

RURAL HEALTH NEEDS SURVEY REPORT

MYSTERY CREEK FIELDDAYS 2018



RURAL HEALTH ALLIANCE AOTEAROA NEW ZEALAND



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CITATION

Beautrais AL, Horwood LJ, McLeod G, and RHĀNZ. Rural Health Needs Survey Report: Mystery Creek Fieldays 2018. Report to Ministry of Health, July 2018.

SUMMARY

We conducted a brief needs assessment of the mental wellbeing of rural youth who visited the Health Hub at Mystery Creek Fielddays 2018. The event provided an opportunity to rapidly, and at low cost, survey a large number of rural and farmer-facing individuals. Survey questions spanned current stresses or problems, access to mental health care, loneliness, and alcohol use.

In total, 1053 people completed the survey. Of these, 620 (58.9%) were aged <30 years. Responses for young people aged < 30 years were compared with those for adults aged 30 and older to explore potential age differences. Individuals self-defined their home location as 'more rural than urban' or 'more urban than rural'.

For both males and females the most common source of stress was their own workload (14.1%). Other problems were financial difficulties and relationship problems. Women reported more stresses than men. Neither age nor rurality influenced stresses.

Almost one in five respondents had contacted someone for help with mental health or addiction problems, for themselves, within the previous year. The most common sources of help were General Practitioners or medical centres, friends or family, and counselling services. Women more often sought help for themselves than men. There were no strong effects for age or rurality.

There was strong demand for more information about mental health issues. The areas for which people sought more information were depression, anxiety, stress, suicide prevention and, for women, how to get help in a mental health crisis. Men, more than women, wanted information about alcohol and drugs. The higher demand for more information was largely confined to younger women (<30 years). Rurality did not influence demand for information.

More than one in 10 felt that they often lacked social contact. More than half reported they lacked social contact some of the time or often. Among those who said they often lacked social contact, women, especially younger women, predominated. There was no effect for rurality.

There were high rates of participation in social groups and organisations, with two thirds of respondents affiliated with at least one social group. There were small gender differences: men were more likely to be involved in sports groups; women were more likely to belong to social, exercise or online groups. There was some variation by age: younger people were more likely to be in sports clubs; older women, but not older men, were more often engaged in social and service organisations. Rural men and women were more likely to be involved in farming interest groups and rural women were more likely to participate in online groups.

Rates of alcohol misuse were high: 10% of respondents reported drinking daily or 5 to 6 times a week; 15% reported binge drinking at least once a week; 10% reported needing a drink first thing in the morning; half of all men and half of all women reported at least one problem with alcohol use.

Men reported significantly more problems with alcohol use than women. Younger men (<30 years) had significantly more alcohol problems than older men. Younger males reported higher rates of weekly drinking than older men, and younger women had lower rates of weekly drinking than women aged ≥30 years. Younger people (<30 years) more often binge drank than older people. Rurality exerted no effect on alcohol problems for males, females or the total sample.

In summary, this survey found that, among rural and farmer-facing people, workloads were stressful and there were high rates of alcohol misuse, help-seeking for mental health problems, and loneliness, despite high rates of participation in social groups. There were high demands for information about mental health issues. Age and rurality made relatively minor contributions to all problems.

Within the limitations of this brief survey, these findings suggest mental health problems faced by rural people are substantially similar to those experienced by people who identified as urban dwellers, including, in particular, problems relating to alcohol misuse and loneliness.

BACKGROUND

A recent study of coroners' records examined the demographic risk factors, characteristics and precipitating factors for a consecutive series of 185 individuals in farm-related jobs who died by suicide in New Zealand between 2007 and 2015 (Beautrais, 2017). A key finding of this study was the youth of farmer suicides. Of the total 185 suicides, 12% were teenagers, 25% were aged less than 25 years, one third were aged less than 30 years, and almost half were under 40.

These young farmers were often characterized by living alone, alcohol problems or acute alcohol intoxication, and access to a firearm which they used for suicide. They tended not to visit primary healthcare providers. These findings raised questions about the extent to which isolation, alcohol abuse, access to firearms and lack of knowledge of, or access to health services, are common to many young farmers or whether they characterize the very small population who die by suicide.

To explore these issues, we carried out a needs analysis of the mental wellbeing of rural youth by conducting a brief survey of individuals who visited the Health Hub at Mystery Creek Fieldays in June 2018. This population represented a large, rural and farmer-facing sample who were able to be conveniently surveyed at low cost.

METHODS

Research Design

The survey was conducted over the four days of the Mystery Creek Fielddays, June 13-16, 2018. The decision to conduct the survey at Fielddays was dictated, in large part, by the modest budget for the survey. Fielddays provided an opportunity to conveniently, at one time and at low cost, sample a large population who lived and worked on farms or were interested in rural and farm issues. This population would otherwise be difficult and expensive to access. In 2017 more than 130 000 people visited Fielddays. Of these, 26% were aged <30 years. This information underwrote the decision to conduct the survey at this event in 2018.

In the Fielddays environment only a brief survey is feasible, and acceptable to participants. However, the volume of visitors meant that we were able to obtain a large number of responses to provide a snapshot and commentary on several issues of interest about rural youth.

Data Collection

The survey was conducted in the Health Hub at Fielddays. The Health Hub was a large marquee in which staff at 21 stands engaged visitors in a range of interactive healthcare activities. The survey was conducted at the RHAANZ stand. Visitors to the Health Hub were invited to participate in the anonymous survey by staff and volunteers of the RHAANZ stand. The purpose of the survey was explained to each person. In addition, a notice board at the stand described the purpose of the survey and conveyed that the information gathered would be used by the Ministry of Health and RHAANZ to inform work related to rural mental health initiatives. Participants were advised that no identifying data at the individual level would be collected and that information collected would be aggregated for analysis. The survey was completed online using iPads and using Survey Monkey as the vehicle for data collection. Visitors who were aged 18 and older were eligible to participate. Efforts were made to recruit younger people aged 18-30 years. These efforts included the fact that the survey was a compulsory activity in the Bayer NZ-sponsored 'Health Hub Challenge'. (Participants aged 18 to 30 were invited to complete 10 Health Hub activities in order to enter a draw for a prize).

Data were collected throughout all four days of the event. Volunteer interviewers were supervised by an experienced survey administrator (ALB). The survey was outside the scope of Health and Disability Ethics Committee (HDEC) review; HDEC verification of this exemption was obtained.

Survey Content

The survey areas of interest were determined by the recent findings from the farmer suicide research conducted by Beautrais which identified youth (age under 30 years), alcohol use, living alone and use of a firearm for suicide as significant factors related to farmer suicide. However, the survey focused on alcohol use and isolation. A third and more lethal risk factor relating to ownership, access and use of firearms was not included in this survey at the request of the Ministry of Health.

While the focus was on assessing youth health needs, the survey was not confined to youth since comparing health needs across the lifespan helps inform whether there is a need for targeted youth-specific, versus generic lifespan, strategies to address the problems identified.

The survey questions spanned the following content areas:

- Demographic data including age, gender and ethnicity.
- Self-identification as rural- or urban-based depending on location of residence.
- Access to care and advice for mental health and addictions problems.
- Social isolation. Participants were asked all three questions of the Short Scale for Measuring loneliness in Large Surveys (Hughes et al, 2004).
- Alcohol use. Participants were asked four questions about alcohol use behaviours, using the CAGE, phrased informally and introduced in an open-ended fashion to encourage sensitivity, and three questions relating to frequency of alcohol use (Ewing, 1984; Steinweg and Worth, 1993).

A list of all survey questions is included in Appendix 1.

Data Analysis

Data from the Survey Monkey tool were transferred to a statistical package (SPSS) and are reported using descriptive statistics.

