PIT STOP INITIAL EVALUATION REPORT

Farm World March 2012

Initial Pit Stop Data.
Report 1 of 3
ABSTRACT

This report provides an overview of the Pit Stop program conducted at Farm World, 24th and 25th of March 2012. This report explores the effectiveness of interventions to support mens’ health initiatives in Gippsland, recognising the health discrepancies seen between men and women and particularly seen in the rural setting. A total of 124 men participated in the health screening checks, the results of which are examined throughout the report. The results indicate that 29 of the participants (23%) overall received a Canary (take action) sticker.

This report has found that whilst the Pit Stop program has achieved its stated aims and objectives further in-depth evaluation is required to determine the overall effectiveness of the Pit Stop initiative in Gippsland, in influencing mens’ behaviour in relation to positive health outcomes.
INTRODUCTION

State-wide, mens’ health is significantly poorer in comparison to womens’ with similar trends being seen in Gippsland (Victorian Department of Health, 2011). According to the Department of Health, in 2007 men in Gippsland on average died 5.9 years earlier than women. In 2006, statewide 48,000 men died from preventable illness, which could potentially be prevented by regular GP visits and maintainence of a healthy lifestyle (Victorian Department of Health, 2011).

Men living in rural areas also face more health disparity in comparison to men living in metropolitan areas (Dixon, & Welch, 2000). On average, men living in rural areas in Victoria have a lower life expectancy by 2.1 years in comparison to those living in metropolitan areas (Victorian Department of Health, 2011). Numerous studies also indicate that men living in rural areas are more likely to suffer from chronic diseases such as cardiovascular disease, diabetes, as well as depression, suicide and have a higher mortality rate due to injury (Dixon, & Welch, 2000). Men living in the Gippsland area have also been found to engage in more unhealthy and risk-taking behaviour in comparison to the rest of the state (Victorian Department of Health, 2011). Men living in Gippsland were more likely to engage in harmful alcohol consumption, have a lower fruit and vegetable intake, have lower physical activity levels, were more likely to smoke tobacco and have higher rates of obesity, all contributing to a greater burden of disease (Victorian Department of Health, 2011). Furthermore, lack of access and availability to healthcare services results in longer waiting times and a need to travel further distances to access medical treatment and advice (Bourke, et al, 2004).

The Pit Stop program is a mobile health initiative aimed at engaging men in a screening process by likening areas of the body and their function with different parts of a car. The screening process Pit Stop adopts provides its male participants with a masculine, ‘mechanically’ focused, non-medical and humorous concept. This enables men to feel more comfortable with the screening process and the health information provided (Alston & Hall, 2001, Central West Gippsland Primary Care Partnership 2010). A common theme found in the literature is that compared to women, men are reluctant to talk about their health and to seek medical advice (O’Brien, & Forrest, 2008). By providing a more ‘user-friendly screening process, Pit Stop has the potential to engage men who wouldn’t typically visit a medical service on a regular basis. The Pit Stop initiative has been shown to reduce the stigma amongst men regarding “admitting a problem” as participants pass through a series of health check stations, and can discuss any health issues or concerns they may have as they are identified through the test results (Alston & Hall, 2001).

The Pit Stop program was originally developed by the Gascoyne Public Health Unit, Western Australia and is designed to operate as a mobile screening service that can be
conducted at events and in areas with a high male attendance. Pit Stop is based on a mechanical theme where participants pass through a series of health stations for a range of health checks, after which they receive an overall health assessment rated as either a ‘pass’ green traffic light an amber traffic light or ‘take action’ red traffic light. Once reviewed at each station, Work Orders are reviewed and participants are given either a ‘Roadworthy Pass Certificate’ or a ‘Canary (Take Action) Sticker’ depending on the number of red traffic lights received. Participants who receive two or more red traffic lights, or multiple amber, are given a ‘Canary (Take Action) Sticker’.

