Alcohol and Drug Foundation

PREVENTING HARM IN AUSTRALIA

Local Government Prevention Capacity and Infrastructure (PCI) Survey.

Technical Paper:
Prevention and Readiness Ratings

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PLANET Youth by ICSRA

PARTNER Australia

Background

The local community level is an important arena for public health promotion and prevention strategies, with major investments in local alcohol, tobacco and other drugs (ATOD) prevention being been made in many countries.

International bodies, such as the World Health Organization (2010), have listed community action as a recommended target area for national policy options and interventions - however, little is known about the effects of local ATOD prevention. One reason for this is the lack of systematically collected local data on ATOD prevention work on a larger scale.

An exception to this is Sweden, where prevention data from all 290 municipalities have been collected annually, for more than 15 years, to monitor and assess the effectiveness of local ATOD prevention.

To aid assessments and evaluations, a composite alcohol prevention measure has been developed to capture a wide range of prevention efforts, with a system model for local prevention and community action as the basis (Nilsson, 2015; 2019). This Prevention model and its sub-categories have been used to assess the ATOD prevention capacity of Swedish municipalities, on a country-wide scale, as well as specific community intervention projects (e.g. Leifman, et al, 2013; Leifman, et al, 2019).

This local prevention capacity assessment approach is now an integrated measurement tool within the Planet Youth model (Icelandic ATOD prevention model) with the aim of facilitating effective implementation of this model.

The capacity assessment is not necessarily confined to selected Planet Youth communities. It can be pursued across a large number of municipalities for a better understanding of on-going local activities and conditions for prevention work.

The current Local Government capacity survey study conducted in 145 councils in Australia, under the auspices of the Alcohol and Drug Foundation, meets both of these purposes.

The Australian capacity study - the Local Government Prevention Capacity and Infrastructure Survey

In October 2019, the Alcohol and Drug Foundation (ADF), supported by Planet Youth, conducted an ATOD prevention capacity survey with councils across Australia, known as the Local Government Prevention Capacity and Infrastructure Survey (or the PCI Survey).

Based on past experiences and with necessary adaption to the local Australian context, prevention experts Planet Youth and the ADF designed the PCI Survey to measure each council's current **prevention capacity** and **infrastructure** along with its **readiness** for the implementation of long-term and sustainable ATOD prevention work.

The responses to the survey were analysed using a model developed by Planet Youth. The model uses composite measures of **prevention** and **readiness** based on a variety of survey questions that captured each council's current prevention efforts. More than 100 survey questions were included to build a series of additive ratings.

The rationale for developing composite ratings – the Overall Prevention rating and the Overall Readiness rating

The construction of the composite ATOD Prevention measures has its theoretical base in a systems-model for substance use prevention (Holder, 1998). In accordance with this model, effective local prevention must focus on system-wide structures and processes and interactions between these.

Holder's model has influenced prevention of ATOD (including methamphetamine and illicit drugs) (Birckmayer, et al, 2008; Birckmayer, et al, 2004; Gripenberg Abdon, 2012) and similar approaches (also based on multicomponent interventions), have been tested in several trials, such as Communities That Care (CTC) and Communities Mobilizing for Change on Alcohol (CMCA), with promising results (e.g. Hawkins, et al, 2014; Holder, et al, 2000; Wagenaar, et al, 2000).

In an evaluation by the World Health Organization of community prevention projects on alcohol, it was concluded that such projects function best when various sectors in the community are mobilised (WHO, 2012). In the International Standards on Drug Use Prevention, published by the United Nations Office on Drugs and Crime (UNODC, 2015), it was shown that multimodal efforts at the municipal level can prevent the use of alcohol, drugs, and tobacco.

Therefore, the monitoring of local prevention work (prevention, readiness) needs to capture many different dimensions and overall summary measures (ratings) must therefore embrace all parts identified as necessary for long-term sustainable and effective prevention work.