FINDINGS

SAMPLE CHARACTERISTICS

Table 1 shows demographic characteristics for 1053 participants who completed the survey. There were more females (597, 56.7%) than males (N=456, 43.3%), and more people aged <30 years (N=620, 58.9%) than ≥30 years (N=432, 41.1%). (Recruitment favoured younger people). Of young people aged <30 years, 345 (55.6 %) were female and 275 (44.4%) were male. Most participants (83.8%) were of European ethnicity; 8.5 % were Maori. Overall, 564 (53.6%) of participants identified their home location as being ‘more rural than urban’.

Table 1. Demographic characteristics

| Measure | Females | | Males | | Total sample | |
|---------------------------------------|------------|-------------|------------|-------------|--------------|------------|
| | N | % | N | % | N | % |
| Age group | | | | | | |
| < 20 years | 52 | 8.7 | 39 | 8.6 | 91 | 8.7 |
| 20-24 years | 153 | 25.6 | 125 | 27.5 | 278 | 26.4 |
| 25-29 years | 140 | 23.5 | 111 | 24.4 | 251 | 23.9 |
| 30-39 years | 84 | 14.1 | 64 | 14.1 | 148 | 14.1 |
| 40-49 years | 69 | 11.6 | 47 | 10.3 | 116 | 11.0 |
| 50-59 years | 65 | 10.9 | 43 | 9.5 | 108 | 10.3 |
| 60-69 years | 24 | 4.0 | 20 | 4.4 | 44 | 4.2 |
| 70+ years | 10 | 1.7 | 6 | 1.3 | 16 | 1.5 |
| Missing data | - | - | 1 | - | 1 | - |
| Ethnicity | | | | | | |
| European | 514 | 86.1 | 368 | 80.7 | 382 | 83.8 |
| Māori | 45 | 7.6 | 44 | 9.7 | 89 | 8.5 |
| Pacific People | 4 | 0.7 | 13 | 2.9 | 17 | 1.6 |
| Middle Eastern/Latin American/African | 8 | 1.3 | 4 | 0.9 | 12 | 1.1 |
| Other | 25 | 4.2 | 26 | 5.7 | 51 | 4.8 |
| Missing data | 1 | - | 1 | - | 2 | - |
| Home location | | | | | | |
| More urban than rural | 283 | 47.4 | 204 | 44.7 | 487 | 46.3 |
| More rural than urban | 313 | 52.4 | 251 | 55.0 | 564 | 53.6 |
| Missing data | 1 | - | 1 | - | 2 | - |
| Total | 597 | 56.7 | 456 | 43.3 | 1053 | 100 |

CURRENT PROBLEMS

Table 2 shows the types of current serious problems or stressors reported by participants. Overall, one third (33.2%) of women and one quarter of men (26.3%) reported at least one current problem or stressor. Women consistently reported every type of problem more than men. For both men and women, the most common problem was their own workload: just over one in 10 men (11.6%) and one in 7 women cited their workload as a problem. The second most common problem, for both men and women, was ‘financial difficulties’ with 10% of women and 8% of men citing financial difficulties as a stressor. Relationship problems were a stressor for approximately 5% of both men and women. One in 20 people also cited problems with their boss or workmates as a stressor. Erratic markets, the consequences of natural disasters, and worries about livestock or crop health (e.g. *mycoplasma bovis*, *varroa mite*) were problems for only 1 to 2% of participants.

Table 2. Current serious problems or stressors, by gender

| Problem | Females (N=597) | | Males (N=456) | | Total (N=1053) | |
|---|-----------------|-------------|---------------|-------------|----------------|-------------|
| | N | % | N | % | N | % |
| Relationship problems | 39 | 6.5 | 20 | 4.4 | 59 | 5.6 |
| Problems with children or family members | 35 | 5.9 | 14 | 3.1 | 49 | 4.7 |
| Problems with your boss or workmates | 34 | 5.7 | 19 | 4.2 | 53 | 5.0 |
| Problems finding staff | 16 | 2.7 | 16 | 3.5 | 32 | 3.0 |
| Your own workload | 95 | 15.9 | 53 | 11.6 | 148 | 14.1 |
| Financial difficulties | 59 | 9.9 | 35 | 7.7 | 94 | 8.9 |
| Erratic markets | 3 | 0.5 | 8 | 1.8 | 11 | 1.0 |
| Consequences of natural disasters (eg floods, storms or earthquakes) | 10 | 1.7 | 4 | 0.9 | 14 | 1.3 |
| Livestock or crop health (eg <i>mycoplasma bovis</i> , <i>varroa mite</i>) | 9 | 1.5 | 12 | 2.6 | 21 | 2.0 |
| Government regulations and paperwork demands | 14 | 2.4 | 22 | 4.8 | 36 | 3.4 |
| Other serious problems or stressors | 32 | 5.4 | 21 | 4.6 | 53 | 5.0 |
| Any of the above serious problems or stressors | 198 | 33.2 | 120 | 26.3 | 318 | 30.2 |

Table 2a shows the fraction of each age group (youth, <30 years; adults, 30-49 years; older adults, ≥50 years), by gender, who reported at least one serious problem of stressor. Age made no contribution to the burden of stressors or problems: There were no significant age differences in the proportions of women or men, or the total sample, reporting problems.

Table 2a. Serious problems or stressors, by age group and gender

| Age | Females | | | Males | | | Total | | |
|--|---------|--------|-------|-------|-------|-------|-------|-------|-------|
| | <30 | 30-49 | 50+ | <30 | 30-49 | 50+ | <30 | 30-49 | 50+ |
| | yrs | yrs | yrs | yrs | yrs | yrs | yrs | yrs | yrs |
| | N=345 | N =153 | N =99 | N=275 | N=111 | N =69 | N=620 | N=264 | N=168 |
| % with any serious problems or stressors | 33.3 | 35.3 | 29.3 | 25.1 | 27.9 | 29.0 | 29.7 | 32.2 | 29.2 |

Table 2b examines the impact of rurality on problems and stresses and shows that rurality made no contribution to the burden of problems. For both men and women, and for the total sample, there were no differences in the proportions of urban versus rural residents reporting problems.

Table 2b. Serious problems or stressors, by home location (urban/rural) and gender

| | Females | | Males | | Total sample | |
|-------------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | More urban than rural (n=283) | More rural than urban (n=313) | More urban than rural (n=204) | More rural than urban (n=251) | More urban than rural (n=487) | More rural than urban (n=564) |
| % Any serious problems or stressors | 32.5 | 33.9 | 27.0 | 25.9 | 30.2 | 30.3 |

HELP FOR MENTAL HEALTH AND ADDICTIONS PROBLEMS

Table 3 shows the number of people who contacted different sources for help for problems with their own mental health or addiction problems in the last year. Overall, almost one in five people (17.7%) reported that they had contacted at least one healthcare provider or accessed a resource for assistance with their own mental health problems in the previous 12 months. Women reported higher rates of help-seeking than men (20.6% vs. 13.8%).

The most common source of help, for both men and women, was their General Practitioner (GP) or medical centre. Overall, one in 10 participants reported having contacted their GP for help with mental health problems in the previous year. Women (12.4%) were more likely to report contacting their GP for this reason than men (6.6%). The second most common source of help, for both men and women, was a friend or family member. Overall, 6.9% of all participants reported contacting a friend or family member for help. Women were three times more likely to report contacting a friend or family member for mental health problems than men (9.9% vs. 3.1%). Almost 5% of all participants reported contacting a counselling service for help. Women were twice as likely to report contacting a counselling service for help than men (5.9% vs. 2.9%).

