Part III Survey details

8 Planning the survey

8.1 The NSW study as the pilot study

The pilot study for this survey was the 1996 NSW prisoner health study. The NSW survey confirmed the viability of the various questionnaires and assessed the prisoners' reactions to the various questions.

Concerns as to the detailed nature, sensitivity (particularly in relation to drug use and sexual abuse), complexity and overall length of the survey had all been addressed in the NSW study. This study concluded:

- Overall, inmates were willing to divulge information about their health status to interviewers.
- Raising issues such as sexual abuse and drug use history did not elicit generally adverse reactions.
- The survey provided many inmates with an opportunity to receive advice about health concerns from health professionals.

8.2 Prisoner Profile

Tables 8.1 and 8.2 show all prisons in Victoria, the predominant prisoner profile, the security classification(s) in operation at the prison, and the prisoner population.

Data on the prisoner population is based on the muster lists provided during the period of the survey. Prisoner population is not static and hence actual numbers in the different categories are expected to vary from month to month.

9 Literature Review of prison based health studies

9.1 The Irish study – August 2000

The key objective of the Healthcare study of the Irish prison population (HIPP) was to document the health status of current Irish prisoners in order to provide more focused and appropriate health services based on need.[22]

The HIPP study included 777 prisoners located across 13 of the 15 Irish prison facilities. The two facilities excluded from the study were used as pilot sites to test and refine the survey instruments. A probability stratified sampling technique was used, with the sample distribution allocation proportionately based on prison population size. Prisoners in each participating facility were chosen randomly from a list of all inmates of the prison with the exception of female prisoners where a complete census sample was sought.

Of the 777 participants, 59 were female prisoners which represents 3% of the surveyed population. This is reflective of the entire Irish prison population where only 2% of prisoners are females.

There were three components to the HIPP study;

- A questionnaire covering physical and mental health, health related behaviour, the prison health service and the prison environment. This question was interviewer assisted where necessary.
- Medical history and World Health Organisation (WHO) quality of life BREF instrument
- Physical measurements; blood pressure, pulse, respiratory function, height and weight.

A team of nine field workers including one doctor and five nurses worked in each prison. Several days before the survey took place, each prisoner in that institution received a written explanation of the study and their possible inclusion in the study. Immediately prior to the fieldwork in a prison, one of the field workers visited the prison to make the necessary arrangements and to draw the sample.

[22] Final report, Healthcare study of the Irish prison population, The Department of Justice, Equality and Law Reform, Galway, Ireland, August 2000.

Overall the survey concludes that the health status of prisoners is significantly lower than that of the general population. It also confirmed high rates of adverse lifestyle in respect of tobacco alcohol and drug use and emphasizes. This finding emphasizes the psychological distress of a large number of male prisoners and virtually all the female prisoners.

More detailed results included:

- Reported levels of excellent or very good health (29% males, 74% females)
- Almost a quarter of prisoners reported having a long-standing disability or illness that limited their activities (excluding infections such as HIV or Hepatitis C which were not tested).
- Prisoner diets were generally comparable with the general population, while their exercise patterns were better and their blood pressure readings lower than those of the general population.

9.2 NSW Study - 199623

The key objective of the NSW Corrections Health Service (NSW CHS) was to define the health profile of inmates to enable delivery of health services appropriate to their needs. In addition, the survey results were used to inform the health planning process with the correctional system and guide the allocation of correctional health services.

The survey included 789 prisoners, of which 657 were male and 132 were female. The sampling process over-sampled Aboriginal and elderly persons relative to their representation in the overall prison population so that there would be adequate reasonably accurate information to enable separate analysis of their health status. All 27 jails in NSW were included in the study.

Several days prior to screening at each facility, a random sample of prisoners was generated using the muster list. A list of reserves was also drawn to cover refusers and inmates who were unavailable for the survey. Randomly selected prisoners were recruited by clinical staff at the facility in the days prior to the commencement of field work or by the interview team on the day.

[23] Corrections Health Service, New South Wales. Inmate Health Survey. Sydney; November 1997.

Major findings of the report include;

- Approximately 30% of male and 60% of female participants tested positive for the Hepatitis C antibody.
- Only four cases of HIV were reported
- 40% of females and 27% of males had seen a dentist in the previous 12 weeks.

The report makes no detailed comparison between the health of the prison population and the health of the general population.

9.3 Victorian Prisoner Survey

The study of the Victorian prison population has had the benefit of learning from both the Irish and NSW studies. This survey is both extensive covering all 13 Victorian prison facilities with the widest coverage of issues including dental and an unprecedented range of pathology, and intensive in-depth interviews.

Like the NSW survey our study aims to survey the average health profile of Victorian prisoners. By average health profile we mean the average prisoner health profile that would be expected to pertain on a typical day. Other studies such as entry or exit surveys merely describe the health profile of the average entering or departing prisoner. This later profile is likely to be unrepresentative of the average health characteristics of the entire prison population to the extent that entrants and departures are unrepresentative of the prison population.

The Victorian survey, as stated before, is multifaceted. This enables the study of the relationship between different health characteristics – mental, physical, dental and pathology. Such relationships cannot be effectively studied with single faceted studies even if there is a sequence of repeated single faceted surveys.

Both the mental and physical health questionnaires were filled in by trained health assessors, not prisoners themselves. Special attention was given to ensure the health assessors held a common understanding of each question and a common way of rephrasing or restating the question should the prisoner require further clarification. This quality control ensures confidence in the sample outcomes and confidence in the appropriate conclusions that may be drawn from the survey. Focusing on a uniform survey rather than a study of medical records has ensured our survey measures a consistent set of health attributes for all prisoners pertaining at a particular point of time.

The study has closely and rigorously monitored non response including monitoring the profile of non responders. Other studies have generally adopted a more informal approach to response issues, obscuring the potential evaluation of its detailed impact. The potential adverse impacts of non response are well known. By closely monitoring non response in the Victorian study, appropriate allowances have been made, permitting more rigorous and informed conclusions to be drawn from the survey as a whole.

Reasons for non participation were categorised as follows:

(a) At Doctor
(b) Court
(c) Lost Interest
(d) Medical Restrictions
(e) Not interested
(f) No Show
(g) Protection
(h) Released
(i) Sick
(j) Transfer
(k) Visits
(l) Work

Table 9.1 summarises the participation by segments and the reasons given for non-participation. The first percentage [under the heading "Part."] comprises those who were asked and who did in fact take part in one or more aspects of the survey. Subsequent percentages are arranged under the letter symbols for reasons for non-participation – e.g. under column C, 4% of older, non-aboriginal women indicated "lost interest" as the reason for non-participation. Work commitments [L] are not included in the table.

Table 9.1 – Participation and reasons for non-participation by age, ethnicity and sex

			Number	Reasons for non participation										
Age	Ethnicity	Sex	asked	Part.	A	B	C	D	E	F	G	H	I	J	K
old	aboriginal	female	2	50%	0%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%
old	aboriginal	male	9	56%	0%	0%	0%	0%	75%	25%	0%	0%	0%	0%	0%
old	non aborig.	female	50	54%	0%	0%	4%	0%	61%	13%	0%	17%	0%	4%	0%
old	non aborig.	male	320	43%	0%	3%	0%	1%	79%	2%	2%	3%	1%	8%	1%
young	aboriginal	female	19	89%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	0%
young	aboriginal	male	129	43%	0%	1%	0%	0%	85%	0%	3%	8%	0%	3%	0%
young	non aborig.	female	179	50%	0%	1%	1%	1%	76%	8%	0%	9%	0%	4%	0%
young	non aborig.	male	394	36%	4%	6%	0%	1%	62%	0%	8%	2%	0%	16%	1%

The following are noteworthy features of Table 9.1:

- The highest participation rate was amongst young aboriginal females whereas the lowest percentage was among young non aboriginal males.
- **The most common reason for non participation was simply "not interested" [E]**.
- The second most common reason was a "no show". This could have been for a number of reasons including lack of interest or otherwise engaged.
- Generally the pattern of reasons for non response are similar across the various segments.

Participation rates were also considered as a function of security rating. Higher security ratings tend to be associated with higher participation rates with **participation rates running from about 60% for the high security prisoners to about 32% for low security prisoners**.

10 Sampling methodology

The general aim of the sampling plan was to draw representative and reasonably sized samples from the key segments of Victorian prison population. Segments were defined by age, (old/young), ethnicity (aboriginal/non aboriginal) and sex (male/female). At the start of the study the total sample of about 470 was split between the eight segments defined by the three segmenting variables so as to approximately equalize the sampling error in each segment. Segment sampling errors are further explained in section 8.7.

The given sample for each segment was then spread proportionately across the 13 prison facilities. This ensured, as far as possible, the sample for each segment is representative with respect the major other categories such as length of stay and security.

The further sections of this chapter describes the detailed steps and rationale for the above general sampling methodology.

10.1 The Victorian Prison Population and the sample frame

The Victorian prison population is not static. New entrants and departures occur on a daily basis. Thus the "Prison Population" is a shifting concept. However we can expect that the average health profile of the prison population to be reasonably constant from day to day

The "average" health status of the Victorian prison population refers to the average health profile pertaining on a typical day during the period of the study. This average is different from the average health status of "admissions" because admissions contains a mixture of short and long term prisoners whereas the Victorian prison population on a given day is relatively over represented with those on longer term sentences. Thus the prison population on a given day is a "length biased" relative to admissions. The average health profile of these two views of the prison population differ by an amount related to the extent that the health status of long term prisoners is different from those on shorter term sentences.

10.2 The sample frame

The sample frame is the master list of prisoners drawn up from the individual prison muster list drawn up during the period of the survey. The prison specific muster lists formed the basis of the target sampling lists drawn up a few days prior to each prison visit by the Victorian Department of Justice

Some prisons received more than one visit from the health assessment team and in this case only one of the musters from that prison is used in the master list defining the sampling frame.

The master list is a series of snapshots of the prison population over the period. There is little reason to suspect this composite picture is less representative of the somewhat intangible notion of the "Victorian Prison Population" then one snapshot of the entire prison system taken on a given day.

10.3 Sample size and adequacy

A random sample of 470 (and not the whole population of around 3500) was decided upon based on cost. Other issues that impinged on this decision included practicality, greater speed, greater scope and possible greater accuracy achievable with smaller sample sizes.

The accuracy afforded by a random of sample can be quantified in terms of the margin of error. The margin of error is the likely maximum difference between a quantity calculated from the sample and the corresponding unknown quantity computed from the entire population.

With a projected sample size of 470 and a "yes/no" health attribute (such as drug use, hepatitis, depression etc.), the sampling error is around 2%. Thus if 25% of the sample participants have the condition then it is highly likely that in the population between 21% and 29% have the condition.[24] Highly likely means that there is a 95% probability that the range so constructed will in fact contain the population rate.

While a margin of error of 4% may not be satisfactory for all circumstances, it is reasonable given the costs of sampling and the transitory nature of the Victorian Prison population. Furthermore, to halve the margin error requires a quadrupling of the sample size. For example to attain a margin of error of 2% would require a sample size of around 1900, which is not practical. A sample size of 235, half of the proposed 470, would deliver a margin of error of around 6.3%.

10.4 Voluntary Participation and anonymity

All participation in this survey was voluntary and participation once begun could be terminated at any time. No specific incentives were offered for participation.

[24] This is a conservative calculation assuming the "finite population correction factor", random sampling, 95% confidence, applicability of the normal approximation, and a population rate of 50%. Actual margins of error are marginally lower if the population rate differs from 50%.

Voluntary participation poses a potential problem with the sampling in that participants are a non random selection from the prison population. Non randomness implies that participants are potentially a health-biased selection from the prison population as a whole. We stress "potential" since the key issue is whether participation or otherwise is correlated to health. If there is such bias, results from the survey have to be interpreted with care.

Some check on the bias is gained from comparing the demographic profile of participants to that of the master list. Comparisons were made in section 1.6.

The anonymity of participants was ensured by converting each CRN prisoner number into an "prisoner identification code." (pid) CRN numbers are unique to each prisoner and each prisoner has at most one CRN number (even if they move in and out of the system). The pid used to identify each prisoner in the survey is a one-to-one mapping from the CRN code and the coding is confidential.