The ‘stations’ set up for this Pit Stop event consisted of:
- chassis check (diabetes risk),
- lube service (circulatory system – cholesterol),
- oil pressure (blood pressure),
- fuel additives (alcohol consumption),
- spark plugs (testicular health -under 44 years),
- fuel injectors (prostate check—over 45 years)
- and shock absorbers (coping skills).

At each station a health professional spoke with the participant about the related health issues. This involved either a questionnaire to assess risk factors (e.g. ‘fuel additives’), screening for risk factors (e.g. ‘oil pressure’) or provision of health advice.

Each participant is provided with a ‘Work Order’ (copy attached) which is used to record individual results from each station. Individuals are assessed as “Pass” or “Take Action”, depending on the results of the screening at that station. The Pit Stop program can also incorporate additional stations such as skin cancer (Duco), exhaust (Smoking), flexibility (Torsion) and hearing (Sound System), depending on the target audience and available staffing and resources.

In 2009 a working group was established including participants from Central West Gippsland Primary Care Partnership, Central West Gippsland Department of General Practice, Relationships Australia Victoria, Latrobe Community Health Service, and the local office of Department of Veterans Affairs. This working group has since collaborated to deliver the Pit Stop program, as described above, in the Gippsland region. Pit Stop has been delivered by this collaborative working group for the past four years, including annually at Farm World (the largest agricultural field days in the southern hemisphere) from 2010.
AIM AND OBJECTIVES:

Aim:

To offer men the opportunity to complete a free and confidential health check

Objectives:

- To encourage men to participate in a health screening process in a non-medical environment
- To provide participants with education and awareness of mens’ health issues
- To provide men with performance measures of their own health based on seven health indicators
- To provide recommendations on how to improve their health (if indicated) as a result of the seven health indicators
- To encourage men (where indicated) to visit their GP or other relevant health professional for further health screening and advice
- To deliver the program using a collaborative and multi-organisational approach

METHODS:

Study Design:

The study design aims to use each participant’s results to achieve a baseline overview of current health status.

To determine if participation in the 2012 Farm World Pit Stop program encouraged men to take further action on their health; and their recall of the Pit Stop process, together with any changed behaviour. Both qualitative and quantitative methods of data collection are included.

Inclusion & Exclusion:

Inclusion for participation in the Pit Stop program was being male, and over the age of eighteen. Females were excluded.
As the Pit Stop program is aimed at men living in rural areas of Gippsland, Farm World 2012 was chosen as the primary setting. The target audience is well represented in this setting, which can see over 50,000 visitors over a four day period.

Data collection:

Participant information was collected on individual ‘Work Order’ sheets. Data was collected from the Work Order which was filled out as the participants progressed through each health check station. A copy of the completed Work Order was provided to each participant at completion of the program.

Analysis:

The data collected from the ‘Work Order’ sheets was analysed using Survey Monkey and Microsoft Windows Excel to provide simple descriptive statistics. This information provided a basic overview of the collated data results which enabled the researcher to review the participant’s results.

RESULTS:

Demographics

In total, 124 men participated in the Pit Stop program at Farm World 2012. This was a reduction from 2011 which saw 177 men participate. Factors contributing to this reduction included adverse weather on the second day reducing crowd numbers significantly, and concurrent Work Health checks being conducted at the event for the first time. Of the men who participated in the Pit Stop Health Checks at Farm World in 2012, 56% were from the Gippsland region, 16% were from Melbourne and surrounding areas, 1% from NSW and WA and the remaining 26% participants’ location unknown. The age demographic of participants’ indicated that 45.2% were 61-75 years old, 28.2% were 46-60 years old, 21% were 31-45 years old, 4.8% were 76 and over 0.8% were 18-30 years old.
**Chassis Check (Diabetes Risk)**