Table 3. Mental health or addiction contacts (past 12 months), by gender

| | Females (N=597) | | Males (N=456) | | Total (N=1053) | |
|--|-----------------|-------------|---------------|-------------|----------------|-------------|
| | n | % | n | % | n | % |
| GP or medical centre | 74 | 12.4 | 30 | 6.6 | 104 | 9.9 |
| Emergency Department or hospital | 6 | 1.0 | 4 | 0.9 | 10 | 1.0 |
| Pharmacy | 2 | 0.3 | 2 | 0.4 | 4 | 0.4 |
| Healthline | 9 | 1.5 | 1 | 0.2 | 10 | 1.0 |
| www.depression.org | 14 | 2.4 | 4 | 0.9 | 18 | 1.7 |
| Kaupapa Māori Mental Health and Addiction Service | 3 | 0.5 | 2 | 0.4 | 5 | 0.5 |
| 1737 Need to Talk | 1 | 0.2 | 0 | 0.0 | 1 | 0.1 |
| Rural Support Trust | 9 | 1.5 | 3 | 0.7 | 12 | 1.1 |
| Counselling service | 35 | 5.9 | 13 | 2.9 | 48 | 4.6 |
| 111 Emergency Services | 1 | 0.2 | 4 | 0.9 | 5 | 0.5 |
| Friend or family member | 59 | 9.9 | 14 | 3.1 | 73 | 6.9 |
| Employment Assistance Programme (EAP) | 0 | 0.0 | 3 | 0.7 | 3 | 0.3 |
| Other helpline (Youthline, Lifeline, Samaritans) | 5 | 0.8 | 0 | 0.0 | 5 | 0.5 |
| Other mental health or addiction contacts | 9 | 1.5 | 9 | 2.0 | 18 | 1.7 |
| Any of the above | 123 | 20.6 | 63 | 13.8 | 186 | 17.7 |

Table 3a shows mental health or addiction contacts in the previous year, by age group and gender. Women aged 50 and older (15.2%), compared to those aged less than 50 years (22%), were slightly less likely to make contact for mental health problems. Among men, adults aged 30 to 49 years were less likely to seek help for mental health problems than those who were either younger (< 30 years) or older (≥50 years) (8.1% vs. 15.6% and 15.9%, respectively). For the total sample, there was no strong variation in help-seeking by age.

Table 3a. Mental health or addiction contacts (past 12 months), by age group and gender

| | Females | | | Males | | | Total | | |
|---|------------------|--------------------|-----------------|------------------|--------------------|-----------------|------------------|--------------------|------------------|
| | <30 yrs N=345 | 30-49 yrs N=153 | 50+ yrs N=99 | <30 yrs N=275 | 30-49 Yrs N=111 | 50+ yrs N=69 | <30 yrs N=620 | 30-49 yrs N=264 | 50+ yrs N=168 |
| % Any mental health or addiction contacts | 21.2 | 22.9 | 15.2 | 15.6 | 8.1 | 15.9 | 18.7 | 16.7 | 15.5 |

Table 3b shows mental health or addiction contacts in the previous year, by home location (rural vs. urban) and gender. Overall, there were no differences in the fraction of people seeking help for mental health problems in the previous year by either gender or by rurality. Approximately 20% of both urban and rural women sought help for problems. There were no significant differences in help-seeking between urban (12.3%) and rural (15.1%) males. For the total sample, almost one in five reported seeking help for mental health problems in the previous year, with no difference between urban and rural dwellers.

Table 3b. Mental health or addiction contacts (past 12 months), by home location (urban/rural) and gender

| | Females | | Males | | Total sample | |
|---|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| | More urban than rural (n=283) | More rural than urban (n=313) | More urban than rural (n=204) | More rural than urban (n=251) | More urban than rural (n=487) | More rural than urban (n=564) |
| % Any mental health or addiction contacts | 21.6 | 19.8 | 12.3 | 15.1 | 17.7 | 17.7 |

INFORMATION ABOUT MENTAL HEALTH TOPICS

All participants were asked if there were areas of mental health or addiction about which they would like more information. Table 4 shows requests for information about specific topics by gender. Overall, 61% of respondents said they wanted more information about at least one topic. The most common topics for which more information was requested were depression, anxiety and stress: For each of these topics approximately one third of all respondents wanted more information. Of all respondents, 15% requested more information about suicide prevention. While the majority of both women (66%) and men (55%) wanted more information, there were gender differences by mental health topic. Women wanted more information about depression, anxiety, stress, suicide prevention, and how to get help in a mental health crisis, while more men than women wanted information about alcohol or drug use. Equal numbers of men and women (less than 5% in each case) wanted more information about self-injury.

Table 4. Mental health or addiction problems for which respondents would like more information, by gender

| Problem | Females (N=597) | | Males (N=456) | | Total (N=1053) | |
|--|-----------------|-------------|---------------|-------------|----------------|-------------|
| | n | % | n | % | N | % |
| Depression | 215 | 36.0 | 118 | 25.9 | 333 | 31.6 |
| Anxiety problems | 241 | 40.4 | 94 | 20.6 | 335 | 31.8 |
| Alcohol problems | 48 | 8.0 | 50 | 11.0 | 98 | 9.3 |
| Drug problems | 33 | 5.5 | 41 | 9.0 | 74 | 7.0 |
| Suicide prevention | 101 | 16.9 | 57 | 12.5 | 158 | 15.0 |
| Stress | 207 | 34.7 | 112 | 24.6 | 319 | 30.3 |
| Self-injury (e.g. cutting) | 29 | 4.9 | 19 | 4.2 | 48 | 4.6 |
| How to get help in a mental health or suicide crisis | 61 | 10.2 | 29 | 6.4 | 90 | 8.6 |
| Other issues | 11 | 1.8 | 5 | 1.1 | 16 | 1.5 |
| Any mental health or addiction issue | 394 | 66.0 | 250 | 54.8 | 644 | 61.2 |

Table 4a shows requests for more information by age group and gender. Younger women had a higher demand for more information than older women with almost 75% of women aged less than 30 years wanting more information compared to women aged 30-49 years (60.8%) and women aged 50 and older (50.5%). Amongst men there were no significant differences in demand by age. The demand by younger women was reflected in the total sample, in which there was a higher demand for information from younger (< 30 years) than older (≥30 years) respondents.

Table 4a. Mental health or addiction problems for which respondents would like more information, by age group and gender

| Measure | Females | | | Males | | | Total | | |
|--|---------------------|-----------------------|--------------------|---------------------|-----------------------|--------------------|---------------------|-----------------------|---------------------|
| | <30 yrs N=345 | 30-49 yrs N=153 | 50+ yrs N=99 | <30 yrs N=275 | 30-49 yrs N=111 | 50+ yrs N=69 | <30 yrs N=620 | 30-49 yrs N=264 | 50+ yrs N=168 |
| | % Depression | 42.6 | 28.1 | 25.3 | 25.8 | 28.8 | 21.7 | 35.2 | 28.4 |
| % Anxiety problems | 46.4 | 36.0 | 26.3 | 20.7 | 20.7 | 18.8 | 35.0 | 29.6 | 23.2 |
| % Suicide prevention | 21.2 | 13.1 | 8.1 | 13.8 | 10.8 | 10.1 | 17.9 | 12.1 | 8.9 |
| % Stress | 40.9 | 30.1 | 20.2 | 25.1 | 24.3 | 21.7 | 33.9 | 27.7 | 20.8 |
| % Any mental health or addiction issues | 72.8 | 60.8 | 50.5 | 54.6 | 57.7 | 50.7 | 64.7 | 59.5 | 50.6 |

Table 4b shows demand for information by gender and rurality. Overall, rurality made no difference to demand for information, although for each issue (stress, depression, anxiety, suicide prevention) there was slightly more demand for information from urban rather than rural women.