10.5 Random and stratified random sampling

Random sampling was used to ensure, with a high degree of probability, that the sample is representative and that results calculated from the sample give an unbiased view of the population as a whole.

The sampling design adopted was stratified random sampling. This means that the population is segmented and random samples of a predetermined size are taken from each segment. The segment samples are random in that for a given segment, each prisoner in that segment has the same chance of being selected. The random sampling was performed through the use of computer generated random numbers.

Stratification was used because:

- Data of known precision is required for given strata. The Department of Justice has indicated particular information was required for Males and Females, Aboriginality status or otherwise, and Older and Younger Age groups. By stratifying the population and assigning given sample sizes to these strata avoids under - sampling in these specific strata as may happen with simple random sampling.
- Stratification increases precision. Subdivision of the Victorian population leads to groups with likely more homogenous health characteristics. For example, the health characteristics within age groups are more homogenous than the population as a whole. The overall average health profile of the prison population as a whole can be recovered given the known numbers in each age group.

10.6 Stratified methods implemented to achieve aims of the project

For the given sampling effort of 470, the sample was allocated to the defined key segments within the prison population. Thus the sampling design aimed to maximise the amount and precision of information across the segments.

- Old (41 or greater) versus Young
- Aboriginal versus Non Aboriginal
- Female versus Male

These 3 variables define a total of 8 segments.

Intellectual disability and other variables were considered as segmenting variables. These other variables imply small segments and early on in the study it was decided that setting out to capture the health characteristics of small groups would be wasteful in terms of sampling effort. In effect, sampling effort would have to be taken away from the larger groups with consequent unacceptable reduction in precision. Other potential segmenting variables were similarly excluded.

The definitions of "Old" as opposed to "Young" prisoners was arrived at on the basis of similar sampling effort considerations. Any person aged 41 or over was deemed "Old". Other age cut-offs were considered but were deemed inappropriate for the following reason. As the cut-off age moves up the number of prisoners in the "Old" category rapidly diminishes. With diminished numbers relatively more sampling effort has to be expended in the reduced size categories for the same sampling precision. Thus even though from a health point of view it may have been desirable to push up the age 41 cut-off, this did not make sense from a sampling precision point of view.

Lack of segmentation with respect to a variable does not preclude studying health related issues as a function of that variable. It only means that sample sizes in those segments are randomly determined and not fixed in advance. Thus the margins of error associated with these subgroups are not controlled.

10.7 Sample sizes within strata

To arrive at an appropriate sample allocation the sample was split across the 8 segments according to the criterion that the margin of error associated with a "yes/no" attribute should be approximately the same in each segment. This led to the recommended sampling sizes and fractions displayed in Table 9.1.

Table.10.1 – Recommended Sample Sizes

Female	Old	Young	Total
Aboriginal	2	13	15
Non Aboriginal	40	85	125
Total	42	98	140
Male	Old	Young	Total
Aboriginal	9	77	86
Non Aboriginal	119	125	244
Total	128	202	330

Accordingly we do not use full sampling of, for example, females as had been suggested. Increasing the female sample size beyond 140 would have led to increased female precision at significant loss of precision for the male statistics and in particular the subgroups within the male population. With the suggested sample sizes the margins of error for male and female binary characteristics are approximately the same while leaving sufficient numbers in the subgroups as discussed below. The margin of error calculations assumed finite population correction factors and similar population rates in the Female and Male population. While different rates are expected in the female and male prison populations, there is no expectation that the difference will always be positive or negative. Similar arguments were used with respect to the other segmentations.

Projected margins of error in the subgroups are displayed in Table 9.2.

Table 10.2 – Indicative Margins of Error

Female	Old	Young	Total
Aboriginal	0.0%	7.7%	6.7%
Non Aboriginal	8.1%	7.9%	6.1%
Total	7.8%	7.1%	5.6%
Male	Old	Young	Total
Aboriginal	0.0%	6.9%	6.3%
Non Aboriginal	8.4%	8.7%	6.1%
Total	8.1%	6.7%	5.2%

Health statistics particular to individual population segments may be subject to larger margins of error on account of the smaller available sample size for each segment. However health profiles are likely to be more homogeneous within strata and, if so, this will work to reduce the applicable margins of error.

10.8 Allocation of sampling across different prison facilities

Care was exercised to spread the sample across the entire 13 prisons in the Victorian prison system. Health characteristics may be correlated with prison facility and to achieve a representative or unbiased picture for the prison system as a whole the sample was spread across the 13 facilities according to relative proportion of the prison population in each segment residing at that facility. This led to the projected sample sizes displayed in Table 9.3.

The optimal sampling fractions were applied to the individual prison populations at the time of each visit. Expected sample sizes given the prison population as at 31 October 2001 are given in Table 9.3.

Table 10.3 – Projected Sample Sizes per Facility

	Male				
	Aboriginal		Non Aboriginal		
Prison	**Old**	**Young**	**Old**	**Young**	**Total**
ARARAT	2	3	27	8	39
BARWON	1	11	10	12	34
BEECHWORTH	0	4	2	6	12
BENDIGO	0	3	2	4	8
DHURRINGILE	0	1	7	4	12
FULHAM	0	13	15	32	60
LANGI.KAL.KAL	0	0	9	2	11
LODDON	0	7	14	12	33
MELB.ASS.PRISON	0	11	7	13	31
PORT PHILLIP	5	21	23	29	77
WON.WRON	1	2	5	4	12
Total	9	77	119	125	330

	Female				
	Aboriginal		Non Aboriginal		
Prison	**Old**	**Young**	**Old**	**Young**	**Total**
DME P FROST CTR	1	12	28	71	113
TARRENGOWER	1	1	12	14	27
Total	2	13	40	85	140

10.9 Sampling methodology taking into account prisoner movements

The Victorian Prison population is transitory. Significant movements occur both between prisons and in and out of the system as a whole. This movement precludes the assembly of complete sampling lists at the start of the study, since by the time the assessment team were to arrive at a particular facility, many inmates would have moved on. This problem is exacerbated by the fact that assessments had to be spread out over a period of at least 3 months given the logistical difficulties that were faced in implementing the data collection.

While significant movements occur between prisons and in and out of the prison system as a whole, the aggregate prison population composition is expected to be reasonably constant.

To address the problem of prisoner movements, optimal sample sizes were translated into sampling fractions as displayed in Table 9.4

Table 10.4 – Recommended Sampling Rates

Female	Old	Young	Total
Aboriginal	100.0%	92.9%	93.8%
Non Aboriginal	74.1%	47.0%	53.2%
Total	75.0%	50.3%	55.8%
Male	Old	Young	Total
Aboriginal	100.0%	63.6%	66.2%
Non Aboriginal	15.5%	5.4%	7.9%
Total	16.5%	8.3%	10.3%

These sampling fractions were then applied to the relevant prison lists drawn up shortly before the arrival of the assessment team.

To illustrate, the optimal sampling fraction for old non aboriginal males prisoners was determined to be 15.5%. This fraction was applied to the total number of older non aboriginal males in the prison muster list drawn up shortly before the visit to the particular prison. The list of all old non aboriginal prisoners was then randomly permuted. The assessment team then moved down the resulting list until the until the targeted number of older non aboriginal male prisoners was reached. Similar procedures were followed for the other segments.

A number of issues arose with the above procedure.

- There is a possibility that a prisoner, on account of movement between prisoners and the assessment moving between prisons over time, is assessed twice. This problem was minimized by asking prisoners whether they had previously participated. We found no duplicates in the actual sample.
- The list ran out prior to the target sample size being reached. This was more prone to occur in the smaller segments with high sampling rates and happened on account of unavailability (including the small chance that the prisoner had moved out of the prison) or refusal. To address this issue sampling rates were, if possible marginally increased for the same segment at other comparable facilities.
- Assessment teams could not complete their targets within the time frame initially allocated to the prison visit. This occurred with a number of prisons (especially where there were "lockdowns" or other interruptions) and necessitated a second visit to that facility at a later date. Secondary visits necessitated the drawing up of new lists reflecting the population in the prison at the time of the second visit. The same sampling rates were applied to the new lists and sample sizes thus derived were reduced by the numbers already surveyed. Potential duplicates, that is prisoners already surveyed, were removed from the secondary lists and hence were not part of the sampling frame for the second round.

11 Pathology

Given the possible range of infectious diseases relevant to the prisoner population, it was necessary to prioritise certain diseases for inclusion in the survey. The following section lists the various tests that were included in the serological screening component of the survey. Standard laboratory methods were used in all cases. The Pathology samples were analysed by Mayne Health Pathology.

Mayne Health Pathology are accredited by the Pathology Services Accreditation Board with a Certificate of Accreditation of a Pathology Service. They have NATA accreditation (National Assoc. of Testing Authority of Australia) and are certified in the area of medical testing and have had ISO9002 Certification with the Quality Assurance Services (QAS) since 1996.

11.1 Serological results

Human Immunodeficiency Virus (HIV) Antibody

The survey provided the opportunity to determine HIV prevalence among those already in the Victorian prisoner population.

HIV was only analysed in those samples where the prisoner had given specific consent. The results of test were forwarded to the prison health provider and the prisoner notified of the results with appropriate counselling provided by the prison health provider. A sample HIV consent form is in Appendix C.

The test was performed: by Abbott AxSym HIV-1 & HIV-2 and forwarded to VIDRL for further EIA testing and Western Blot if an equivocal, low positive or positive result was obtained initially.

Hepatitis A Total Antibodies

The prisoners were tested for the prevalence of Hepatitis A antibodies. The test was performed by Abbott AxSym.

Hepatitis B Antibody

The prisoners were tested for the prevalence of Hepatitis B core total antibodies. If an individual tested positive for Hep B core total antibodies, then the sample was tested for Hepatitis B surface antigen. If this was positive, the sample was referred to VIDAS for confirmation.

Hepatitis C Antibody

The prisoners were tested for the prevalence of Hepatitis C antibodies by Abbott AxSym (HCV 3.0).

If an individual tested positive, then the sample was confirmed via testing with EIA Murex.

Mantoux Test for Mycobacterium

With the global re-emergence of tuberculosis (TB) and overseas descriptions of TB outbreaks in prisons, it was seen as essential to conduct Mantoux screening for mycobacterium tuberculosis in the Victorian prisoner population.

The Victorian Department of Human Services assisted with the reading of the Mantoux. Staff from the DHS Tuberculosis Program were available to read the Mantoux.

11.2 Sexually transmitted Diseases

Syphilis

The prisoners were tested for the prevalence of Treponemal (Syphilis.), The tests performed were Rapid Plasma Reagin (RPR); Treponemal Pallidum Particle Agglutination (TPPA / TPHA)

Herpes simplex virus type 2 (HSV-2)

No prison based study had ever tested for this virus; however, there had been studies conducted in groups such as antenatal clinic attendees and clients of STD clinics. Testing inmates for HSV-2 was seen as an important piece of the HSV-2 epidemiological jigsaw as prisoner populations are often excluded from community surveys.

The test was performed by Behring EIA.

Chlamydia trachomatis

An unsupervised urine sample was tested for the presence of Chlamydia. The test was performed by Roche Cobas Amplicor PCR.

Gonorrhoea

An unsupervised urine sample was tested for the presence of gonorrhoea.

The test was performed by VIDRL using Multiplex PCR.

Blood Glucose

The frequency of diabetes was assessed by measuring serum glucose concentrations on random, non-fasting preserved blood specimens. These were collected at different times of day and were measured on a Roche Modular analyser.

Rubella Antibody

Rubella antibody was tested only in females to determine the likely impact of this virus in the event of an outbreak. Rubella is a recognised cause of birth defects following infection during pregnancy and is preventable by a readily available vaccine.

Cholesterol

The study specifications included a measure of total cholesterol to provide an indication of hyperlipidemia among prisoners. On-fasting blood specimens were collected at different times of the day. Measurements were performed on a Roche Modular analyser.

Iron Studies

Serum iron, transferrin and ferritin concentrations were measured to assess iron status in females. The blood specimens were collected at different times of the day and the measurements were performed on a Roche Modular analyser.

12 Dental health

The dental health assessment involved a dentist recording the number of Decayed, Missing and Filled Teeth (DMFT) for each inmate on a form (see Appendix 8). This information allows an individual's DMFT score to be calculated which is a generally accepted measure of their oral health status. The main advantage of the DMFT is that it is a relatively quick examination of the oral cavity which takes approximately 10 minutes per subject.