Of those who participated in the Pit Stop program 50.8 % were found to have a waist measurement of 102cm or higher putting them at greater risk of developing Type 2 diabetes. 4 % of participants at the chassis check (diabetes risk) station received a red light, 60.5% amber, and 33.9% green.
**Lube Service (Circulatory System-Cholesterol)**

The Circulatory System Station found that 9.7% of participants had high cholesterol readings and 79% were within normal limits. 4% of participants at the Lube Service (circulatory System- Cholesterol) station received a red light, 33% amber, and 53% a green.
Results for Total Cholesterol

<table>
<thead>
<tr>
<th>Total Cholesterol Reading (mmol/L)</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5.5 (Normal)</td>
<td>79.0%</td>
<td>98</td>
</tr>
<tr>
<td>Greater than 5.5 (High)</td>
<td>9.7%</td>
<td>12</td>
</tr>
<tr>
<td>Incomplete</td>
<td>11.3%</td>
<td>14</td>
</tr>
</tbody>
</table>

*Number of participants* 124

Traffic Light results for Circulatory System

- Green (Pass) 53%
- Amber 33%
- Red (Take Action) 4%
- Incomplete 10%
Oil Pressure (Blood Pressure)

The Blood Pressure Station found that 48.4% of participants had high or very high blood pressure, 39.5% had medium blood pressure and 9.7% had normal blood pressure. 33% were given a traffic light rating of red, 21% amber, and 40% red.

<table>
<thead>
<tr>
<th>Blood Pressure Reading (mmHg)</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>180/110+ Very High</td>
<td>2.4%</td>
<td>3</td>
</tr>
<tr>
<td>140-179/90-109 High</td>
<td>46.0%</td>
<td>57</td>
</tr>
<tr>
<td>120-139/80-89- Medium</td>
<td>39.5%</td>
<td>49</td>
</tr>
<tr>
<td>120/80 or less -Normal</td>
<td>9.7%</td>
<td>12</td>
</tr>
<tr>
<td>Incomplete</td>
<td>2.4%</td>
<td>3</td>
</tr>
</tbody>
</table>

Number of participants: 124
**Fuel Additives (Alcohol Consumption)**

The results for the Alcohol Consumption Station found that 73% of participants drank 0-6 standard alcoholic beverages per week, 12% drank seven or more standard drinks per week and 15% of participants results were not recorded. The traffic light results for alcohol consumption found that 3% were given a red light, 18% an amber, and 74% a green.
Spark Plugs (*Testicular Health*)

The testicular health station’s traffic light results were 76% received a green light and 18% an amber, while 6% of participants results were incomplete.

![Traffic Light Results for Testicle Health]

Fuel Injectors (*Prostate Health*)

The Prostate health check traffic light results for participants were 69% received a green light, 25% percent an amber, 1% a red light and 5% were incomplete. Of those which were incomplete, contributing factors included falling outside the target age group for each check; i.e. <44 years for spark plugs and >45 years for fuel injectors; however, many were still given the relevant information for each check.
Shock Absorbers (Coping Skills)

The traffic light results for coping skills resulted in 2% of participants receiving a red light, 14% an amber, 78% a green light and 6% were incomplete.
**Recommended GP visit**

At the 2012 Farm World Pit Stop, 39% of participants were recommended to visit a GP, 56% percent did not have results indicating any need for a visit, and the remaining 5% had incomplete results, and therefore were unable to be advised either way.

Those in the 46-60 yrs. age range had the highest percentage of recommendations to visit a GP (42.9%).
Roadworthy Certificate or Canary Sticker

Receiving a combination of red and/or multiple amber lights determined whether a Roadworthy Certificate or ‘Canary’ Sticker was issued to each participant.