Table 4b. Mental health or addiction problems for which respondents would like more information, by home location (urban/rural) and gender

| Measure | Females | | Males | | Total sample | |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | More urban than rural (n=283) | More rural than urban (n=313) | More urban than rural (n=204) | More rural than urban (n=251) | More urban than rural (n=487) | More rural than urban (n=564) |
| % Depression | 39.9 | 32.6 | 23.5 | 27.9 | 33.1 | 30.5 |
| % Anxiety problems | 45.6 | 35.8 | 20.6 | 20.7 | 35.1 | 29.1 |
| % Suicide prevention | 17.3 | 16.6 | 11.3 | 13.6 | 14.8 | 15.3 |
| % Stress | 37.5 | 32.3 | 29.4 | 20.7 | 34.1 | 27.1 |
| % Any mental health or addiction issue | 71.4 | 61.3 | 53.4 | 56.2 | 63.9 | 59.0 |

SOCIAL CONTACTS

All respondents were asked three questions relating to social contacts and loneliness. Table 5 shows the number and fraction of individuals who reported that they felt, ‘some of the time’, or ‘often’, that they lacked social contacts. Using this level of frequency (‘some of the time’ or ‘often’), a majority of respondents (56.2%) reported a lack of social contact. Almost half (45.2%) of the total sample reported that they felt they lacked company and friends some of the time or often, and almost 40% reported that they felt isolated from other people, some of the time or often. Women were consistently slightly more likely than men to report feeling left out, isolated or that they lacked friends.

Table 5. Perceived problems with social contact, experienced often / some of the time, by gender

| Measure | Females (N=597) | | Males (N=456) | | Total (N=1053) | |
|----------------------------|-----------------|-------------|---------------|-------------|----------------|-------------|
| | N | % | n | % | N | % |
| % Lack company and friends | 287 | 48.1 | 189 | 41.5 | 476 | 45.2 |
| % Feel left out | 261 | 43.7 | 164 | 36.0 | 425 | 40.4 |
| % Feel isolated | 256 | 42.9 | 150 | 32.9 | 406 | 38.6 |
| % Any of the above | 349 | 58.5 | 243 | 53.3 | 592 | 56.2 |

Given the high prevalence of social contact problems reported in Table 5, Table 5a shows the fraction of respondents reporting social contact problems when responses were restricted to having these problems ‘often’ versus having these problems ‘some of the time’ or ‘often’. When responses were restricted to ‘often’ a similar pattern was apparent, but the prevalence was much lower. Overall, one in 10 people reported that they ‘often’ had at least one measure reflecting problems with lack of social contacts. More women than men reported lacking social contacts often (13.7% vs. 8.6%).

Table 5a. Respondents reporting perceived problems with social contact, ‘often’, by gender

| Measure | Females (N=597) | | Males (N=456) | | Total (N=1053) | |
|----------------------------------|-----------------|-------------|---------------|------------|----------------|-------------|
| | N | % | N | % | N | % |
| % Often lack company and friends | 56 | 9.4 | 31 | 6.8 | 87 | 8.3 |
| % Often feel left out | 44 | 7.4 | 15 | 3.3 | 59 | 5.7 |
| % Often feel isolated | 55 | 9.3 | 17 | 3.8 | 72 | 6.9 |
| % Any of the above | 82 | 13.7 | 39 | 8.6 | 121 | 11.5 |

Table 5b shows the number and fraction of respondents who reported lack of social contact, for each measure, by age group and gender. Inclusion was restricted to people who reported that they ‘often’ felt this way. Overall, younger people (< 30 years) were more likely to report problems with lack of social contact, and this was accounted for by younger women who were more likely than adult or older women to report problems lacking social contacts (17.2% vs. 9.8% and 8.1%, respectively). In total, almost one in five women aged less than 30 reported that they often felt they lacked company, felt left out or isolated.

Table 5b. Social contact problems, ‘often’, by age group and gender

| Measure | Females | | | Males | | | Total | | |
|---------------------------|----------------------------------|-----------------------|--------------------|---------------------|-----------------------|--------------------|---------------------|-----------------------|---------------------|
| | <30 yrs N=345 | 30-49 yrs N=153 | 50+ yrs N=99 | <30 yrs N=275 | 30-49 yrs N=111 | 50+ yrs N=69 | <30 yrs N=620 | 30-49 yrs N=264 | 50+ yrs N=168 |
| | % Often lack company and friends | 11.4 | 6.5 | 7.1 | 5.8 | 9.0 | 7.4 | 8.9 | 7.6 |
| % Often feel left out | 9.0 | 5.2 | 5.2 | 4.1 | 3.6 | 0.0 | 6.9 | 4.5 | 3.0 |
| % Often feel isolated | 11.1 | 7.2 | 6.1 | 3.4 | 4.6 | 4.5 | 7.7 | 6.1 | 5.4 |
| % Any of the above | 17.2 | 9.8 | 8.1 | 7.6 | 9.9 | 10.3 | 12.9 | 9.9 | 9.0 |

Table 5c shows perceived lack of social contacts, by gender and rurality. Inclusion was restricted to those who reported that they ‘often’ felt this way. Overall, there was no difference in reported lack of social contacts between those who lived rurally and those who lived in urban areas.

Table 5c. Social contact problems, ‘often’, by home location (urban/rural) and gender

| Measure | Females | | Males | | Total sample | |
|---------------------------|----------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | More urban than rural (n=283) | More rural than urban (n=313) | More urban than rural (n=204) | More rural than urban (n=251) | More urban than rural (n=487) | More rural than urban (n=564) |
| | % Often lack company and friends | 11.3 | 7.7 | 9.8 | 4.4 | 10.7 |
| % Often feel left out | 6.7 | 8.0 | 4.5 | 2.4 | 5.8 | 5.6 |
| % Often feel isolated | 7.8 | 10.6 | 4.0 | 3.6 | 6.2 | 7.5 |
| % Any of the above | 14.5 | 13.1 | 10.8 | 6.8 | 12.9 | 10.3 |

All participants were asked if they belonged to any sports team, clubs or community organisations. Table 6 shows the number of people to belonged to any such group, and the numbers who belonged to specific groups. Overall, there was a high rate of participation in social groups, with two thirds of

respondents belonging to at least one social organisation. The organisations that people most commonly belonged to were sports clubs (28.1%) or hobby, social or exercise groups (27.2%). Approximately 15% of the sample belonged to online groups, 10% belonged to faith-based groups and 10% belonged to service or volunteer organisations. Overall, there were no gender differences in the fraction of men and women belonging to social groups. However, there were some, relatively small, gender differences in the types of groups to which men and women were affiliated: Men were more likely than women to belong to sports clubs; women, more often than men, belonged to hobby, social or online groups.

Table 6. Community organisation membership, by gender

| Organisation | Females (N=597) | | Males (N=456) | | Total (N=1053) | |
|--|-----------------|-------------|---------------|-------------|----------------|-------------|
| | N | % | N | % | n | % |
| Farming interest groups | 47 | 7.9 | 41 | 9.0 | 88 | 8.4 |
| Professional groups (eg Federated Farmers, Young Farmers, Dairy Women NZ) | 41 | 6.9 | 38 | 8.3 | 79 | 7.5 |
| Parental or Education support groups (eg Play groups) | 24 | 4.0 | 3 | 0.7 | 27 | 2.6 |
| Online or Facebook groups (eg Farming mums, online gaming) | 108 | 18.1 | 59 | 12.9 | 167 | 15.9 |
| Sports clubs | 142 | 23.8 | 154 | 33.8 | 296 | 28.1 |
| Community organisations (eg School Board of Trustees, Councils, Health Agencies) | 52 | 8.7 | 35 | 7.7 | 87 | 8.3 |
| Hobby, social or exercise groups (eg walking groups, book clubs, RSA) | 180 | 30.2 | 106 | 23.3 | 286 | 27.2 |
| Volunteer or service organisations (eg Volunteer Fire Brigade, St John, Rotary, Lions) | 75 | 12.6 | 45 | 9.9 | 120 | 11.4 |
| Church or faith-based organisations | 72 | 12.1 | 51 | 11.2 | 123 | 11.7 |
| Other organisation | 14 | 2.4 | 17 | 3.7 | 31 | 2.9 |
| Membership of any of the above organisation(s) | 406 | 68.0 | 295 | 64.7 | 701 | 66.6 |

Table 6a shows engagement in social groups by age group and gender. Overall, a similarly high fraction of respondents, regardless of age, belonged to social groups. Some variability by age was apparent in the types of groups to which people belonged: younger people were more likely to be involved in sports groups than those aged ≥ 50 , but there was no difference in sports club affiliation between those aged <30 and those aged 30-49 years. Women aged ≥ 50 years, but not older men, were more likely to belong to volunteer, service or faith-based organisations.