13 General health measurements

13.1 Height

Participants were measured barefooted using a stadiometer that had been calibrated with a still tape measure. Prisoner's heels, buttocks, upper part of the back and (usually, but not necessarily) back of the head are resting against the stadiometer. Measurements were recorded to the nearest 0.5cm.

13.2 Weight

Calibrated scales were placed on a hard level surface. Participants were measured barefooted. After waiting for a stable reading, the measurement was recorded to the nearest 0.2kg.

13.3 Vision

Visual acuity was measured on a Snellen chart and recorded in the form of a fraction. The prisoner was asked to stand 6 metres (or if small charts used at - 3 metres) away from the chart and cover one eye. Recordings were made for each eye.

13.4 Blood Pressure

The participant was asked to sit down and remove any restrictive clothing. The cuff was placed on patients arm, ensuring that is fits snugly. Systolic and Diastolic readings were taken. A participant with an elevated reading (>145/95) had another measurement taken 5 minutes later. Both readings were recorded.

13.5 Peak Flow Measurement

Participant held the peak flow meter and were asked to breathe in as deeply as possible and place lips tightly around the disposable mouthpiece. They were asked to blow as hard and fast as possible in a short sharp blast. The peak flow was recorded.

Disposable mouthpieces were used for each inmate. Inmates were given verbal instructions or a demonstration if necessary on how to use the apparatus.

13.6 Other Health Issues

Other general health issues covered in the physical health screening questionnaire were: the use of current medications, hospitalisation in the

previous twelve months, consultations with health professionals, injury, diet, and exercise.

As appropriate, certain sections of the questionnaire were modelled on existing community surveys to enable comparisons between the prisoner population and the general community. For example, the questions on sun exposure were taken from the NSW Health Promotion Survey, and the section on spousal abuse was taken from the Women's Health Australia Survey.

Injury was coded in accordance with the National Injury Surveillance Unit's guidelines. This coding scheme classifies an injury into five dimensions: nature of the injury, the cause of the injury, the intent, the place the injury occurred, and the activity at the time of the injury.

A number of sections addressing the needs of specific groups were also included in the questionnaire: women's health (eg. breast self-examination and intimate abuse), Aboriginal health (eg. removal from family, access to special services for Aborigines) and men's health (testicular examination).

14 Interviewer recruitment and training

Each of the data collection elements were conducted by appropriately qualified and experienced staff. Most of the staff undertaking data collection had experience within the correctional health system. All were adequately qualified and had counselling and/or interviewing skills.

Appropriately trained and qualified Dentists were used for the Dental Checks. All of the Dentists used had experience within the Victorian Corrections system.

When recruiting staff, Mayne policies for recruitment were adhered to including anti-discrimination and EEO guidelines.

14.1 Staff orientation process

Staff orientation was delivered over a two-day period, one week prior to commencing the data collection process. An agenda of the days training is included in Appendix D.

14.2 Gender and Culture

Only female assessment staff saw female prisoners to undertake the physical measurements and the physical and mental health survey. The dental officer was not gender specific.

All staff were briefed on the cultural issues relating to Aboriginal prisoners within the corrections system and issues relating to the data collection in this group. All staff also received a briefing regarding the unique issues associated with the correctional system environment.

15 Data collection

The section gives a detailed description of the data collection process. Data collection was undertaken by Mayne Health, the largest provider of private health services in Australia. Mayne Health liaised closely with the facilitators of the 1996 NSW Study in order to leverage from their learning's.

15.1 Data collection background

As outlined in the Survey Specifications, about 470 data samples were collected from a random sample of Victorian prisoners. Deloitte Consulting determined which Prisoners were surveyed, through a statistically robust methodology. This sampling methodology is separately detailed.

Once the sample population had been determined, Mayne Health collected the required data in accordance with the methodology outlined in this paper.

The following elements were required in the data collection process;

1. Recruitment of Prisoner
2. Completion of Study and HIV Consents
3. HIV Pre-test Counselling
4. Collection of pathology samples
5. Collection of urine sample
6. Mantoux administration
7. Physical measurements
8. Physical health survey
9. Mental health survey
10. Dental check
11. Mantoux reading (within 48-72 hours)

15.2 Information provided to prisoners

It was our belief that we needed all stakeholders in the study to fully understand the aims of the project and the data collection process. Our communication strategy covered each of the major stakeholder groups including;

- Prisoner representative groups
- Aboriginal elders within the prison system
- Prison operators
- Prisoners
- Prison officers
- Prison health providers

Where possible, meetings were held with all stakeholders to provide details of the aims of the study, the sampling methodology, the data collection process and the expected outcomes of the study. We also discussed cultural issues pertaining to the study methodology and sought assistance in meeting cultural issues.

15.3 Recruiting Prisoners to the Study

The prisoner recruitment strategy was tailored to each individual prison in order to maximise participation at that prison while accommodating operational issues and the needs of prison management.

The preferred methodology involved the Prison being advised of the eligible participants approximately 24 hours prior to the data collection. The prison officers and/or the prisoner representative group would approach the eligible prisoners and advise them of their opportunity to participate. This would give the prisoner an opportunity to consider whether they wanted to participate and would accelerate the process when the data collection began.

This also allowed some prisons to plan work groups and to ensure that the prisoner was available to attend.

Once the data collection began, the staff usually advised the Prison Officer allocated to the team, that the next prisoner was required. The Prison Officer would either call the Prisoner, or ask the Unit Officer to find or contact the Prisoner. In one case the data collection staff were able to call the prisoners over the public address system.

Some eligible participants had specific intervention orders that needed to be accommodated eg: protection; under management; under observation, confinement. While every effort was made to include these prisoners in the study, final decisions regarding access to these prisoners was the responsibility of the senior prison officer on duty. Security issues took priority at all times.

15.4 Prisoner Consent

Prior to any data collection, each prisoner recruited to the study was briefed about the objectives of the study. They were then asked to complete a consent form. A copy of this prisoner consent form is included in Appendix B.

If a member of the data collection team did not feel a prisoner was competent to provide consent, the survey did not proceed. Procedures were in place to accommodate such circumstances.

In addition to the consent form, the following information was provided to each participant:

- that participation was voluntary;
- the survey was an initiative of the Corrections Health Board and that complete confidentiality of information is guaranteed;
- that no individual clinical data will be passed on to non-medical staff;
- that only medical staff at your prison will have access to the clinical health data with the individuals prisoner's informed consent;
- that all test results and any identified medical conditions as a result of the screenings will be followed up in confidence by the Health Services staff at that facility with the patient's informed consent;
- that all data will be de-linked and de-identified and therefore made anonymous shortly after the survey has been completed;
- that the prisoner may refrain from answering certain questions or sections should they wish to do so;
- that the prisoner may terminate the interview/survey at any time, or withdraw consent during the interview at any other point if they wish to do so and, any information gained will be destroyed
- Mayne Health are required to advise the DHS of the details of any prisoner with a Notifiable Disease, as prescribed by DHS.

15.5 Consent for HIV Test

A separate consent for the testing of HIV was obtained. If the prisoner agreed to the HIV test, appropriate pre-test counselling by an accredited counsellor was provided.

The results of tests were forwarded to the prison health provider and the prisoner notified of the results with appropriate counselling provided by the prison health provider. A sample HIV consent form is in Appendix C

15.6 Collecting data from the intellectually disabled

The Office of the Public Advocate appointed a senior Advocate to assist with the health assessments for any prisoner with an intellectual disability who was selected as part of the random sample. The Advocate would assist in ensuring the prisoner was able to give informed consent and understood the assessment process as it was carried out.

Some Prisoners in Victorian prisons are registered as Intellectually Disabled. Of those, 12 emerged on the random sample lists. Prisoners with intellectual disabilities were given the opportunity to choose whether to participate in the study and were subject to the same security measures previously mentioned.

Of the 12 registered IDS prisoners, 2 were unavailable for the study, 5 advised the prison officer they did not want to be involved in the study and 5 agreed to participate. In each of these latter cases, the data collection staff, in conjunction with advice from the prison officer, or health centre staff, were comfortable with their ability to participate in the study. In these cases, the interviews took longer. In one case the interview took nearly 5 hours.

15.7 Collecting data from non-English speaking prisoners

The Victorian prison health system uses an interpreter service to assist with prisoners who do not adequately speak or understand English. The assessment teams used this interpreter service, if required, to carry out the study with non-English speaking prisoners. Other prisoners did not act as interpreters.

To further support the participation of non English speaking prisoners, the Prisoner Information Sheets were available in a number of languages.

There were 3 participants identified in the sample where an interpreter was required to complete the interview. Prisoners with communication difficulties were still given the opportunity to choose whether to participate in the Study and were subject to the same security measures mentioned earlier. In each of

these occasions, when the process of using an interpreter was explained, the participant withdrew their intent to participate in the study.

15.8 Interview

The location of the interview depended on the correctional facility, but the criteria included the need to be secure, private and where possible, conducive to a successful interaction eg natural light; not overly confined, obviously private etc. Prisoners' cells were not used for interviews.

The Mayne Project Manager reviewed each facility prior to the data collection to determine the suitability of allocated facilities. In most cases the Medical Centre was used, but other areas such as Reception areas and interview rooms were also utilised.

At the completion of each interview, the interviewer completed an interview review form (Appendix F).

15.9 Data privacy issues

Prisoner privacy and complying with the new privacy legislation, which was introduced in the week the data collection commenced, was considered priorities in the study design.

The file containing the random sample was provided to Mayne Health in an MS Excel format. The Prisoner Identification Code (PID) was used on all data forms, including pathology forms.

The following diagram further represents the transfer of unmasked data to masked data and its use during the study to ensure the privacy of prisoner's responses is maintained.

Pathology samples were sent for analysis labelled only with the Prisoner's Unique Identifier. An outside party would not be able to decipher the random code to establish the prisoner identity.

On receipt of the pathology results, Mayne Health had one of its experienced medical practitioner review each file to determine if any further clinical follow-up is required by the prison health provider.

There were three possible clinical pathways that were available for follow-up:

(a) Pathology analysis contained no results of a clinical consequence. In this case, no further action was required by Mayne Health or the prison health provider.

(b) Pathology analysis contained results that have a clinical consequence. This information is de-coded and the Mayne Health medical practitioner will inform the prison health provider of the clinical significance of the results. It is the responsibility of the prison health providers to follow this up with the prisoner.

(c) Prisoner consented to an HIV test. All HIV results must be reported to the prison health providers. All HIV results will be de-coded and sent separately to the prison health providers to make an appointment with each prisoner to discuss the HIV test results.

In addition, Mayne Pathology were required to advise the appropriate authorities of any Notifiable Diseases, as defined by DHS that were identified.