There are several advantages in using composite indicators (ratings) rather than many individual indicators. For instance, a composite measure is easier to interpret and may summarise multiple dimensions and facilitate communication. Furthermore, it enables comparisons of complex dimensions. Importantly, the main purpose of the PCI Survey is to strengthen councils' prevention capacity and composite measures facilitate such an effort. Composites can, however, also be misleading if they are poorly constructed or misinterpreted.

The Overall Prevention Rating

Components

Based on previous experience and research, the Overall Prevention Rating consists of three necessary categories (sub-ratings) (see Figure 1).

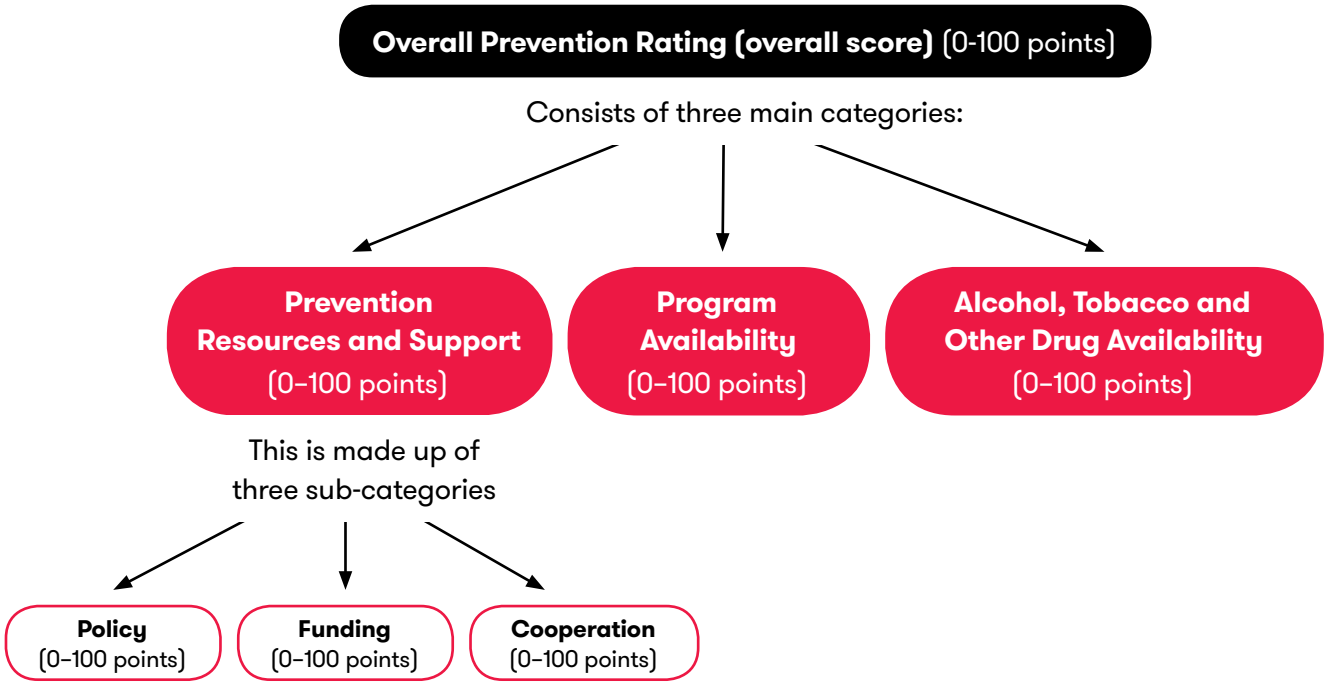

Figure 1. The building and components of Overall Prevention

The first of which is Prevention Resources and Support (Section A of the survey), which in turn comprises three sub-categories: (1) Policy (e.g. strategies, priorities, adopted policies); (2) Funding (e.g. staff, budget); and, (3) Cooperation (e.g. coordination, collaboration with other stakeholders).