Table 6a. Community organisation membership, by age group and gender

| Measure % | Females | | | Males | | | Total | | |
|--|------------------|--------------------|-----------------|------------------|--------------------|-----------------|------------------|--------------------|------------------|
| | <30 yrs n=345 | 30-49 yrs n=153 | 50+ yrs n=99 | <30 yrs n=275 | 30-49 yrs n=111 | 50+ yrs n=69 | <30 yrs n=620 | 30-49 yrs n=264 | 50+ yrs n=168 |
| % Farming interest groups | 7.8 | 8.5 | 7.1 | 8.0 | 10.8 | 10.1 | 7.9 | 9.5 | 8.3 |
| % Professional groups (Federated Farmers, Young Farmers, Dairy Women NZ) | 5.5 | 7.2 | 11.1 | 7.3 | 9.9 | 10.1 | 6.3 | 8.3 | 10.7 |
| % Parental or education support groups (eg. Play groups) | 2.3 | 9.2 | 2.0 | 1.1 | 0.0 | 0.0 | 1.8 | 5.3 | 1.2 |
| % Online or Facebook groups (eg Farming Mums, online gaming) | 15.9 | 28.1 | 10.1 | 14.6 | 8.1 | 13.0 | 15.3 | 19.7 | 11.3 |
| % Sports clubs | 28.1 | 20.3 | 14.1 | 35.3 | 36.0 | 23.2 | 31.3 | 26.9 | 17.9 |
| % Community organisations (eg School Board of Trustees, Councils, Health Agencies) | 3.2 | 14.4 | 19.2 | 7.6 | 7.2 | 8.7 | 5.2 | 11.4 | 14.9 |
| % Hobby, social or exercise groups (eg walking groups, book clubs, RSA) | 31.6 | 25.5 | 32.3 | 21.8 | 22.5 | 29.0 | 27.3 | 24.2 | 31.0 |
| % Volunteer or service organisations (eg Fire Brigade, St John, Rotary, Lions) | 11.3 | 10.5 | 20.2 | 9.1 | 11.7 | 10.1 | 10.3 | 11.0 | 16.1 |
| % Church or faith based organisations | 11.9 | 9.2 | 17.2 | 12.4 | 9.0 | 10.1 | 12.1 | 9.1 | 14.3 |
| % Other organisation | 1.5 | 2.6 | 5.1 | 3.3 | 5.4 | 2.9 | 2.3 | 3.8 | 4.2 |
| % Membership of any of the above organisation(s) | 67.0 | 68.0 | 71.7 | 65.1 | 65.8 | 60.9 | 66.1 | 67.1 | 67.3 |

Table 6b shows membership of community organisations by rurality and by gender. Rural men and women were more likely than their urban counterparts to belong to farming interest and professional groups. Rural women were more likely than urban women to belong to online social groups. Overall, however, there was no effect for rurality: urban and rural people were equally likely to belong to social groups and organisations, and rates of affiliation to social groups was high across both rural and urban groups.

Table 6b. Community organisation membership, by home location (urban/rural) and gender

| Measure | Females | | Males | | Total sample | |
|--|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|
| | More urban than rural N=283 | More rural than urban N=313 | More urban than rural N=204 | More rural than urban N=251 | More urban than rural N=487 | More rural than urban N=56 |
| % Farming interest groups | 2.5 | 12.8 | 2.5 | 14.3 | 2.5 | 13.5 |
| % Professional groups (eg Federated Farmers, Young Farmers, Dairy Women NZ) | 4.6 | 9.0 | 5.9 | 10.4 | 5.1 | 9.6 |
| % Parental or Education support groups (eg Play groups) | 3.9 | 4.2 | 0.5 | 0.8 | 2.5 | 2.7 |
| % Online or Facebook groups (eg Farming mums, online gaming) | 14.8 | 21.1 | 14.2 | 12.0 | 14.6 | 17.0 |
| % Sports clubs | 22.6 | 24.9 | 32.8 | 34.7 | 26.9 | 29.3 |
| % Community organisations (eg School Board of Trustees, Councils, Health Agencies) | 6.4 | 10.9 | 6.4 | 8.8 | 6.4 | 9.9 |
| % Hobby, social or exercise groups (eg walking groups, book clubs, RSA) | 32.9 | 27.8 | 27.0 | 20.3 | 30.4 | 24.5 |
| % Volunteer or service organisations (eg Volunteer Fire Brigade, St John, Rotary, Lions) | 12.4 | 12.8 | 9.3 | 10.4 | 11.1 | 11.7 |
| % Church or faith-based organisations | 13.1 | 11.2 | 9.8 | 12.4 | 11.7 | 11.7 |
| % Other organisation | 3.5 | 1.3 | 4.4 | 3.2 | 3.9 | 2.1 |
| % Membership of any of the above organisation(s) | 69.6 | 66.8 | 60.8 | 68.1 | 65.9 | 67.4 |

ALCOHOL USE

All participants were asked about alcohol use and drinking behaviours. Table 7 shows responses to these questions, by gender. One in 10 respondents (11.4%) reported that they drank daily or 5 to 6 times a week. One in four (25%) drank at least 3 to 4 times a week. More than half (55.4%) drank at least once a week.

One in four participants (26.8%) reported that, on a typical drinking occasion, they would drink five or more drinks. This number included 7% of the sample who said they would typically drink 12 or more drinks on a single occasion.

Binge drinking was defined as four or more drinks within two hours for females and five or more drinks within two hours for males. Of the total sample, 15.1% reported binge drinking at least once a week; one in 10 women (9.5%) and one in five men (22.2%) reported binge drinking at least once a week. One third of the sample (35.5%) reported binge drinking at least once a month. Men were twice as likely to report binge drinking at least once a month: one in five women (22.2%) and almost half of all men (44.2%) reported that they binge drank at least once a month.

Rates of reported problem drinking behaviours were high. One third (29.6%) of the total sample felt that they should cut down on their drinking; this included one in four women (26.3%) and one in three men (34%). More than one in 10 women (10.9%) and 16.5% of men said that people had annoyed them by criticizing their drinking: Overall, 13.3% of the total sample had been annoyed by criticism of their drinking. One in five people (21.2%) reported feeling bad or guilty about their drinking; this figure included 18.8% of all women and 24.3% of all men. One in 10 people (9.5%) reported that they had a drink first thing in the morning to steady their nerves or get rid of a hangover. In total, 5.7% of women and 14.5% of men reported needing a drink in the morning to steady their nerves.

Overall, half of all men (50.6%) and half of all women (49.4%) in the sample reported at least one problem with alcohol. For the total sample, 39.3% reported at least one problem with alcohol.