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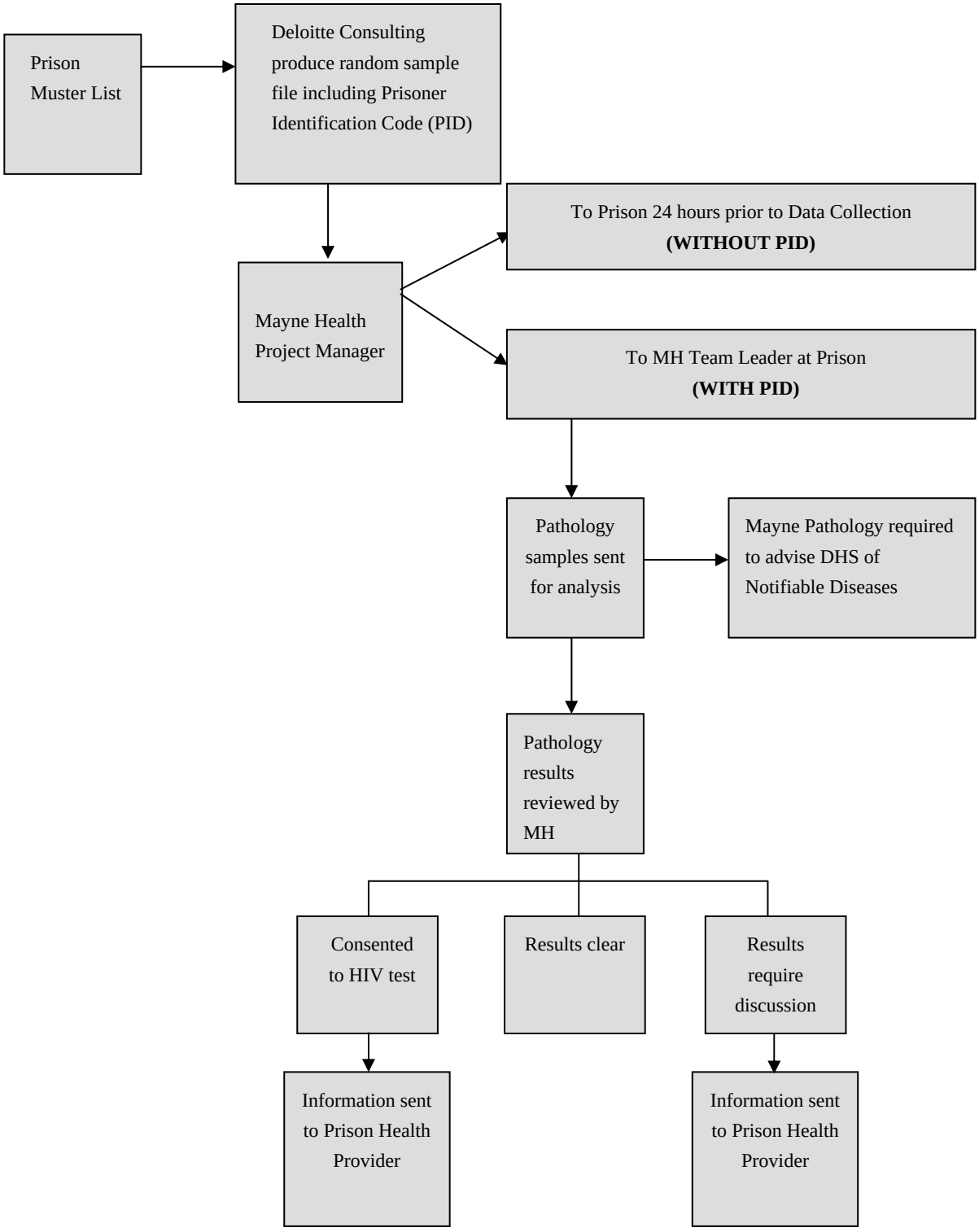
Data Process Map



15.10 Definition of participation

There were a number of prisoners who either refused the blood sample, or were unable to provide a blood sample. Similarly, some prisoners refused, or were unavailable to complete specific components of the data collection, such as the Dental Check, or the Mantoux test. Completed components of the survey were included in the survey results.

15.11 Prisoner referral to Prison Health Centre

One of the benefits of the study to the prisoners was that they were able to follow up the health screening results, if they wish, with the prison health providers.

There were a number of opportunities for referral to the prison health providers during the health study. These were:

(a) During the physical measurements and the dental check, the prisoner was advised of any areas of concern. The attached "Health Prescription" (Appendix G) was used for the prisoner to liaise with the prison health providers.

(b) Immediate health needs of prisoners were referred to the health provider as soon as possible after the interview has been conducted. This was in line with the information provided on the Consent Form.

(c) A Mayne Health medical practitioner reviewed pathology results and arranged referral to the prison health providers in any case where follow-up was required. This process is detailed on the prisoner consent form.

Any referral at any stage of the Health Study will be documented on the Prisoner Referral Sheet attached to each file (Appendix H).

16 Data entry processes and data integrity

16.1 Data entry

Data entry for this survey was classified into two categories; coded data and free text.

Coded Data is where the participant has selected a predefined option. All coded data was key-punched and verified by Harrison Data Capture. This means the data was entered twice by two separate key punch operators. Any variations in the data entry were investigated and resolved. This form of data entry provides the highest level of accuracy.

Free text is categorized as where the participant was given an opportunity to provide input into the survey without any restrictions. The free text was only entered once and was not verified by an independent operator.

Deloitte Consulting personnel escorted the survey files from Mayne Health to Harrison Data Capture and after completion, from Harrison Data Capture back to Deloitte Consulting premises where the data is securely stored.

16.2 Data integrity

A great deal of effort went into reconciling and matching data on computer files once it had been entered. Specific steps undertaken included:

(a) Resolving any issues of for example where number input contained character

(b) Ensuring each participant was appropriately matched to the "asked" list

(c) Removing duplicate records

(d) Cleaning up anomalous input such as where numbers did not fall into a pre-assigned range

(e) Matching records across the various files

(f) Linking records to appropriate demographic information

(g) Appropriate updating of "asked list" to accurately reflect participation on the various phases of the survey.

17 Project learnings

Project learning's can be classified into three distinct categories:

- collaboration and communication
- logistical considerations
- survey logistical planning

17.1 Collaboration and communication

A correctional environment poses more than the usual difficulties in carrying out a health survey. Collaboration and communication with all impacted parties is critical to the success of the project. Closer collaboration with the existing Health Service providers would facilitate greater efficiency in conducting the study. From an implementation perspective, one opportunity may be to utilise health service provider's staff that are familiar with the particular prison routine. With respect to communication, it is critical that each correctional facility take responsibility for achieving the communication goals.

17.2 Logistical considerations

Throughout the project day to day prison logistics have proved a major challenge for the project team. Below are a list of suggestions from the survey implementation team to improve any studies in the future:

Funds could be allocated to each facility to assist with the study. This includes funds for a nominated person to be responsible for the study within the facility, additional prison officers if required and the follow-up of pathology by the health service provider

Consideration could be given to conducting the data collection over a longer period of time so that current facilities could be used in a more discreet manner without disrupting the Health Service provider. This would also mean a reduction in the number of extra prison officer staff.

Prioritise the data that is to be collected. The current study required 11 separate interactions with the prisoner. Each new interaction leads to delays and logistical difficulties and importantly an increase in the drop out rate due to prisoner movements, court appearances and prisoners being released.

The use of notebook or handheld computers should be considered. This would help with the collection, collation and analysis of the data.

A data collection co-ordinator could be allocated to the larger prisons to ensure smooth operations. This person would deal directly with the prison staff member allocated to assist with the survey and together, operational issues could be discussed and minimised. Furthermore, operational staff from one or more of the major facilities should be included on the study steering committee to provide to strengthen the channels of communication between all impacted parties.

Health service providers should be responsible for the Pathology review and follow-up. The Medical Officer at the facility should be the referring Doctor and all pathology returned to them for review.

17.3 Survey logistical planning

Statistical protocols have to be strictly adhered to when implementing the survey. This minimises subsequent potential statistical hurdles such as constructing substitute random sampling lists or designing statistical procedures which address biases. These statistical protocols include the following:

- Optimally, all data samples from an individual prison should be collected in the shortest timeframe possible. This reduces the impact of the transient prisoner population.
- Optimally all samples for an individual prisoner are also collected within the shortest time frame. This reduces the likelihood of "sample attrition" wherein a prisoner has moved or been released from the system before all components of the survey have been completed.
- The random prison participation lists must be followed in specific order. There must be no cherry picking of the lists. The need for this is sometimes not appreciated by prison staff and authorities.
- Where possible, the data collection from individual prisons must be done is one visit. Multiple visits to correctional facilities creates potentially time consuming statistical implications.

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Part IV Appendices

A Additional Result Tables

Table A.1: Suicide – general questions

	old aboriginal male	old non abor. female	old non abor. male	young aboriginal female	young aboriginal male	Young non abor. Female	young non abor. male
Respondents	***8***	***23***	***138***	***12***	***58***	***77***	***134***
General							
Happier future	100% 88%	83% 95%	91% 98%	100% 92%	86% 96%	91% 94%	96% 97%
Happy_now	88% 57%	83% 79%	90% 67%	100% 75%	83% 77%	91% 59%	95% 66%
Want to live	88% 100%	78% 78%	91% 88%	92% 64%	83% 90%	87% 85%	95% 88%
Lots to do	100% 100%	83% 100%	88% 96%	100% 92%	86% 98%	91% 96%	95% 95%
Love life	88% 86%	83% 100%	90% 92%	100% 92%	86% 88%	88% 82%	95% 89%
Want all	100% 88%	83% 100%	89% 92%	100% 83%	86% 92%	88% 91%	95% 94%
Life courage	100% 88%	83% 100%	89% 95%	100% 92%	86% 98%	90% 93%	93% 97%
Plans	88% 100%	83% 95%	89% 89%	100% 75%	86% 92%	90% 93%	94% 98%
Bad temporary	100% 88%	83% 95%	88% 93%	100% 100%	86% 96%	88% 90%	95% 94%
solutions	100% 75%	83% 95%	88% 94%	100% 83%	86% 98%	88% 94%	95% 96%
Stable	100% 75%	78% 94%	88% 95%	100% 83%	86% 88%	87% 85%	95% 86%
purpose	100% 88%	78% 100%	88% 97%	100% 92%	84% 98%	87% 97%	95% 97%
live_desire	88% 86%	78% 100%	88% 94%	100% 100%	86% 96%	88% 96%	95% 96%
not_miserable	88% 100%	78% 83%	86% 86%	92% 82%	86% 82%	84% 80%	93% 80%
life_isall	88% 100%	74% 94%	89% 94%	100% 92%	83% 96%	82% 87%	93% 95%
I_care	100% 88%	74% 94%	89% 95%	100% 83%	84% 90%	83% 94%	94% 94%
life_beatiful	88% 100%	74% 88%	88% 96%	100% 92%	84% 92%	84% 86%	93% 93%
family_commitm	100% 88%	74% 94%	89% 89%	100% 92%	84% 94%	83% 94%	93% 92%
family_depends	88% 100%	74% 88%	88% 82%	100% 92%	86% 90%	83% 91%	93% 81%
not_selfish	88% 100%	74% 94%	88% 84%	92% 91%	86% 78%	82% 90%	91% 91%
Guilty	88% 86%	74% 94%	87% 88%	92% 82%	86% 84%	81% 92%	92% 92%
child_harm	75% 100%	70% 94%	86% 92%	83% 100%	83% 90%	74% 93%	75% 92%
think_weak	100% 75%	74% 88%	83% 78%	92% 91%	84% 71%	81% 87%	91% 75%
concerned	88% 57%	74% 65%	86% 61%	92% 73%	84% 63%	82% 71%	93% 45%
love_family	100% 88%	74% 94%	88% 89%	100% 92%	83% 88%	82% 94%	90% 92%
only_god	88% 43%	65% 60%	82% 57%	75% 78%	76% 66%	82% 68%	87% 63%
morally_wrong	88% 86%	74% 76%	84% 69%	83% 70%	76% 70%	83% 62%	87% 72%
religion_forbids	63% 40%	70% 56%	82% 50%	75% 56%	78% 38%	79% 51%	84% 53%
afraid_hell	88% 14%	65% 40%	80% 33%	83% 40%	74% 44%	78% 52%	88% 34%
Can't_decide	75% 17%	70% 31%	80% 46%	75% 33%	76% 30%	71% 40%	85% 37%

	old aboriginal male	old non abor. female	old non abor. male	young aboriginal female	young aboriginal male	Young non abor. Female	young non abor. male
Inept	75% 33%	65% 27%	80% 32%	75% 22%	76% 23%	70% 35%	86% 29%
Coward	75% 17%	65% 33%	82% 33%	75% 22%	72% 36%	71% 40%	86% 30%
wont_work	75% 17%	65% 27%	82% 35%	75% 22%	76% 30%	70% 37%	84% 30%
afraid_blood	75% 33%	65% 20%	83% 39%	75% 33%	76% 34%	73% 39%	87% 31%
afraid_death	88% 0%	65% 20%	87% 27%	83% 40%	86% 36%	82% 35%	90% 36%
afraid_unknown	100% 25%	65% 20%	84% 28%	83% 40%	84% 39%	81% 50%	90% 40%

Table 2: Gambling

All the questions in this table have the following possibilities: "never", "less than monthly", "monthly", "weekly" and "daily or almost daily." The reported percentages are firstly the percentage of nonzero responses and secondly the percentages in the various categories for those that did give a nonzero response.

