psychological and social wellbeing (Project leader: Ingrid Rowlands, University of Queensland).

• Stoppers, starters and switchers: Young women’s use of contraceptives and the relationship to physical and reproductive health (Project leader: Ingrid Rowlands, University of Queensland).

Other
• Cohort profile of the new young cohort of women aged 18-23 in 2012-13 (Project leader: Deborah Loxton, University of Newcastle).

• Health status and behaviours according to sexual orientation across two generations of young Australian women (Project leader: Ruth McNair, University of Melbourne).

• A population health examination of yoga and meditation use amongst Australian women (Project leader: Sridhar Maddela, University of Technology Sydney).
4.2 Outcomes (at September 2015)

Reports:


Papers published:


Papers under review:
5 Future directions

One of the more pressing issues in demography and health care planning concerns the timing of family formation. In particular, the delaying of childbirth beyond the mid-thirties increases the risk of fertility problems and childbirth complications. Over the next decade, women in the 1989-95 cohort will enter into stable relationships and start their families. Already, at age 24, nearly 40% were in stable intimate relationships and one in five of the women has been pregnant. While most women aspired to be in a relationship and to have two children by the time they were 40, work with the ALSWH 1973-78 cohort indicates that aspirations frequently change as women age. It is, therefore, very important to monitor relationships and childbearing in the 1989-95 cohort.

Polycystic Ovary Syndrome (PCOS) impacts adversely on fertility and was reported by 7% of women at age 24. PCOS is also associated with excessive hair growth, obesity, acne and menstrual problems. However, it is currently uncertain as to whether obesity is a cause of PCOS, a consequence of PCOS, or both. In order to plan and evaluate effective interventions for women with PCOS, it is necessary to understand the precursors, correlates and outcomes of PCOS and of PCOS treatments. The data collected from the 1989-95 cohort as well as linked administrative data (e.g., Medicare, hospitals & perinatal data collections) throughout the childbearing years will provide the opportunity to untangle some of these relationships, such as the relationship between obesity and PCOS.

In addition to PCOS, obesity and overweight lead to increased risk of diabetes, heart disease, and osteoarthritis as well as asthma, breathlessness, fatigue and depression. At age 24, 35% of the 1989-95 cohort were overweight or obese and around half of the cohort were reporting breathing problems, fatigue and difficulty sleeping. Obesity and overweight have serious health consequences and this cohort is at high risk of needing more health services at younger ages than previous generations. Future research is needed to determine the factors that underlie overweight and obesity. In 2015 family of origin data will be collected from the 1989-95 cohort and this will help to fill that gap. In addition, a greater understanding of the dietary habits of women this age in conjunction with physical activity is also needed. In 2016 an accurate measure of women’s dietary intake will be included in the fourth survey of the 1989-95 cohort, permitting complex analyses of the food women are eating, their physical activity habits, lifestyles and health status, including their psychological health.

A high proportion of the 1989-95 cohort report psychological health problems including depression and anxiety, with 40% recording high to very high levels of psychological distress. Use of 1989-95 cohort survey data linked with Medicare data (MBS and PBS) will permit the evaluation of health services accessed by women in this cohort, including the Better Access Scheme. It is also important to measure psychological health over time.

While many women experience improved psychological wellbeing as they grow older, some women do not. Furthermore, analyses of data collected from the 1973-78 cohort have revealed that women with poorer psychological health are more vulnerable to later experiencing intimate partner violence, which is itself associated with long term mental health deficits. At age 24, 16% of the 1989-95 cohort report intimate partner violence. With the comprehensive data collected from this cohort it will be possible to determine other factors that precede entry into a violent relationship, and to
specify those factors that might help in recovery from violence. This information can help with the development of both primary and secondary prevention strategies.

In terms of current prevention strategies, uptake of pap smears was generally good for this cohort, but only 80-85% of women reported having had the HPV vaccine. Furthermore, 2% at age 24 reported having had genital warts and around 12% of women reported chlamydia. These results suggest a need to examine these data in more detail, to determine factors that might be preventing women from avoiding these sexually transmissible infections.

The first two surveys of the 1989-95 cohort have established the baseline characteristics and health behaviours of women aged 18-24. As they age, the data collected from the women and from linked datasets will enable complex longitudinal analyses that will help to uncover the pathways to disease, the impact of health services and the factors that underlie and promote good health.