Table 7. Frequency of alcohol use/problems for males, females and the total sample.

| Measure | Females | | Males | | Total sample | |
|---|---------|------|-------|------|--------------|------|
| | N | % | N | % | N | % |
| Frequency of alcohol use (past 12 months) | | | | | | |
| Daily | 16 | 2.7 | 23 | 5.0 | 39 | 3.7 |
| 5-6 times per week | 34 | 5.7 | 47 | 10.3 | 81 | 7.7 |
| 3-4 times per week | 64 | 10.7 | 79 | 17.3 | 143 | 13.6 |
| Twice per week | 79 | 13.2 | 88 | 19.3 | 167 | 15.9 |
| Once per week | 87 | 14.6 | 65 | 14.3 | 152 | 14.4 |
| 2-3 times per month | 94 | 15.8 | 56 | 12.3 | 150 | 14.3 |
| Once per month | 62 | 10.4 | 30 | 6.6 | 92 | 8.7 |
| 3-11 times per year | 65 | 10.9 | 22 | 4.8 | 87 | 8.3 |
| 1-2 times per year | 46 | 7.7 | 15 | 3.3 | 61 | 5.8 |
| Not in past year/never drank alcohol | 49 | 8.2 | 30 | 6.6 | 79 | 7.5 |
| Missing data | 1 | - | 1 | - | 2 | - |
| Number of drinks on typical drinking occasion (past 12 months) | | | | | | |
| 25+ | 9 | 1.5 | 12 | 2.6 | 21 | 2.0 |
| 19-24 | 2 | 0.3 | 9 | 2.0 | 11 | 1.0 |
| 16-18 | 3 | 0.5 | 12 | 2.6 | 15 | 1.4 |
| 12-15 | 7 | 1.2 | 20 | 4.4 | 27 | 2.6 |
| 9-11 | 29 | 4.9 | 18 | 4.0 | 47 | 4.5 |
| 7-8 | 28 | 4.7 | 31 | 6.8 | 59 | 5.6 |
| 5-6 | 54 | 9.1 | 48 | 10.5 | 102 | 9.7 |
| 3-4 | 117 | 19.6 | 87 | 19.1 | 204 | 19.4 |
| 2 | 147 | 24.6 | 105 | 23.0 | 252 | 23.9 |
| 1 | 116 | 19.4 | 72 | 15.8 | 188 | 17.9 |
| None | 84 | 14.1 | 41 | 9.0 | 125 | 11.9 |
| Missing data | 1 | - | 1 | - | 2 | - |
| Bingeing frequency (past 12 months)* | | | | | | |
| Daily | 2 | 0.3 | 6 | 1.3 | 8 | 0.8 |
| 5-6 times per week | 2 | 0.3 | 5 | 1.1 | 7 | 0.7 |

| | | | | | | |
|--|------------|-------------|------------|-------------|------------|-------------|
| 3-4 times per week | 10 | 1.7 | 14 | 3.1 | 24 | 2.3 |
| Twice per week | 15 | 2.5 | 27 | 5.9 | 42 | 4.0 |
| Once per week | 28 | 4.7 | 49 | 10.8 | 77 | 7.3 |
| 2-3 times per month | 41 | 6.9 | 41 | 9.0 | 82 | 7.8 |
| Once per month | 72 | 12.1 | 61 | 13.4 | 133 | 12.6 |
| 3-11 times per year | 64 | 10.7 | 43 | 9.4 | 107 | 10.2 |
| 1-2 times per year | 118 | 19.8 | 73 | 16.0 | 191 | 18.1 |
| Never | 225 | 38.5 | 128 | 28.1 | 353 | 33.9 |
| Missing data | 12 | 2.0 | 1 | 0.2 | 13 | 1.2 |
| Alcohol related problems (% ever) | | | | | | |
| Felt you should cut down on drinking | 157 | 26.3 | 155 | 34.0 | 312 | 29.6 |
| People annoyed you by criticizing your drinking | 65 | 10.9 | 75 | 16.5 | 140 | 13.3 |
| Felt bad/guilty about your drinking | 112 | 18.8 | 111 | 24.3 | 223 | 21.2 |
| Had a drink first thing in the morning to steady nerves or get rid of a hangover | 34 | 5.7 | 66 | 14.5 | 100 | 9.5 |
| Any alcohol problem | 204 | 49.4 | 209 | 50.6 | 413 | 39.3 |

* Females (4+ drinks), males (5+ drinks), within 2 hour period

Table 7a shows the fraction of the sample meeting criteria for each of four indices of regular, chronic or problem alcohol consumption, by age group and gender. These four measures were:

1. **Drinking at least weekly in the last year.** Overall, rates of weekly drinking were high: Between 40% and 70% of the sample, depending on age group and gender, drank at least weekly. Younger women (<30 years) were less likely to drink weekly (40.3%) than adult or older adult women (56.9% and 54.6%, respectively). Significantly more younger men than younger women (<30 years) were likely to drink at least weekly (68.7% vs. 40.3%). Overall, more than half of each age group (younger, adult, older adult) had drunk at least weekly in the last year.
2. **Consuming seven or more drinks (7+) on a typical occasion.** Younger people (<30 years) were significantly more likely than older people to report consuming 7+ drinks on a typical occasion in the last 12 months. Overall, one in five younger people (22.5%) reported drinking 7+ drinks compared to 11.4 % of adults (30-49 years) and 6.6% of adults aged 50 and older. Almost one in five younger women (18.9%) and one in four younger men (26.9%) reported consuming 7+ drinks on a typical occasion. Men of all ages were more likely to consume 7+ drinks on a typical occasion than women.
3. **At least weekly binge drinking in the last 12 months.** Younger people (<30 years) and adults (30-49 years) were both significantly more likely to report at least weekly binge drinking than older adults (50 years and older): A total of 8.6% of older adults reported binge drinking at least weekly, compared to 19.9% of adults (30-59 years) and 17.6% of young people (<30 years). Men aged under 50 years were significantly more likely to report weekly binge drinking than men aged 50

and older, but almost 20% of males aged <30 years, as well as 20% of those aged 30 to 49 years, reported binge drinking at least weekly. Younger women (<30 years) reported less weekly binge drinking than adult women aged 30-49 years (11.2% vs. 16.0%).

4. **Any reported alcohol problem.** Overall rates of alcohol problems were high: Approximately one third of women in each age group, and almost half (approximately 45%) of men in each age group reported at least one alcohol problem. Across the age groups, men were more likely to report alcohol problems than women. Amongst women, there were no age differences in alcohol problems. Similarly, amongst men, there were no significant age effects.

Table 7a. Measures of regular, chronic or problem alcohol consumption, by age group and gender

| Measure | Females | | | Males | | | Total | | |
|---|---------------------|-----------------------|--------------------|---------------------|-----------------------|--------------------|---------------------|-----------------------|---------------------|
| | <30 yrs N=345 | 30-49 yrs N=153 | 50+ yrs N=99 | <30 yrs N=275 | 30-49 yrs N=111 | 50+ yrs N=69 | <30 yrs N=620 | 30-49 yrs N=264 | 50+ yrs N=168 |
| % Drinking at least weekly (past year) | 40.3 | 56.9 | 54.6 | 68.7 | 58.6 | 69.6 | 52.9 | 57.6 | 60.7 |
| % Consuming 7+ drinks on a typical occasion (past year) | 18.9 | 7.2 | 2.0 | 26.9 | 17.1 | 13.2 | 22.5 | 11.4 | 6.6 |
| % At least weekly binge drinking (past year) ^a | 11.2 | 16.0 | 3.2 | 25.5 | 25.2 | 16.2 | 17.6 | 19.9 | 8.6 |
| % Any reported alcohol problem (ever) | 34.0 | 36.0 | 32.3 | 47.3 | 43.2 | 45.3 | 39.9 | 39.0 | 37.7 |

^a 4+ drinks (females) 5+ drinks (males) in a 2-hour period

Table 7b shows measures of problem and chronic alcohol consumption by urban/rural home location, and gender. Rurality exerted no effect on alcohol problems for males, females or the total sample.