The questions labelled "injured" gives the relevant percentages of respondents having been injured as a result of their drinking (no,"yes" – not in the last year, "yes" – during the last year). The "concerned" question probes whether a friend or relative has ever been concerned about the respondents drinking (yes, no, declined to answer). The "in_prison" question probes whether the respondent had ever consumed alcohol in prison (yes, no, declined to answer), whereas the final question relates to how often the respondent consumes alcohol in prison. The categories for this final question are as enumerated in 1.- 5. above with the final category indicating "declined to answer".

	old aboriginal male	old non abor. female	old non abor. male	young aboriginal female	young aboriginal male	young non abor. female	young non abor. male
Respondents	***8***	***23***	***138***	***12***	***58***	***77***	***134***
	100% 0%	87% 50%	100% 29%	100% 50%	98% 19%	96% 54%	98% 21%
	13% 13%	15% 10%	6% 12%	0% 17%	19% 14%	18% 3%	20% 11%
how_often	38% 38%	5% 20%	20% 33%	0% 33%	12% 35%	11% 15%	21% 27%
	88% 29%	48% 45%	72% 20%	50% 0%	78% 11%	44% 12%	75% 15%
	0% 14%	36% 9%	31% 7%	0% 50%	4% 11%	24% 26%	24% 13%
how_many	0% 57%	0% 9%	8% 34%	17% 33%	7% 67%	3% 35%	7% 41%
	100% 38%	48% 45%	72% 25%	50% 0%	78% 9%	47% 39%	75% 16%
	13% 0%	18% 0%	21% 9%	0% 33%	16% 16%	17% 8%	21% 12%
six_ormore	13% 38%	27% 9%	16% 29%	17% 50%	20% 40%	22% 14%	31% 21%
	88% 43%	48% 82%	72% 74%	50% 67%	78% 71%	47% 86%	77% 79%
	0% 14%	0% 0%	1% 0%	0% 0%	7% 0%	0% 0%	0% 0%
outofmind_difficulty	14% 29%	0% 18%	3% 22%	17% 17%	2% 20%	6% 8%	7% 15%
	100% 50%	48% 91%	72% 68%	50% 50%	78% 51%	47% 75%	77% 68%
	13% 0%	9% 0%	2% 2%	0% 0%	7% 4%	3% 3%	5% 6%
cant_stop	13% 25%	0% 0%	7% 21%	17% 33%	11% 27%	6% 14%	8% 14%
	100% 50%	48% 82%	72% 62%	50% 33%	78% 44%	47% 64%	76% 62%
	13% 0%	9% 0%	14% 5%	33% 17%	11% 16%	25% 3%	22% 6%
cant_remember	13% 25%	0% 9%	6% 13%	17% 0%	11% 18%	6% 3%	8% 3%
	100% 63%	48% 91%	73% 74%	50% 50%	78% 67%	47% 81%	77% 83%
morning	13% 0%	0% 0%	3% 1%	17% 17%	9% 4%	6% 0%	6% 4%

	old aboriginal male	old non abor. female	old non abor. male	young aboriginal female	young aboriginal male	young non abor. female	young non abor. male
	13% 13%	0% 9%	6% 16%	0% 17%	2% 18%	6% 8%	2% 5%
	100% 38%	48% 100%	73% 72%	50% 50%	78% 60%	47% 83%	77% 78%
	38% 25%	0% 0%	11% 1%	17% 17%	9% 9%	3% 0%	11% 2%
guilt	0% 0%	0% 0%	8% 8%	0% 17%	16% 7%	11% 3%	6% 4%
	100% 50%	48% 73%	72% 76%	50% 50%	78% 53%	47% 83%	77% 60%
injured	38% 13%	18% 9%	21% 3%	33% 17%	18% 29%	14% 3%	22% 17%
	100% 38%	48% 82%	72% 69%	50% 33%	78% 38%	47% 83%	76% 71%
concerned	38% 25%	18% 0%	16% 15%	33% 33%	22% 40%	6% 11%	21% 9%
	100% 25%	48% 0%	72% 17%	50% 17%	78% 27%	49% 32%	77% 21%
in_prison	75% 0%	100% 0%	83% 0%	83% 0%	71% 2%	66% 3%	78% 1%
	50% 50%	17% 100%	35% 79%	33% 75%	34% 50%	22% 59%	40% 66%
	0% 0%	0% 0%	2% 0%	0% 0%	0% 5%	0% 6%	0% 2%
	0% 50%	0% 0%	6% 10%	25% 0%	10% 30%	0% 29%	4% 28%
prison_freq	0%	0%	2%	0%	5%	6%	0%

Table A.3 Drug use

	old aboriginal male	old non abor. female	old Non abor. male	young aboriginal female	young aboriginal male	young non abor. female	young non abor. male
Respondents	***8***	***23***	***138***	***12***	***58***	***77***	***134***
p_cannabis	63% 60% 40%	22% 0% 100%	20% 39% 54%	67% 0% 88%	50% 52% 41%	62% 31% 65%	69% 49% 49%
p_heroin	25% 0% 100%	17% 0% 100%	14% 21% 68%	58% 14% 71%	36% 43% 43%	40% 45% 48%	57% 34% 66%
p_morphine	25% 0% 100%	17% 0% 100%	12% 6% 82%	50% 0% 83%	28% 6% 75%	35% 26% 67%	47% 11% 87%
p_amphetamines	25% 0% 100%	17% 0% 100%	14% 25% 65%	50% 0% 83%	29% 29% 53%	31% 25% 67%	47% 17% 83%
p_cocaine	25% 0% 100%	17% 0% 100%	12% 6% 82%	50% 0% 83%	28% 0% 81%	29% 0% 91%	44% 5% 93%
p_ecstasy	25% 0% 100%	17% 0% 100%	12% 6% 82%	50% 0% 83%	28% 6% 75%	30% 9% 83%	44% 5% 93%
p_crack	25% 0% 100%	17% 0% 100%	13% 6% 83%	50% 0% 83%	28% 0% 81%	29% 0% 86%	44% 0% 98%
p_ice	25% 0% 100%	17% 0% 100%	13% 6% 83%	50% 0% 83%	28% 0% 81%	30% 4% 83%	44% 2% 97%
p_lsd	25% 0% 100%	17% 0% 100%	13% 6% 83%	50% 0% 83%	28% 13% 69%	29% 5% 82%	44% 2% 97%
p_yourmeth	25% 0% 100%	17% 0% 100%	13% 11% 78%	50% 0% 83%	29% 12% 71%	30% 22% 70%	45% 15% 85%
p_othermeth	25% 0% 100%	17% 0% 100%	12% 0% 88%	58% 14% 71%	28% 6% 75%	31% 17% 75%	46% 8% 90%
p_tranq	25% 0% 100%	22% 20% 80%	14% 16% 74%	50% 0% 83%	33% 32% 53%	35% 44% 48%	49% 23% 74%
p_poppers	25% 0% 100%	17% 0% 100%	12% 0% 88%	50% 0% 83%	28% 6% 75%	29% 0% 91%	44% 0% 98%
p_steroids	25% 0% 100%	17% 0% 100%	12% 0% 88%	50% 0% 83%	28% 0% 81%	29% 0% 91%	44% 2% 97%
p_injection	25% 0%	17% 0%	22% 26%	58% 0%	47% 48%	61% 28%	59% 37%
p_shareneedle	13% 0% 100%	0% 0% 0%	6% 62% 12%	0% 0% 0%	21% 83% 8%	18% 71% 29%	23% 74% 26%
p_sharedrug	13% 0% 100%	0% 0% 0%	6% 62% 25%	0% 0% 0%	21% 50% 50%	18% 57% 43%	23% 65% 35%
p_cleaned	13% 0% 0%	0% 0% 0%	5% 86% 14%	0% 0% 0%	21% 75% 17%	17% 85% 0%	22% 76% 10%

	old aboriginal male	old non abor. female	old Non abor. male	young aboriginal female	young aboriginal male	young non abor. female	young non abor. male
p_whynotother	0% 0% 0%	0% 0% 0%	1% 0% 0%	0% 0% 0%	0% 0% 0%	1% 0% 100%	1% 100% 0%
Program	38% 0%	26% 50%	15% 48%	58% 57%	36% 33%	62% 63%	44% 44%
Current	50% 0%	22% 40%	18% 0%	58% 14%	43% 4%	60% 15%	48% 3%
Shouldbe	13% 0% 100%	4% 100% 0%	11% 0% 100%	25% 33% 67%	22% 8% 85%	44% 6% 94%	28% 8% 92%
sought_help	38% 67%	13% 67%	14% 70%	50% 67%	34% 50%	56% 79%	45% 73%
Before	25% 0% 100%	9% 100% 0%	9% 67% 17%	17% 100% 0%	19% 64% 18%	39% 77% 7%	30% 78% 10%
need_help	38% 33%	13% 33%	14% 25%	67% 50%	36% 38%	57% 36%	40% 33%
unconscious	50% 50%	22% 40%	18% 60%	67% 63%	47% 56%	69% 51%	50% 55%
when_unc	25% 100% 0%	4% 100% 0%	11% 80% 0%	25% 100% 0%	22% 77% 8%	30% 83% 4%	25% 88% 6%
help_unc	0% 0%	0% 0%	3% 50%	0% 0%	3% 0%	5% 75%	3% 25%

Table A.4 – Referral decision scale

	old aboriginal male	Old non abor. Female	old non abor. male	young aboriginal female	young aboriginal male	young non abor. female	young non abor. male
Respondents	8	23	138	12	58	77	134
Watching	88% 29%	83% 11%	99% 17%	100% 42%	95% 18%	95% 16%	99% 33%
Following	88% 29%	83% 11%	99% 17%	100% 25%	95% 15%	95% 15%	99% 36%
Poisoned	88% 29%	83% 0%	99% 9%	100% 25%	95% 13%	95% 11%	98% 19%
thought_control	88% 14%	83% 11%	99% 7%	100% 17%	95% 11%	95% 12%	98% 11%
Read_mind	88% 14%	83% 0%	99% 10%	100% 17%	95% 15%	95% 14%	98% 16%
Racing	88% 57%	83% 5%	98% 20%	100% 8%	95% 25%	95% 25%	99% 38%
Special	88% 14%	83% 5%	98% 4%	100% 8%	95% 9%	94% 8%	99% 17%
no_sleep	88% 29%	83% 11%	98% 15%	100% 17%	95% 16%	95% 15%	99% 29%
Active	88% 29%	83% 11%	98% 22%	100% 25%	95% 16%	94% 19%	99% 38%
More_interested	75% 50%	83% 0%	96% 21%	100% 25%	95% 22%	94% 13%	98% 39%
in_hospital	88% 29%	83% 5%	98% 21%	100% 8%	95% 13%	95% 22%	99% 18%
lost_appetite	100% 50%	87% 40%	98% 37%	100% 67%	95% 40%	95% 77%	99% 50%
Slow_down	100% 13%	83% 21%	98% 26%	100% 33%	95% 22%	96% 38%	99% 36%
less_interested	100% 38%	87% 30%	96% 35%	100% 67%	95% 29%	94% 64%	98% 45%
useless	100% 63%	87% 30%	98% 44%	100% 67%	95% 36%	96% 69%	98% 49%
manic_depressive	63% 20%	61% 7%	67% 25%	83% 10%	50% 17%	77% 24%	69% 17%

All questions in this portion of the survey have three nonzero responses. The only exception is the "lose_weight" question which elicits whether or not the respondent is purposely trying to lose weight by eating less ("yes" or "no"). For each question the initial percentage is the nonzero response percentage and the next two percentages indicate percentages in category 1 and 2, respectively. The actual meaning of these category varies according to the question.