For local prevention work to be of any significance, different activities are also needed; both those aiming to reduce the demand and those aiming to reduce the supply (availability) of ATOD. These areas are captured in the remaining two categories: Program Availability (Section B of the survey), which is the availability of activities, programs and interventions aimed at reducing demand for ATOD; and, Alcohol, Tobacco and Other Drug Availability (Section C of the survey), which measures efforts to regulate the availability of ATOD.

All three categories are needed to provide an overall comprehensive picture of the local ATOD prevention work.

No prevention work can be done without funding (staff and budget); policies are needed to gain political support and stability over time; local cooperation with other stakeholders and agencies, such as the police, is essential in order to reach sectors that fall outside the local authorisation; reducing the demand for ATOD via the delivery of programs and raising awareness, in combination with limiting (regulating) ATOD availability is important to impact on both consumption and harm (Nilsson, 2019).

While each of the three categories is important individually, they also strengthen one another by creating a system of prevention, affecting different structures, arenas, and individuals within a municipality.

Scores, weighting and rating

Each of the three categories has a score ranging from 0 to 100 points.

Zero means that nothing is in place or conducted; whereas 100 points indicates that everything asked in the survey is either in place and/or fully conducted.

Many of the individual items are coded 1 ('yes' or the highest score) or 0 ('no' or the lowest score). There are also some others with values in between 0 and 1 (e.g. 0.25, 0.5, 0.75).

The overall Prevention Rating is the mean of: Prevention Resources and Support; Program Availability and Alcohol; and, Tobacco and Other Drug Availability (all categories are weighted equally). Prevention Resources and Support is the mean of the scores on: Policy; Funding; and, Cooperation (also weighted equally).

For the Overall Prevention Rating and the three categories, each council's score (0-100) was also classified into one of five equally large groups (quintiles; lowest quintile: 0-20%, highest quintile: 81-100%) with a five-colour coded heatmap (see table below). This was made in order to facilitate comparisons between categories and between councils.

National Comparison Criteria				
Performance is ranked in the lowest 20% of councils **(0-20%)**	Performance is ranked in the second lowest 20% of councils **(21-40%)**	Performance is ranked in the middle 20% of councils **(41-60%)**	Performance is ranked in the second highest 20% of councils **(61-80%)**	Performance is ranked in the highest 20% of councils **(81-100%)**

Since the data revealed a positive correlation between the prevention capacity of a council and its population size, benchmarking should also be made between councils with approximately the same population size.

There are six population groups in total with approximately 20-25 councils in each group (see table below). For such a comparison, the councils' scores for each population group were divided into three groups: those within one standard deviation from the mean of the councils in the same population group; those above and those below one standard deviation from the mean (see table below). This is a rather cautious rating system of the councils' scores; most councils are in the middle group (within one standard deviation). Even though the data is not a random sample, small differences compared to the average should be interpreted with great caution. This is the reason that the scores were divided into intervals.

Population Size Comparison Criteria		
Performance is ranked in the lowest 16% of councils **(0-16%)**	Performance is ranked in the middle 68% of councils **(17-84%)**	Performance is ranked in the highest 16% of councils **(85-100%)**

Note: A mean is the average of scores in a dataset (e.g. the sum of scores is divided by the number of participants). One way to measure the spread of scores either side of a mean is using the standard deviation of the dataset. According to the normal distribution curve, 68% of scores in a dataset are contained within one standard deviation either side of the mean, 95% of scores are within two standard deviations either side of the mean, and 99% of the scores are within 3 standard deviations either side of the mean. Datasets with a large spread of scores from the mean will have a higher standard deviation, whereas those with a more narrow range of scores (that are closer to the mean) will have a lower standard deviation.

Table 1. Population groups, based on 2018 Australian Bureau of Statistics (ABS) data

Population size group	No. of councils
Less than 10,000 residents	23
10,001 to 20,000 residents	21
20,001 to 35,000 residents	21
35,001 to 70,000 residents	25
70,001 to 150,000 residents	23
More than 150,000 residents	32

The Overall Readiness Rating

Components

Readiness – or more precisely readiness for change – is the degree to which a community/organisation/group of stakeholders is prepared to take action on a specific issue.