The overall results, as determined on presentation of the completed Work Order, found that 23% of participants (n = 29) received a ‘Canary’ sticker. Of those 29, 11 did not receive a red light at any of the stations, 14 received one red light and 4 received two or more red lights. Roadworthy Certificates were given to 7% of participants while 5% of the results were not stated.
DISCUSSION

The Pit Stop program is designed to provide men in rural areas with some self-awareness and strategies to address their personal health and to enhance their understanding of potential risk factors. It is not intended to replace a consultation with a GP. It is provided in a positive and encouraging atmosphere, and is a non-threatening process which enables men to feel less inhibited or reluctant to discuss personal health issues and concerns. The program is delivered by qualified health professionals from a range of services, including but not limited to community health, drug and alcohol, general practice and counselling services.

The Pit Stop initiative at Farm World 2012 achieved the aim and objectives set.

It encouraged men to complete a confidential health check in a non-medical environment. Pit Stop did this by engaging men to participate in a mini health check, providing education and awareness of mens’ health issues and providing them with performance measures of their own health. Pit Stop provided health advice and recommendations to visit a GP where required. Although the number of participants was less than the previous year, the initiative was still successful in engaging men to take part in health screening checks. Reduced participation rates may have been due to a number of factors, including adverse weather conditions, and the competing Work Health checks being conducted elsewhere at Farmworld for the first time.

The results of the Pit Stop health checks have shown some inconsistencies in the recording outcomes, however it should be noted that the health checks are guidelines only, therefore results can be interpreted differently depending on the individual’s circumstances. Practitioners discuss personal health business with each participant and not all details are recorded on the Work Order. A previous evaluation report has also indicated inconstancies in reporting information on the Work Order forms (Moffatt, Hossain, & Boucher, 2010). To reduce these inconsistencies, further investigation is required to determine appropriate processes to improve reporting of participant’s health screening information.

The Pit Stop initiative has the potential for recall bias. This occurs when an individual finds it difficult to recall the correct response to the questions and as a result, participants may over represent or under represent their responses. Also, participants may only provide answers they believe would be the ‘right answer’ or the answer which they presume will make them appear healthier, which can further skew the data.

Overall results indicate that measures of blood pressure and waist circumference were more likely to be above recommended levels.
Measurements related to coping skills and alcohol consumption were more positive suggest that the areas of poorer health were around blood pressure and waist circumference, which were stations were they were screened using physical health measures and testing devices while coping skills and alcohol consumption received more positive results. This can suggest that recall bias was evident in the initiative and ways to prevent this should be explored.

**FUTURE DIRECTION**

Information on the long term impact of Pit Stop is limited. Future Pit Stop initiatives would benefit from incorporating a more rigorous evaluation methodology including qualitative and quantitative evaluation during the event, along with longitudinal follow up evaluation, and a costing versus benefits component.

To provide further insights in to the long term impact (or otherwise) on health behaviour change, follow up evaluation of the Pit Stop program conducted at Farm World 2012 will be undertaken at 3 and 12 months post event. The evaluation process will also include a cost benefit calculation to determine if the initiative is financially viable when compared with its long term benefits.

**CONCLUSION**

The Pit Stop initiative has significant potential to reach and impact on the health of Gippsland men. Pit Stop encourages and promotes healthy behaviour change and provides information and advice to men who, if had not attended may otherwise never receive such information.

The findings from the Farm World 2012 Pit Stop initiative suggest that the aim and objectives were met. It is recommended that further evaluation processes be explored, to review the feasibility and approach of the Pit Stop initiative in Gippsland, including the current processes for collection and evaluation of results, as well as the reach of this initiative in the community.
REFERENCES


RESOURCES

By Men for Men: A Mens’ Pit Stop in Alice Springs. 

Evaluation of the Pit Stop Program in the Tamworth and Bendemeer Communities.

Government of Western Australia, Department of Health WA Country Health Service.

‘Good Health is all about taking pit stop’, Examiner, Tasmania October 2007, Pit Stop sessions run by Quit Tasmania.

The Work Order used at Pit Stop Farm World 2012 can be viewed by opening the embedded document below. Click twice on the icon.