Table A.5 – Beck's depression scale

	old aboriginal male			old non abor. female			Old non abor. Male			young aboriginal female			Young aboriginal Male			young non abor. female			young non abor. male		
respondents	8			23			138			12			58			77			134		
Sad	63%	60%	40%	26%	83%	17%	36%	82%	12%	83%	60%	30%	29%	88%	12%	60%	85%	9%	38%	86%	8%
discouraged	38%	67%	33%	17%	100%	0%	22%	68%	16%	25%	67%	33%	24%	71%	14%	31%	71%	17%	28%	81%	11%
Failure	25%	100%	0%	17%	75%	25%	35%	58%	29%	42%	60%	20%	31%	61%	33%	53%	68%	27%	37%	60%	36%
satisfaction	75%	67%	17%	30%	100%	0%	40%	75%	11%	58%	71%	29%	34%	80%	20%	55%	79%	10%	37%	80%	14%
Guilty	38%	33%	0%	26%	83%	17%	37%	69%	8%	50%	67%	33%	36%	71%	24%	60%	59%	20%	35%	77%	15%
Punished	88%	0%	14%	52%	0%	8%	68%	15%	9%	67%	0%	37%	55%	16%	16%	68%	13%	6%	66%	19%	18%
disappointed	50%	75%	25%	43%	100%	0%	54%	81%	12%	67%	88%	12%	52%	73%	13%	77%	78%	14%	57%	86%	12%
Worse	38%	100%	0%	22%	60%	40%	41%	75%	16%	17%	50%	50%	29%	29%	35%	44%	62%	24%	38%	57%	33%
Suicidal	25%	100%	0%	0%	0%	0%	12%	71%	18%	25%	33%	33%	14%	87%	12%	19%	67%	7%	19%	84%	8%
Crying	38%	67%	33%	22%	100%	0%	24%	58%	6%	67%	50%	25%	28%	44%	6%	39%	60%	13%	30%	40%	5%
Irritated	50%	50%	50%	22%	100%	0%	33%	61%	13%	75%	100%	0%	40%	65%	4%	53%	80%	12%	43%	67%	9%
lost_interest	38%	67%	33%	26%	100%	0%	30%	64%	24%	50%	67%	33%	26%	60%	33%	45%	71%	23%	40%	56%	35%
Decisions	25%	100%	0%	17%	75%	25%	17%	43%	39%	25%	67%	33%	22%	46%	38%	17%	46%	38%	25%	65%	32%
look_worse	0%	0%	0%	52%	83%	8%	22%	84%	13%	42%	60%	0%	12%	86%	0%	55%	79%	14%	19%	76%	0%
Work	63%	40%	0%	35%	63%	38%	33%	60%	29%	25%	67%	33%	19%	64%	36%	29%	77%	23%	25%	74%	24%
Sleep	88%	57%	29%	61%	71%	14%	45%	63%	23%	92%	64%	9%	45%	50%	31%	74%	75%	12%	50%	64%	10%
Tired	63%	60%	40%	74%	88%	12%	43%	83%	12%	92%	91%	0%	38%	91%	0%	62%	81%	13%	37%	88%	8%
Appetite	38%	67%	33%	22%	80%	20%	25%	77%	20%	42%	60%	20%	26%	47%	47%	23%	61%	39%	27%	69%	22%
Weight	38%	0%	67%	17%	25%	50%	27%	41%	19%	17%	50%	0%	29%	35%	18%	26%	60%	15%	28%	35%	30%
lose_weight	88%	0%		87%	35%		91%	38%		100%	25%		86%	12%		94%	44%		92%	24%	
health_worries	75%	33%	50%	39%	44%	44%	33%	80%	16%	42%	60%	40%	22%	85%	15%	38%	79%	17%	28%	89%	11%
sex_interest	0%	0%	0%	13%	0%	0%	20%	56%	15%	25%	67%	33%	10%	50%	17%	27%	33%	38%	17%	57%	17%

Sun protection

Prisoners were asked a series of questions about protecting their skin from the sun. The questions listed in table 3.18 had three possible responses; 'most of the time', 'sometimes' and 'never'. Only the percentage responses to 'most of the time' and 'sometimes' are listed in the table. The percentage response of 'never' is not explicitly stated in this table, however, it can be calculated by subtraction. The first three questions relate to the use of the hat in the sun, whether less clothing is worn so as to get the sun, sunglass use, and the use of sun-block. Response rates have not been included in table 3.18 as they were uniformly high to all questions in this section of the report.

Table A.6 – Sun smart behaviour

	Old aboriginal male	old non abor. female	old Non abor. male	Young Aboriginal Female	young aboriginal male	young non abor. female	young non abor. male
Respondents	***7***	***24***	***137***	***12***	***56***	***79***	***133***
Wear a hat	14% 14%	35% 4%	48% 9%	25% 8%	33% 11%	8% 13%	36% 14%
Less clothing	14% 57%	9% 4%	13% 15%	33% 17%	20% 18%	23% 28%	28% 29%
Sunglasses	43% 29%	65% 17%	46% 13%	50% 25%	38% 11%	44% 22%	52% 16%
Sun block	0% 0%	59% 18%	21% 13%	8% 33%	2% 13%	26% 19%	8% 21%

The pertinent issue with sun protection appears to be the percentage of respondents who indicated 'never' with the respect to each of the sun protection activities.

There does not appear to be any pattern to segment differentials insofar as sun protection measures are concerned.

Sun block access is reported by about 78% of the prisoner population. Young aboriginal males reported less access. Many prisoners raised the issue of having to buy sun block. This appears to be a facility specific issue as some prisoners reported that the free availability of sun block varied across facilities.

Table.A.7 - General health

	old aboriginal male	old non abor. female	old non abor. male	young aboriginal female	young aboriginal male	young non abor. female	young non abor. male
respondents	8	23	138	12	58	77	134
well	88% 0%	87% 5%	99% 7%	92% 0%	93% 22%	94% 7%	99% 21%

	old aboriginal male	old non abor. female	old non abor. male	young aboriginal female	young aboriginal male	young non abor. female	young non abor. male
	14% 43%	55% 30%	74% 16%	55% 45%	67% 11%	58% 31%	62% 14%
tonic	88% 14% 14% 43%	87% 20% 45% 25%	97% 43% 32% 20%	83% 10% 30% 40%	95% 51% 27% 18%	92% 30% 27% 39%	99% 47% 27% 20%
run_down	88% 0% 29% 57%	87% 30% 45% 15%	99% 48% 23% 26%	92% 9% 27% 55%	95% 67% 15% 16%	95% 33% 25% 36%	99% 41% 33% 22%
Ill	88% 43% 0% 29%	87% 45% 20% 25%	99% 65% 21% 11%	92% 73% 0% 18%	93% 83% 7% 9%	95% 67% 12% 16%	99% 70% 19% 10%
head_pains	88% 43% 14% 29%	87% 55% 20% 20%	99% 67% 17% 14%	92% 27% 27% 45%	95% 71% 15% 15%	95% 44% 18% 32%	97% 65% 20% 13%
head_pressure	88% 29% 14% 43%	87% 75% 5% 10%	99% 77% 15% 7%	92% 55% 18% 27%	95% 82% 5% 11%	95% 59% 14% 22%	98% 69% 13% 15%
hot_spells	88% 71% 14% 14%	87% 55% 10% 25%	99% 80% 12% 8%	92% 45% 0% 45%	95% 85% 7% 7%	95% 68% 7% 19%	98% 73% 15% 9%
lost_sleep	88% 14% 29% 29%	87% 40% 25% 25%	99% 59% 20% 16%	92% 9% 0% 64%	95% 51% 18% 20%	94% 25% 15% 47%	99% 42% 20% 27%
int_sleep	88% 29% 14% 29%	87% 40% 20% 25%	99% 51% 20% 22%	92% 18% 9% 55%	95% 47% 20% 20%	95% 19% 21% 47%	99% 36% 28% 24%
strained	88% 43% 14% 14%	87% 20% 55% 15%	99% 56% 21% 17%	92% 18% 9% 64%	93% 52% 20% 24%	95% 40% 27% 26%	99% 52% 24% 17%
edgy	88% 43% 0% 29%	87% 55% 25% 20%	99% 64% 23% 11%	92% 27% 9% 45%	95% 62% 25% 7%	95% 47% 22% 26%	99% 48% 30% 19%
panicky	88% 71% 14% 14%	87% 75% 10% 15%	99% 76% 9% 11%	92% 18% 36% 45%	95% 75% 9% 13%	92% 68% 15% 14%	99% 67% 17% 11%
On_top	88% 57% 0% 29%	87% 55% 35% 10%	99% 65% 20% 12%	92% 36% 0% 55%	95% 58% 27% 11%	95% 41% 25% 32%	99% 61% 25% 11%
nervous	88% 43% 29% 14%	87% 55% 30% 5%	99% 64% 17% 16%	92% 9% 18% 64%	95% 62% 22% 13%	94% 44% 18% 35%	99% 50% 27% 19%
occupied	88% 29% 43% 14%	87% 20% 75% 5%	99% 15% 74% 8%	92% 9% 73% 18%	95% 18% 67% 11%	95% 12% 77% 10%	99% 25% 62% 10%
longer	88% 0% 43% 57%	83% 5% 79% 16%	99% 3% 77% 18%	92% 9% 45% 36%	95% 9% 78% 11%	95% 1% 58% 41%	99% 5% 80% 12%
doing_well	88% 0% 100% 0%	83% 0% 95% 0%	99% 4% 88% 7%	92% 0% 82% 9%	95% 15% 78% 7%	94% 6% 81% 10%	99% 11% 80% 6%
satisfied	88% 0% 100% 0%	83% 0% 89% 11%	99% 7% 86% 5%	92% 9% 73% 9%	95% 16% 75% 9%	94% 7% 78% 13%	99% 11% 77% 10%
useful	88% 0% 57% 29%	83% 5% 95% 0%	99% 10% 73% 15%	92% 0% 73% 18%	95% 13% 73% 13%	92% 4% 83% 13%	98% 11% 74% 13%
decisions	88% 0% 71% 29%	83% 5% 84% 11%	99% 7% 85% 8%	92% 9% 82% 9%	95% 11% 85% 4%	95% 10% 78% 10%	98% 11% 82% 6%

	old aboriginal male	old non abor. female	old non abor. male	young aboriginal female	young aboriginal male	young non abor. female	young non abor. male
enjoy	88% 0% 71% 14%	87% 0% 90% 5%	99% 1% 77% 17%	92% 0% 82% 9%	95% 11% 73% 15%	95% 5% 73% 19%	99% 9% 69% 19%
worthless	88% 57% 0% 29%	83% 89% 5% 5%	99% 77% 16% 5%	92% 64% 0% 27%	95% 76% 16% 7%	95% 63% 22% 15%	99% 67% 20% 11%
hopeless	88% 71% 14% 14%	83% 89% 5% 0%	99% 82% 11% 7%	92% 73% 0% 9%	95% 80% 15% 5%	94% 71% 19% 10%	98% 76% 14% 8%
not_worth	88% 86% 0% 14%	83% 84% 16% 0%	99% 85% 10% 4%	92% 82% 0% 18%	95% 85% 11% 4%	95% 82% 15% 3%	98% 83% 11% 5%
suicide	88% 57% 0% 29%	83% 100% 0% 0%	99% 88% 3% 6%	92% 82% 0% 0%	95% 78% 9% 11%	95% 82% 8% 8%	98% 82% 6% 9%
bad_nerves	88% 71% 14% 0%	87% 70% 25% 5%	99% 72% 15% 10%	92% 36% 27% 36%	95% 75% 9% 15%	95% 55% 18% 26%	99% 75% 14% 6%
death_wishes	75% 67% 17% 17%	83% 95% 5% 0%	99% 89% 2% 5%	92% 82% 0% 0%	95% 78% 15% 5%	94% 83% 11% 6%	99% 80% 10% 8%
suicidal_thoughts	88% 57% 0% 29%	83% 95% 0% 5%	99% 82% 7% 6%	92% 82% 0% 0%	95% 76% 7% 13%	94% 88% 6% 6%	99% 80% 8% 7%
healthy	88% 0% 0% 43% 14%	87% 15% 20% 25% 30%	99% 10% 29% 29% 24%	100% 0% 8% 33% 33%	97% 21% 41% 23% 7%	96% 12% 15% 36% 31%	99% 20% 30% 26% 17%
counselling	88% 86%	87% 30%	99% 50%	100% 67%	95% 36%	96% 73%	99% 48%