Table 7b. Alcohol consumption by home location (urban / rural) and gender

| Home location | Females | | Males | | Total sample | |
|---|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| | More urban than rural (n=283) | More rural than urban (n=313) | More urban than rural (n=204) | More rural than urban (n=251) | More urban than rural (n=487) | More rural than urban (n=564) |
| % Drinking at least weekly (past year) | 48.1 | 46.0 | 62.8 | 69.3 | 54.2 | 56.4 |
| % Consuming 7+ drinks on a typical occasion (past year) | 13.8 | 12.5 | 21.6 | 23.1 | 17.0 | 17.2 |
| % Binge drinking at least weekly (past year) ^a | 10.8 | 11.4 | 21.1 | 26.3 | 15.2 | 18.1 |
| % Any reported alcohol problem (ever) | 38.9 | 30.0 | 48.0 | 44.2 | 42.7 | 36.4 |

^a 4+ drinks (females) 5+ drinks (males) in a 2-hour period

CONCLUSIONS

This brief survey of 1053 people attending Mystery Creek Fieldays 2018 found high rates of self-reported alcohol misuse, high rates of mental health problems, and high rates of loneliness, despite high rates of belonging to social organisations and groups. Responses for young people aged <30 years were compared with those for adults aged 30 and older. Young men (<30 years) had higher rates of alcohol misuse than men aged 50 and older, and younger women (<30 years) were more likely to report a lack of social contacts than older women. These differences aside, there were few age disparities. Individuals self-defined their home location as 'more rural than urban' or 'more urban than rural'. Responses for people who defined their residence as 'more rural than urban' were compared with those of people who defined their residence as 'more urban than rural'. There was no strong relationship between rurality and alcohol problems, mental health problems, and lack of social contacts.

Overall, one third of women and one quarter of men (30% of the total sample) reported at least one current stressor or problem. For both males and females, the most common source of stress was their own workload (14.1%). Other problems were financial difficulties and relationship problems. Women reported more stresses than men. Neither age nor rurality influenced stresses.

These findings are consistent with a rising number of reports, in New Zealand and internationally, highlighting heavier workloads and increased stress at work in a range of different industries (see, for example, Business NZ and Southern Cross Health Society, 2017; Health and Safety Executive, UK. [Stress and mental health at work](#)). In a 2017 Wellness in the Workplace survey of 93,000 employees in New Zealand, 31.2 per cent of employees said their level of stress had risen in the last two years. Increased workload stresses can lead to anxiety and depression, and to mental health problems and physical health problems (Melchior et al, 2007). Work-related stresses can also aggravate an existing mental health problem, making it more difficult to manage. In addition to their workload, 5% of respondents in this survey also cited problems with their work colleagues or boss as current stressors.

Not all problems and stresses are related to workloads or the workplace. Other issues experienced by respondents in this survey included relationship problems and financial difficulties. These are common sources of stress in the general population. Somewhat surprisingly, given the agricultural interests of the sample, specific farming stressors, including livestock or crop health, and consequences of weather events, such as droughts or floods, were cited as problems by only 1% to 2% of the sample.

The high rate of current stresses and problems may have contributed to high rates of help-seeking for mental health problems. Almost one in five respondents reported that they had contacted someone for help with mental health or addiction problems, for themselves, within the previous year. The most common sources of help were General Practitioners or medical centres, friends or family, and counselling services. Women more often sought help for themselves than men. There were no strong effects for age or rurality.

The high rates of contact for help with mental health and addictions problems in the previous year are consistent with New Zealand data about the prevalence of mental disorders in the general population. New Zealand's only national mental health survey found that mental disorder is common and 47% of the population is predicted to have a disorder in their lifetime (Oakley-Browne et al, 2006). The National Mental Health Survey also found that 13.4% of the total population made a visit to a healthcare provider within the previous 12 months for a mental health problem, similar to the rates reported in the current survey.

In addition to contacting primary care providers, people in the Fieldays survey also sought help from friends and family, counsellors and other health sector and community resources and services. These contacts reflect New Zealand's current mental health model of care in which people with mild to moderate mental health problems are managed by primary care and through informal support, counselling and social support services (Ministry of Health, 1997)

However, there was strong demand from survey respondents for more information about a range of mental health issues. The areas for which people sought more information were depression, anxiety, stress, suicide prevention and, for women, how to get help in a mental health crisis. Men, more than women, wanted information about alcohol and drugs. The higher demand for more information was largely confined to younger women (<30 years). Rurality did not influence demand for information.

This strong demand for more information about mental health may reflect rising rates of workforce and personal stresses. The demand also suggests that the current mental health model of care, which for 20 years has promoted informal support for mild to moderate mental health problems, including support provided by family and friends, has failed to provide the general population with sufficient information about mental health disorders and problems, stress and suicide prevention, and how best to respond in mental health emergencies and suicide crises.

This unmet population demand for information about mental health is pertinent given the challenge facing the mental health sector, specifically, how to address a growing demand for mental health care and support by people with mild to moderate mental health problems, allowing for under-resourcing of the sector and pressures on the existing mental health workforce. Chronic under-resourcing suggests the need to promote greater use of online interventions and support. Such resources are readily accessible by the rural sector and their availability, utility and effectiveness should be highlighted.

However, respondents reported very low rates of use of Internet services (e.g. Healthline, www.depression.org.nz, Need to Talk?1737, other helplines, counsellors including Employment Assistance Providers (EAP), and informal sources of support e.g. the Rural Support Trust), suggesting that programmes to educate communities and social service providers about mental health problems, crisis suicide prevention, and provision of alternative methods of support and information, should be strongly supported and widely disseminated.

Social contact was explored by three questions from the Short Scale for Measuring Loneliness in Large Surveys (Hughes et al, 2004). More than one in 10 respondents reported that they often felt that they lacked social contact. Among those who said they often lacked social contact, women, especially younger women, predominated. When responses were widened to include participants who reported that they lacked social contact 'some of the time' or 'often', then more than half of all respondents lacked social contact. There was no effect for rurality.

There is increasing interest in loneliness, and findings from this survey are congruent with recent reports using information from the 2014 New Zealand General Social Survey to explore prevalence and patterns of loneliness in adults aged 15 years and older in New Zealand: In 2014, 13.9 percent of the population aged 15 years and over reported feeling lonely "all, most or some of the time during the last four weeks". Of the people who reported feeling lonely, 1.4% said they were lonely all of the time, 2.2% said they were lonely most of the time and 10.3% said they were lonely some of the time (Ministry of Social Development, 2016; Statistics New Zealand, 2013).

The 2014 New Zealand General Social Survey found that feeling lonely decreased linearly with age, consistent with reports from the Fieldays survey that younger women had a greater likelihood of feeling lonely. Different factors may contribute to loneliness in different age groups, and young people may experience loneliness differently from adults or older adults. Recognition that loneliness is linked to poor health outcomes drives concerns about addressing sources of loneliness. It may be appropriate to develop specific interventions for younger people to ameliorate their loneliness.

Despite high rates of reported loneliness, there were high rates of participation in social groups and organisations, with two thirds of respondents affiliated with at least one social group. There were small gender differences: men were more likely to be involved in sports groups; women were more likely to belong to social, exercise or online groups. There was some variation by age: younger people were more likely to be in sports clubs; older women, but not older men, were more often engaged in social and service organisations. Rural men and women were more likely to be involved in farming interest groups and rural women were more likely to participate in online groups.

Some of the reported social group membership included participation in online social groups. While it would appear that online social groups should help to assuage loneliness, it may be that, for younger people at least, social media might be linked to higher rates of loneliness. Use of social media might contribute to feelings of social isolation because it may replace more authentic face-to-face social experiences. Seeing other social media users enjoying themselves in social activities may foster feelings of exclusion. Highly curated representations of people's lives on social media may also elicit feelings of dissatisfaction with current lifestyles, exclusion and the belief that other people are leading more socially engaged, and happier, lives (Primack et al, 2017).

Rates of alcohol misuse were high: 10% of respondents reported drinking daily or 5 to 6 times a week; 15% reported binge drinking at least once a week; 10% reported needing a drink first thing in the morning; half of all men and half of all women reported at least one problem with alcohol use.