Readiness for change is one of many important factors that affect implementation and the degree of readiness is most valuable to evaluate before starting any process of implementation.

The Overall Readiness Rating used in this analysis is mainly based on experience from working with the Community Readiness Model (CRM) (Oetting, et al, 2001). The CRM is partly based on theories such as stages of change (Prochaska , et al, 1983) and diffusion of innovation (Rogers, 2003). The CRM traditionally relies on semi-structured interviews with representatives of key stakeholders and is a diagnostic tool that connects appropriate strategies to Readiness ratings. There are six main dimensions of Readiness in the CRM: Efforts, Knowledge of the efforts, Leadership, Climate, Knowledge of the issue and Resources.

For the PCI Survey, however, a newly adapted tool of the CRM was created with five categories, instead of the original six CRM categories (Section D of the Survey) (see Figure 2). These categories are:

- *Efforts and Actions:* This captures the ATOD prevention strategies and programs a council already has in place.
- *Knowledge – General and Specific:* This covers the knowledge of ATOD prevention programs currently offered and how these are delivered, as well as understanding of the needs of the community, including those of young people.
- *Leadership:* This measures the council's political, financial and staff expertise to support ATOD prevention efforts.
- *Culture and Climate:* This assesses a council's level of cooperation and agreement with other stakeholders towards support of ATOD prevention work, as well as whether there is an implementation strategy in place.
- *Resources:* This covers funding, partnerships with other organisations, public support and volunteer resources that the council has available to invest in their ATOD prevention efforts.

The Readiness analyses were conducted independently from the analyses of the Prevention data, by a team with extensive experience of the CRM.

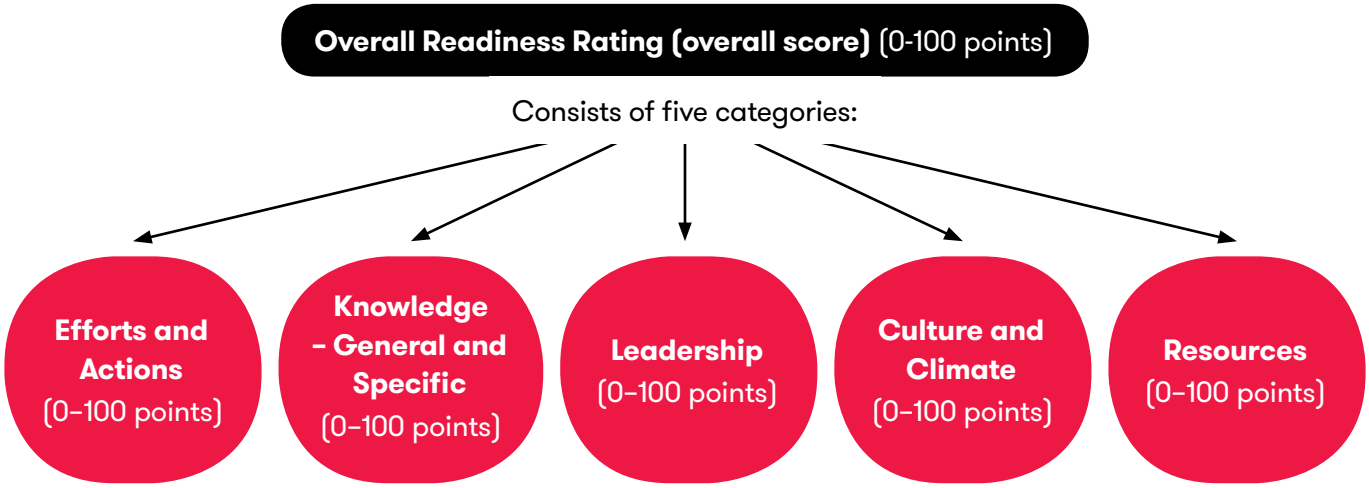

Figure 2. The building and components of Overall Readiness

Scores, weighting and rating

The scoring and weighting procedures for the Readiness data were the same as those described above for the Prevention data, with one important exception - these ratings were not classified into quintiles.