Table A.8 – Medications

	old aboriginal male	old non abor. female	old non abor. male	Young Aboriginal Female	young aboriginal male	young non abor. female	young non abor. male
respondents	7	24	137	12	56	79	133
t_allergy	43% 0%	58% 14%	64% 3%	25% 0%	43% 0%	68% 9%	71% 6%
p_allergy	43% 0%	50% 17%	46% 5%	17% 0%	30% 0%	41% 9%	53% 6%
t_skin	43% 0%	63% 33%	61% 17%	25% 0%	43% 13%	67% 25%	68% 15%
p_skin	43% 0%	54% 31%	47% 22%	17% 0%	32% 6%	48% 26%	50% 18%
t_lax	43% 0%	67% 13%	61% 2%	25% 0%	43% 4%	65% 10%	69% 4%
p_lax	43% 0%	50% 8%	44% 2%	17% 0%	30% 0%	39% 16%	48% 3%
t_stomach	43% 100%	71% 29%	63% 13%	25% 0%	43% 4%	63% 4%	71% 7%
p_stomach	43% 67%	58% 36%	47% 16%	17% 0%	32% 6%	37% 7%	49% 8%
t_blood	57% 25%	67% 19%	66% 18%	25% 0%	43% 0%	65% 4%	68% 0%
p_blood	57% 25%	54% 15%	50% 24%	17% 0%	30% 0%	39% 6%	45% 0%
t_heart	57% 25%	67% 6%	65% 13%	25% 0%	43% 0%	61% 0%	68% 2%
p_heart	57% 25%	50% 8%	48% 18%	17% 0%	30% 0%	37% 0%	45% 3%
t_antig	43% 0%	63% 0%	63% 8%	25% 0%	43% 0%	61% 0%	68% 1%
p_anticoag	43% 0%	46% 0%	45% 11%	17% 0%	30% 0%	37% 0%	45% 0%
t_anticoag	43% 0%	63% 0%	61% 4%	25% 0%	43% 0%	61% 0%	68% 0%
p_agina	43% 0%	46% 0%	44% 5%	17% 0%	30% 0%	37% 0%	45% 0%
t_asthma	43% 33%	63% 33%	61% 13%	33% 50%	43% 4%	63% 22%	70% 13%
p_asthma	43% 33%	54% 23%	45% 18%	25% 33%	30% 6%	44% 26%	48% 19%
t_insulin	43% 33%	63% 0%	62% 5%	25% 0%	45% 4%	61% 0%	68% 0%
p_insulin	43% 33%	46% 0%	45% 6%	17% 0%	32% 6%	37% 0%	45% 0%
t_diabetes	43% 0%	63% 13%	61% 10%	25% 0%	43% 0%	61% 0%	68% 0%
p_diabetes	43% 0%	50% 17%	44% 13%	17% 0%	30% 0%	37% 0%	45% 0%
t_antibiotics	43% 33%	67% 6%	62% 11%	25% 0%	43% 4%	62% 20%	71% 11%
p_antibiotics	43% 33%	50% 0%	46% 13%	17% 0%	30% 6%	43% 24%	48% 16%
t_vitamins	43% 0%	71% 41%	61% 11%	33% 25%	43% 8%	66% 31%	68% 10%
p_vitamins	43% 0%	58% 36%	44% 7%	25% 33%	30% 0%	48% 32%	47% 6%
t_antiep	57% 50%	67% 6%	63% 7%	33% 25%	46% 12%	63% 6%	68% 9%
p_antiep	57% 50%	50% 8%	45% 10%	25% 33%	34% 16%	39% 10%	50% 12%
t_meth	43% 0%	71% 18%	61% 4%	33% 25%	43% 8%	66% 19%	68% 7%
p_meth	43% 0%	54% 23%	44% 5%	25% 33%	34% 11%	44% 29%	47% 10%
t_cough	43% 33%	67% 6%	61% 5%	25% 0%	43% 4%	61% 6%	68% 8%
p_cough	43% 33%	54% 0%	43% 5%	17% 0%	30% 0%	38% 7%	47% 5%
t_pain	43% 100%	71% 53%	65% 28%	42% 60%	45% 24%	67% 32%	72% 20%
p_pain	43% 100%	67% 38%	53% 36%	33% 50%	36% 25%	49% 33%	53% 26%
t_headache	43% 100%	67% 69%	61% 23%	33% 75%	45% 12%	67% 26%	71% 26%

	old aboriginal male	old non abor. female	old non abor. male	Young Aboriginal Female	young aboriginal male	young non abor. female	young non abor. male
p_headache	43% 100%	58% 64%	48% 18%	25% 67%	34% 11%	47% 27%	54% 21%
t_sleep	43% 0%	67% 13%	61% 14%	25% 33%	46% 23%	62% 8%	70% 20%
p_sleep	43% 0%	50% 8%	48% 20%	17% 50%	38% 29%	41% 9%	53% 24%
t_tranq	43% 67%	42% 0%	42% 9%	0% 0%	30% 24%	41% 22%	56% 16%
p_tranq	43% 67%	25% 0%	28% 13%	0% 0%	20% 36%	19% 33%	41% 19%
t_tranq1	14% 0%	4% 0%	7% 50%	0% 0%	7% 75%	10% 38%	14% 44%
p_tranq1	14% 0%	4% 0%	7% 56%	0% 0%	7% 75%	6% 60%	14% 33%
t_tranq2	14% 0%	4% 0%	4% 20%	0% 0%	4% 50%	10% 38%	11% 29%
p_tranq2	14% 0%	4% 0%	4% 20%	0% 0%	4% 50%	6% 60%	11% 21%
t_psych	43% 33%	29% 43%	41% 30%	8% 100%	23% 46%	34% 52%	51% 26%
p_psych	43% 33%	21% 60%	28% 45%	8% 0%	18% 60%	23% 72%	40% 34%
t_psych1	43% 33%	13% 100%	13% 72%	8% 100%	18% 80%	28% 82%	20% 58%
p_psych1	43% 33%	17% 100%	13% 67%	8% 100%	18% 80%	24% 95%	19% 60%
t_psych2	29% 0%	8% 50%	6% 38%	0% 0%	7% 50%	13% 60%	11% 21%
p_psych2	29% 0%	8% 50%	6% 38%	0% 0%	7% 50%	9% 86%	11% 21%

Deloitte Consulting

Appendices – Mental Health Results

APPENDIX– REFERRAL DECISION SCALE RESULTS

Please note – the sample sizes for the individual items vary, but only minimally. The sample ranges are as follows:

Male Aboriginals: 62-63; Male non-Aboriginals: 264-268; Female Aboriginals: 12-12; Female non-Aboriginals: 91-94

	Males		Females	
Item	Aboriginal	Non-Aborig.	Aboriginal	Non-Aboriginal
Schizophrenia				
Feels watched	12 (19.4%)	67 (25.0%)	5 (41.7%)	14 (15.2%)
Feels followed	10 (16.1%)	71 (26.5%)	3 (25.0%)	13 (14.1%)
Feels poisoned	9 (14.5%)	37 (13.9%)	3 (25.0%)	8 (8.7%)
Thought insertion	7 (11.3%)	24 (9.0%)	2 (16.7%)	11 (12.0%)
Others know thoughts	9 (14.5%)	34 (12.7%)	2 (16.7%)	10 (10.9%)
Manic-Depressive				
Thoughts race	18 (29.0%)	77 (28.8%)	1 (8.3%)	19 (20.7)
Grandiosity	6 (9.7%)	29 (10.9%)	1 (8.3%)	7 (7.7%)
Reduced Sleep	11 (17.7%)	58 (21.7%)	2 (16.7%)	13 (14.1%)
Hyperactive/sexual	19 (30.6%)	104 (39.0%)	3 (25.0%)	18 (19.8%)
Previous inpatient	11 (17.5%)	54 (20.2%)	1 (8.3%)	18 (19.6%)
Major Depression				
Appetite disturbance	26 (41.3%)	116 (43.4%)	8 (66.7%)	64 (68.8%)
Activity disturbance	13 (20.6%)	83 (31.1%)	4 (33.3%)	32 (34.4%)
Sex disturbance	19 (30.2%)	106 (40.2%)	8 (66.7%)	52 (56.5%)
Guilt	25 (39.7%)	123 (46.2%)	8 (66.7%)	57 (60.6%)
Previous inpatient	11 (17.5%)	54 (20.2%)	1 (8.3%)	18 (19.6%)

APPENDIX: BECK DEPRESSION INVENTORY ITEMS

The BDI features 21 items, each of which are scored on a scale of 0-3. The percentages in this appendix refer to the percentage of non-zero responses for each item (i.e., those that were coded as 1, 2, or 3).

	Males		Females	
BDI Items	Aboriginal (n = 66)	Non-Aborig. (n = 272)	Aboriginal (n = 13)	Non-Aboriginal (n = 100)
Feel sad	22 (33.3%)	101 (37.1%)	10 (76.9%)	52 (52.0%)
Feel discouraged	17 (25.8%)	68 (25.0%)	3 (23.1%)	28 (28.0%)
Feel a failure	20 (30.3%)	98 (36.0%)	5 (38.5%)	45 (45.0%)
No real satisfaction	26 (39.4%)	104 (38.2%)	7 (53.8%)	49 (49.0%)
Guilty	24 (36.4%)	98 (36.0%)	6 (46.2%)	52 (52.0%)
Feel being punished	39 (59.1%)	182 (66.9%)	8 (61.5%)	64 (64.0%)
Disappointed in self	34 (51.5%)	151 (55.5%)	8 (61.5%)	69 (69.0%)
Blame self for faults	20 (30.3%)	107 (39.3%)	2 (15.4%)	39 (39.0%)
Thoughts of killing self	10 (15.2%)	42 (15.4%)	3 (23.1%)	15 (15.0%)
Crying	19 (28.8%)	73 (26.8%)	8 (61.5%)	35 (35.0%)
Getting irritated	27 (40.9%)	103 (37.9%)	9 (69.2%)	46 (46.0%)
Lost interest in others	18 (27.3%)	96 (35.3%)	6 (46.2%)	41 (41.0%)
Decision making difficulty	15 (22.7%)	57 (21.0%)	3 (23.1%)	17 (17.0%)
Feeling unattractive/ugly	7 (10.6%)	56 (20.6%)	5 (38.5%)	54 (54.0%)
Extra effort needed	16 (24.2%)	79 (29.0%)	3 (23.1%)	30 (30.0%)
Sleeping difficulties	33 (50.0%)	129 (47.4%)	11 (84.6%)	71 (71.0%)
Tired more easily	27 (40.9%)	109 (40.1%)	11 (84.6%)	65 (65.0%)
Appetite worse	18 (27.3%)	71 (26.1%)	5 (38.5%)	23 (23.0%)
Lost weight	20 (30.3%)	74 (27.2%)	2 (15.4%)	24 (24.0%)
Worry of physical problems	19 (28.8%)	82 (30.1%)	5 (38.5%)	38 (38.0%)
Less interested in sex	6 (9.1%)	50 (18.4%)	3 (23.1%)	24 (24.0%)

APPENDIX: GENERAL HEALTH QUESTIONNAIRE RESULTS

Please note – the sample sizes for the individual items vary, but only minimally. The sample ranges are as follows: Male Aboriginals: 61-62; Male non-Aboriginals: 266-269; Female Aboriginals: 10-11; Female non-Aboriginals: 90-93

The four responses on each item of the GHQ are scored 0/0/1/1. This table represents the percentage coded as 1 for each item. The items are broken up into the four subscales, however these subscales have not been utilised further in this study.