There were age and gender differences in alcohol problems. Men reported significantly more problems with alcohol use than women. Younger men (<30 years) had significantly more alcohol problems than older men. Younger males reported higher rates of weekly drinking than older men, and younger women had lower rates of weekly drinking than women aged ≥ 30 years. Younger people (<30 years) more often binge drank than older people. Rurality exerted no effect on alcohol problems for males, females or the total sample.

These findings are consistent with wide recognition of alcohol misuse in New Zealand. For example, recent Ministry of Health data show 15% of New Zealanders who drank alcohol in the past year had a potentially hazardous drinking pattern, and 8.4% of past-year drinkers consumed a large amount of alcohol (more than six standard drinks for males or four for females on a drinking occasion), at least once a week (Ministry of Health, 2013, 2015). Hazardous drinking rates were most common in young people: 36% of 18-24 year old New Zealanders met criteria for hazardous drinking.

Alcohol consumption contributes to a large number of health problems and increases the risk of developing mental health problems. Alcohol misuse is related to suicide risk both via the effects of acute intoxication, and the effects of chronic heavy use. Alcohol misuse is also associated with family and relationship problems. A range of alcohol policies could reduce suicide risk acutely and in the long-term, and at an individual level and at a population level.

This study has some strengths. It is a relatively large sample which provided, at modest cost, a snapshot of mental health needs of a rural, farming-interested population. However, there are some limitations. While Fieldays provided a convenient event at which to survey a large rural population, those who attended the event may not be a representative sample of New Zealand farmers, nor of rural New Zealand. Those who chose to visit the Health Hub may have been a group with a particular interest in health because of personal health issues. However, the Fieldays' survey findings are consistent with results of national surveys of mental health, alcohol use, and loneliness, which suggests the prevalence figures we obtained did not over-estimate problems.

A further limitation was that firearm ownership and access, a potent risk factor for rural suicide, was not explored. Alone of the major risk factors identified for young farmer suicide, firearm access was the single factor which distinguished farm suicides from general population suicides. A decision to omit this risk factor from the research undertaken at the Fieldays reflected the cognisance that this was a potentially triggering line of questioning, and the event in which the research was being undertaken, did not allow for follow up or response should it be required. Further research within a safer and more responsive setting to explore this potentially modifiable major risk factor would be useful.

Despite these limitations this study is useful in highlighting several issues: Among rural and farmer-facing people, workloads were stressful and there were high rates of alcohol misuse, help-seeking for mental health problems, and loneliness, despite high rates of participation in social groups. There were high demands for information about mental health issues.

Age and rurality made relatively minor contributions to all problems. The study of farmer suicide which initiated this survey found that, with the exception of firearm access, risk factors for farm suicide were broadly similar to those for suicide in the general population. The present survey suggests that farmers and the general population share similar mental health issues - current stresses, mental health problems, alcohol misuse, and loneliness - and similar demands for more mental health information and support. These observations suggest broadly similar strategies are needed across rural and urban settings to ameliorate these issues, but with modifications to ensure delivery of mental health services to rural people, and with tailored rural solutions to address loneliness, harmful alcohol use and access to firearms. However, while the prevalence of problems appears similar across rural and urban populations, the impact of stresses and mental illness may be different because of access to services and support. Further research should explore the social and health services necessary to accommodate mental health in rural communities.

The absence of effects for age and rurality suggest there are no health needs (amongst those explored) in young rural people which differ substantially from those for adults and older adults in the general population. In particular, there were no indications that alcohol misuse or loneliness were more common in young rural, compared to young urban, people. While alcohol misuse was a problem for younger males, it was a commonly reported issue across all ages and settings. These findings tend to strengthen the findings from the New Zealand survey of farmer suicide by underscoring the fact that access to a firearm is the key factor in facilitating suicides in young farmers, especially given widespread alcohol misuse. A focus on rural socialisation practices involving alcohol and a focus on firearm safety are both needed to strengthen rural suicide prevention efforts.

REFERENCES

- Beautrais AL, Farm suicides in New Zealand, 2007–2015: A review of coroners' records. *Aust NZ J Psychiatry*, 2017 1-9. <https://doi.org/10.1177/00048674177040>.
- Business NZ & Southern Cross Health Society, [Wellness in the workplace survey 2017](#). Accessed 16/07/2018
- Ewing JA; Detecting alcoholism. The CAGE survey. *JAMA*. 1984 Oct 12 252(14):1905-7.
- Health and Safety Executive, UK. [Stress and mental health at work](#) Accessed 16/07/2018
- Hughes ME, Waite LJ, Hawkey LC, Cacioppo JT. A Short Scale for Measuring Loneliness in Large Surveys: Results From Two Population-Based Studies. *Research on aging*. 2004;26(6):655-672.
- Melchior, M. Caspi A. et al. 2007. Work stress precipitates depression and anxiety in young, working women and men. *Psychol Med*. 2007 Aug; 37(8): 1119–1129.
- Ministry of Health. 1997. Moving Forward: the national mental health plan for more and better services. Wellington, New Zealand.
- Ministry of Health. 2013. Hazardous drinking in 2011/12: Findings from the New Zealand Health Survey. Wellington: Ministry of Health.
- Ministry of Health. 2015. Alcohol Use 2012/13: New Zealand Health Survey. Wellington
- Ministry of Social Development. The Social Report 2016–Te pūrongo oranga tangata <http://socialreport.msd.govt.nz/social-connectedness/loneliness.html> Accessed 16/07/2018
- Oakley Browne, MA. Wells, JE. Scott KM. (eds). 2006. Te Rau Hinengaro: The New Zealand Mental Health Survey. Wellington: Ministry of Health
- Primack BA, Shensa A, Sidani JE, Whaite EO, Lin LY, Rosen D, Colditz JB, Radovic A, Miller E. Social Media Use and Perceived Social Isolation Among Young Adults in the U.S. *Am J Prev Med*. 2017 Jul;53(1):1-8. doi: 10.1016/j.amepre.2017.01.010. Epub 2017 Mar 6.
- Statistics New Zealand (2013). Loneliness in New Zealand: Findings from the 2010 NZ General Social Survey. Available at www.stats.govt.nz. Accessed 16/07/2018
- Steinweg DL, Worth H; Alcoholism: the keys to the CAGE. *Am J Med*. 1993 May 94(5):520-3.

APPENDIX

Health Needs Assessment Survey Questions.

1. Are you over 18 years of age?
2. Gender
3. Age group.
4. Which best describes your ethnicity? Choose only one
5. Would you describe the place in which you live to be:
More rural than urban OR More urban than rural
6. If you know the post code of the place where you live please enter it.
7. At present, do you have any serious problems or stresses?
8. If yes, please tell us what types of problems you have.
9. If a friend or family member had mental health or addiction problems, how would you get help for them?
10. In the last 12 months, have you contacted mental health or addiction services because you were worried about someone else?
11. In the last 12 months did you visit, text or phone anyone for help with a mental health or addiction problem for yourself?
12. What areas of mental health or addiction would you like to know more about?
13. This question is about social contacts...
How often do you feel that you lack company and friends?
How often do you feel left out?
How often do you feel isolated from other people?
14. Do you belong to any sports teams, clubs or community organisations?
15. If you said 'yes' to any of the above activities, did you take part in any of these in the last week?
16. This question is about alcohol...
Have you ever felt you should cut down on your drinking?
Have people annoyed you by criticizing your drinking?
Have you ever felt bad or guilty about your drinking?
Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover?
17. During the last 12 months, how often did you usually have any kind of drink containing alcohol?
18. During the last 12 months, how many alcoholic drinks did you have on a typical day when you drank alcohol?
19. During the last 12 months, how often did you have 4 or more drinks containing any kind of alcohol within a two-hour period?