The combination of both the Prevention Ratings and Readiness Ratings

This is, as far as we know, the first time that prevention and readiness assessments appear together in a large data set.

The prevention assessment informs the council of its position – low, in the middle or high – and thereby provides guidance on what needs to be improved. The readiness assessment provides insight into the council's degree of preparedness to undertake further ATOD prevention work.

Analyses of the data revealed clear correlations between a council's Prevention Rating and their Readiness Rating.

To some extent this is due to the fact that the calculation of the Readiness Ratings also used some of the data included in the Prevention Ratings (Section A and B of the PCI Survey), but also the Readiness items in Section D of the survey were correlated with the Overall Prevention Ratings. While the correlations were far from perfect, the multiple use of the same data supports the reliability of the ratings.

The output of the analyses – reporting

All participating councils receive a PCI Survey report showing their Prevention and Readiness Ratings. Opportunities for Action are also listed.

Councils that did not complete all parts of the questionnaire, receive ratings only on one or several sub-categories, where the supplied data allowed adequate analysis. The Overall Prevention and Readiness Ratings could not be calculated for incomplete surveys.

The individual council reports give councils a baseline indication of their capacity, infrastructure and preparedness to change to continue their ATOD prevention work.

Data collection and response rate

The online data collection occurred in October and November, 2019.

Altogether the online questionnaire was distributed by email to a sample of 272 local governments.

The online questionnaire was divided into three links (three sections: A & D, B, C) and the survey coordinator was asked to fill in the first link consisting of Section A & D of the survey. The survey coordinator could also fill in the remaining two sections or re-distribute those sections to other qualified personnel within council who had more detailed knowledge of demand and supply-related activities.

Altogether 145 councils submitted at least one section of the questionnaire (section A & D) with at least parts of that section filled in (the Policy section) (see table 1). Consequently, the overall response rate is 53%.

The response rate differs, however, between the sections.

The ATOD Availability section (C) showed the lowest response rate (47% or 129 councils), whereas Section A had the highest (51% or 139 councils) with the Program Availability Section B close by (51% or 138 councils). The Section D part of the Section A & D showed a response rate of 49% (134 councils). As also shown in table 2, the response rate altogether, 125 councils (46%) completed all necessary sections (A-C) enabling them to be included in the Overall Prevention Rating and 134 (49%) qualified for inclusion in the Overall Readiness Rating.

The response rate also differed significantly between the states (table 1). The highest response was recorded in Tasmania (88%, 7 out of 8), followed by Victoria (75%). In contrast, Western Australia showed the lowest response rate (38%).

Table 2. Response rates for the PCI Survey 2019

	Total no. of invitees	Prevention Resources and Support (Section A)			Program Availability (Section B)	ATOD Availability (Section C)	Readiness (Section D)	Overall Prevention Rating	Overall Readiness Rating
		Policy	Funding	Cooperation					
National:	272	145	141	139	138	129	134	125	134
		53%	52%	51%	51%	47%	49%	46%	49%
By state:									
NSW	76	33	31	30	30	26	28	24	28
		43%	41%	39%	39%	34%	37%	32%	37%
VIC	57	43	42	42	41	39	41	37	41
		75%	74%	74%	72%	68%	72%	65%	72%
QLD	28	12	12	12	11	11	11	11	11
		43%	43%	43%	39%	39%	39%	39%	39%
SA	65	35	35	34	35	34	34	34	34
		54%	54%	52%	54%	52%	52%	52%	52%
WA	32	12	11	11	12	11	11	11	11
		38%	34%	34%	38%	34%	34%	34%	34%
Tas	8	7	7	7	6	6	6	6	6
		88%	88%	88%	75%	75%	75%	75%	75%
NT	5	2	2	2	2	1	1	1	1
		40%	40%	40%	40%	20%	20%	20%	20%
ACT	1	1	1	1	1	1	1	1	1
		100%	100%	100%	100%	100%	100%	100%	100%

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