	Males		Females	
Item	Aboriginal	Non-Aborig.	Aboriginal	Non-Aboriginal
Somatic				
In good health	12 (19.7%)	49 (18.2%)	5 (45.5%)	33 (35.9%)
Need a tonic	17 (27.4%)	67 (25.2%)	6 (60.0%)	38 (41.8%)
Run Down	15 (24.2%)	74 (27.5%)	7 (63.6%)	36 (38.7%)
Felt ill	9 (14.8%)	32 (11.9%)	3 (27.3%)	22 (23.7%)
Head pains	11 (17.7%)	41 (15.4%)	5 (45.5%)	33 (35.5%)
Tightness in head	11 (17.7%)	34 (12.7%)	3 (27.3%)	24 (25.8%)
Hot-cold spells	5 (8.1%)	27 (10.1%)	6 (54.5%)	25 (26.9%)
Anxiety-insomnia				
Lost sleep over worry	21 (33.9%)	79 (29.4%)	10 (90.9%)	50 (54.3%)
Difficult staying asleep	22 (35.5%)	88 (32.7%)	8 (72.7%)	52 (55.9%)
Under strain	18 (29.5%)	62 (23.0%)	8 (72.7%)	29 (31.2%)
Edgy & bad tempered	11 (17.7%)	49 (18.2%)	7 (63.6%)	27 (29.0%)
Scared & panicky	10 (16.1%)	42 (15.6%)	5 (45.5%)	15 (16.5%)
Things on top of you	11 (17.7%)	39 (14.5%)	7 (63.6%)	27 (29.0%)
Nervous & strung up	11 (17.7%)	57 (21.2%)	8 (72.7%)	30 (32.6%)
Social dysfunction				
Busy & occupied	10 (16.1%)	32 (11.9%)	2 (18.2%)	9 (9.7%)
Taking longer over things	11 (17.7%)	48 (17.8%)	5 (45.5%)	33 (35.9%)
Doing things well	4 (6.5%)	22 (8.2%)	2 (18.2%)	11 (12.1%)
Satisfied	5 (8.1%)	25 (9.3%)	2 (18.2%)	13 (14.3%)
Useful	11 (17.7%)	43 (16.1%)	3 (27.3%)	9 (10.0%)
Decision-making	4 (6.5%)	22 (8.2%)	1 (9.1%)	11 (12.0%)
Enjoyment	11 (17.7%)	59 (21.9%)	2 (18.2%)	18 (19.4%)

Item	Males		Females	
	Aboriginal	Non-Aborig.	Aboriginal	Non-Aboriginal
Depression				
Self worthless	7 (11.3%)	27 (10.0%)	4 (36.4%)	12 (13.0%)
Life hopeless	4 (6.5%)	23 (8.6%)	3 (27.3%)	8 (8.8%)
Life not worth living	3 (4.8%)	14 (5.2%)	2 (18.2%)	2 (2.2%)
Do away with self	10 (16.1%)	29 (10.8%)	2 (18.2%)	7 (7.6%)
Nerves too bad	10 (16.1%)	32 (11.9%)	4 (36.4%)	21 (22.6%)
Wishing to be dead	5 (8.2%)	26 (9.7%)	2 (18.2%)	4 (4.4%)
Think take own life	12 (19.4%)	32 (11.9%)	2 (18.2%)	6 (6.6%)

APPENDIX: AUDIT RESULTS

The AUDIT features 10 items, which are scores on scales of 0–4. The figures presented in this table show the percentage of non-zero responses for each item of the instrument.

	Males		Females	
AUDIT Item	Aboriginal (n = 66)	Non-Aborig. (n = 272)	Aboriginal (n = 13)	Non-Aboriginal (n = 100)
How often drink alcohol	54 (81.8%)	200 (73.5%)	7 (53.8%)	44 (44.0%)
How many drinks	45 (68.2%)	165 (60.7%)	7 (53.8%)	36 (36.0%)
How often 6 or more	46 (69.7%)	160 (58.8%)	7 (53.8%)	28 (28.0%)
How often can't stop	26 (39.4%)	65 (23.9%)	4 (30.8%)	10 (10.0%)
*Thoughts of alcohol	17 (25.8%)	48 (17.6%)	3 (23.1%)	7 (7.0%)
Need a morning drink	18 (27.3%)	43 (15.8%)	4 (30.8%)	8 (8.0%)
Guilt or remorse after	23 (34.8%)	51 (18.8%)	4 (30.8%)	6 (6.0%)
Unable to remember	29 (43.9%)	77 (28.3%)	5 (38.5%)	15 (15.0%)
Injured as a result	25 (37.9%)	65 (23.9%)	4 (30.8%)	9 (9.0%)
Others concerned	33 (50.0%)	61 (22.4%)	5 (38.5%)	8 (8.0%)

APPENDIX: SURVEY DRUG USE RESULTS

The sample described in the following table includes all of those who answered YES, NO, or DECLINED to the item "Have you ever taken illegal drugs". The percentages refer to those who answered yes to the items.

	Males		Females	
Questionnaire Items	Aboriginal (n = 64)	Non-Aboriginal (n = 269)	Aboriginal (n = 13)	Non-Aboriginal (n = 91)
Drugs taken in prison				
Cannabis	18 (28.1%)	56 (20.8%)	0	15 (16.5%)
Heroin	9 (14.1%)	30 (11.2%)	1 (7.7%)	14 (15.4%)
Morphine	1 (1.6%)	8 (3.0%)	0	7 (7.7%)
Amphetamines	5 (7.8%)	16 (5.9%)	0	6 (6.6%)
Cocaine	0	4 (1.5%)	0	0
Ecstasy	1 (1.6%)	4 (1.5%)	0	2 (2.2%)
Crack	0	1 (0.4%)	0	0
Ice	0	2 (0.7%)	0	1 (1.1%)
LSD/Acid	2 (3.1%)	2 (0.7%)	0	1 (1.1%)
Methadone (yours)	2 (3.1%)	11 (4.1%)	0	5 (5.5%)
Methadone (others)	1 (1.6%)	5 (1.9%)	1 (7.7%)	4 (4.4%)
Tranquilisers	6 (9.4%)	18 (6.7%)	0	13 (14.3%)
Poppers	1 (1.6%)	0	0	0
Steroids	0	1 (0.4%)	0	0
If unconscious in prison, receive help from health staff	0	3 (1.1%)	0	3 (3.3%)

B Physical Health Questionnaire

Physical health checks

Questions in this part of the survey included blood pressure, height, weight, respiratory tests (Peak flow – ml/sec), glucometer readings. The proportion of nonzero respondents and the mean and standard deviation on each of these measurements in each segment are recorded in Table 3.42.

Table B.9 – Physical health check

	old aboriginal male			old non abor. female			old non abor. male			young aboriginal female			young aboriginal male			young non abor. female			young non abor. male		
respondents	7			24			137			12			56			79			133		
blood1_p1	0.7	128.0	9.3	0.9	119.1	8.5	0.9	123.2	14.1	0.9	110.7	13.6	0.8	116.9	14.6	0.8	110.9	10.4	0.9	117.6	12.2
blood1_p2	0.7	83.0	7.5	0.9	77.5	6.9	0.9	77.2	10.1	0.9	69.1	13.8	0.8	79.8	45.5	0.8	70.8	8.7	0.9	73.9	9.8
blood2_p1	0.0	0.0	0.0	0.2	114.0	4.9	0.1	126.0	12.5	0.3	109.0	19.2	0.0	120.0	0.0	0.1	107.0	10.0	0.3	116.1	13.9
blood2_p2	0.0	0.0	0.0	0.2	82.0	4.0	0.1	82.2	11.0	0.3	68.3	19.3	0.0	78.0	0.0	0.1	69.7	11.1	0.3	77.6	9.6
height	0.7	166.8	8.2	0.6	157.6	22.6	0.9	174.8	6.9	0.8	169.1	5.9	0.8	175.0	7.1	0.8	164.6	7.1	0.9	175.6	18.0
weight	0.9	71.8	12.8	0.9	77.3	16.2	1.0	88.4	59.1	0.8	67.2	9.5	0.9	80.7	11.9	0.8	68.9	13.7	0.9	84.1	19.9
peak_flow	0.9	395.0	69.0	0.9	294.8	96.3	0.9	483.4	131.0	0.8	384.0	72.2	0.9	494.7	130.4	0.7	334.0	85.8	0.9	528.4	130.4
gluco	0.4	1.0	0.0	0.8	1.3	0.7	0.8	1.0	0.0	0.7	1.3	0.7	0.8	1.1	0.3	0.6	1.2	0.6	0.7	1.1	0.3

C Consent Form

Department of Justice

Victorian Prisoner Health Status Study

CONSENT FORM

We would like your help to study the health of Victorian prisoners. We currently know little about the general health needs of the Victorian prisoner population, although your prison health provider has detailed knowledge of individual prisoner's health**. This study is aimed to increase our knowledge of prisoners' health, factors associated with poor health and to provide direction for health service planning.** You will be asked some questions on your physical and mental health. We will also seek your permission to view your prison medical file, to establish your current medical conditions and prescribed medications.

As part of the study, we will need to take a blood samples to test for hepatitis A, B and C, syphilis, Chlamydia, gonorrhoea, cholesterol, blood sugar and herpes (iron and rubella for females only). You will have your pulse, blood pressure measured as well as a vision test. **All the information obtained as part of the study will be kept confidential** (within the limits allowed by law). Results of tests will be made available to you through the prison health provider with your consent.

This is a good opportunity to have a complete health assessment. We believe that the information you receive about your health will be useful to you as an individual, and will also help in improving the general health of prisoners. The health provider in your prison will follow up any illness identified during the health screen if you agree to have this information made available to the prison health provider.

You don't have to take part in the study, if you decide not to take part, this will not affect you in future medical care you may need.

Deloitte Consulting

PARTICIPATION IS VOLUNTARY.

CONSENT FORM (cont.)

The information we collect will be treated in confidence and the results will only be made available to the prison health provider **with your consent** and will not be shown to any one else. If **you agree to take part in the study, please sign below.** If you have any questions you can contact the health staff at the clinic.

I_____ have read the above and discussed the matter with the assessment staff. I understand what the project involves and agree to take part in the study interview and have blood tests and Mantoux test taken as part of the health screening. I understand that the blood samples will be discarded following confirmation of test results.

I_____ have read the above I agree to allow the interviewer to read my prison health file as part of the study.

I_____ have read the above and I agree to have the results of the health screening tests made available to the prison health provider to provide the results of tests to me.

Signature	Date	Signature	Date
of Study Participant		of Nurse	

Deloitte Consulting

D HIV Antibody Test Consent Form

Victorian Prisoner Health Status Study

HIV ANTIBODY TEST CONSENT FORM

As part of the study of the health of prisoners in Victoria, we would like to take a sample of your blood for an HIV test.

This test involves the removal of a small amount of blood from a vein which will then be sent to a Government laboratory for testing.

The HIV Antibody Test is a screening test to detect the presence of antibodies caused by infection with the Human Immuno-Deficiency Virus.

Results of this test will be treated ***confidentially***, and will not be disclosed to anyone without your consent.

If the result proves to be positive, you will receive follow-up post-test counselling and referral for medical assessment.

You don't have to agree to have an HIV test if you don't want to – ***participation is completely voluntary***.

If you do agree to have an HIV test and receive the test result, please sign below:

I_____have read the above and discussed the matter with the nurse. I hereby consent to have the HIV test performed as part of the prisoner health study, and to receive the test result.

_____ _____

Signature of Study Participant **Date**

_____ _____

Signature of Nurse **Date**

Deloitte Consulting

E Nurse Action Sheet

Victorian Prisoner Health Status Study

INTERVIEW NURSE ACTION SHEET

To be completed at the end of each interview for ALL prisoners.

Name: _____

CRN Number: _____

Location: _____

Mark Yes/No

Interview went OK? _____

Interview terminated prematurely because of distress? _____

Prisoner very distressed at the end of the interview? _____

Current suicidal thoughts (if identified during the interview)? _____

Prisoner requested to see psychiatric staff? _____

NOTES: _____

ACTION: **Mark Yes/No**

No action required: _____

Referral to Psychiatric Services: _____

Follow up by Registered nurse requested? _____

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F Clinical Follow Up Action Sheet

Victorian Prisoner Health Status Study

CLINICAL FOLLOW UP – ACTION SHEET

RESULT	**ACTION**
Hepatitis B	
Hepatitis C	
HIV	
Chlamydia	
N. Gonorrhoea	
Syphilis	
Herpes Simplex	
TB	
Cholesterol	
Blood Sugar	
Rubella (Women only)	
Iron Levels (Women only)	
Physical Assessments	
Blood Pressure	
Pulse	
Hearing	
Visual Acuity	
Help to Quit Smoking	
Risk Factors for Skin Cancer	
Dental assessment	

G References

[1] The Women's Health and Well Being Strategy (DHS) study contained the following wording "One of the questions raises concerning the Global Burden of Disease Study was its capacity to measure the real disease burden of diverse population groups." Recognising that the Victorian study could be questioned on the basis of its ability to measure the disease burden of specific groups, the Victorian Government has, and will, continue to endeavour to ensure that health and well being factors specific to women, such as violence against women are considered adequately in future Victorian studies. Interpretation of the data should keep this in mind.

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[24] This is a conservative calculation assuming the "finite population correction factor", random sampling, 95% confidence, applicability of the normal approximation, and a population rate of 50%. Actual margins of error are marginally lower if the population rate differs from 50%.