"All Tokelauans enjoying the highest standards of mental health and well-being that is grounded in the kaiga through equitable access to comprehensive community based, integrated, quality health services and care."

Acknowledgements
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The preparation of this profile would not have been possible without the support of the following staff from WHO:

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(WHO proMIND): Tokelau
Potential partners interested in finding out more about mental health in Tokelau should also contact project partners based in-country (contact details on page 7).

WHO proMIND
Potential partners and donors interested in supporting or funding WHO proMIND projects should contact Dr Michelle Funk (funkm@who.int), Coordinator, MHP, Department of Mental Health and Substance Abuse, WHO, Geneva, Switzerland.

More information about WHO MIND and WHO proMIND projects is available on the website: http://www.who.int/mental_health/policy/en/
The idea to establish the Pacific Islands Mental Health Network (WHO PIMHnet) came about at a meeting of Ministers of Health for the Pacific Island Countries (Samoa, 2005) during which the idea of a Pacific network as a means of overcoming geographical and resource constraints in the field of mental health was discussed.

There was unanimous support among countries of the Pacific Region to establish the network, and with the support of New Zealand’s Ministry of Health, the World Health Organization initiated the process to establish PIMHnet. The network was officially launched during the Pacific Island Meeting of Health Ministers in Vanuatu in 2007.

- PIMHnet currently counts 19 member countries, each with an officially appointed focal point: American Samoa, Australia, Commonwealth of the Northern Mariana Islands, Cook Islands, Federated States of Micronesia, Fiji, Guam, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tokelau, Tonga and Vanuatu.

The key aim of the Pacific Island Mental Health Network is to enable Island countries to work together and draw on their collective experience, knowledge and resources in order to establish mental health systems that can provide effective treatment and care.

In consultation with countries, PIMHnet has identified a number of priority areas of work, including advocacy; human resources and training; mental health policy, planning, legislation and service development; and access to psychotropic drugs; and research and information. Network countries meet on an annual basis to develop workplans outlining major areas for action to address these priorities, to be officially endorsed by their Ministers of Health.

PIMHnet has also been successful in forging strategic partnerships with NGOs and other agencies working in the Pacific Region in order to reduce the existing fragmentation of mental health activities and to build more coordinated and effective strategies to address the treatment gap, to improve mental health care and put an end to stigma, discrimination and human rights violations against people with mental disorders.

PIMHnet is funded by the New Zealand Ministry of Foreign Affairs and Trade through the New Zealand Aid Programme.
THE PROJECT

"All Tokelauans enjoying the highest standards of mental health and well-being that is grounded in the kaiga through equitable access to comprehensive community based, integrated, quality health services and care."
KEY ACHIEVEMENTS FOR MENTAL HEALTH IN TOKELAU

- Membership in the Pacific Islands Mental Health Network (PIMHnet)
- A mental health policy has been drafted and is being refined
- A detailed human resource and training plan has been developed
- Basic psychotropic medications have been included on the Essential Drug List
- One doctor has regularly travelled to PIMHnet training and meetings over the last four years
- During the past six years, basic initial training in mental health has been provided for some of the health staff in the local hospitals through visiting consultants from the Samoan Mental Unit (Dr Ian Parkins and team), and Dr David Chaplow from Ministry of Health New Zealand

NEXT STEPS FOR TOKELAU

- Finalize the mental health policy
- Establish mental health legislation
- Allocate additional funds for the development of mental health services
- Develop human resources for mental health through further health staff training and ongoing professional development
- Initiate community mental health education, including initiatives to reduce substance abuse and suicide
- Ensure the availability of essential psychotropic medications
- Strengthen psychosocial support through advocacy activities and community involvement in mental health care
- Engage visiting psychiatrists from overseas to provide clinical training, support and management especially on alcohol abuse prevention and suicide prevention
OVERVIEW

Tokelau is a small, geographically isolated nation which is largely self-governing but still under the administration of New Zealand. The small population and limited resources constrain the health services delivered in Tokelau to those provided through primary care. Mental health care is provided at the primary care level, mostly for individuals who are in stable treatment. The small numbers of doctors and nurses working in the local hospitals have not had specific mental health training. For more specialized psychiatric care, individuals are sent overseas through a referral system for diagnosis and treatment in Samoa or New Zealand. Alternatively, telehealth psychiatry consultation is also available from New Zealand. The significant financial assistance provided by New Zealand allows the Tokelau government to provide mental health care, including overseas treatment and medications, free of charge to the population. There are limited psychiatric medications available. Most medications are first generation drugs, although second generation medications are being introduced.

Tokelau is a member of the WHO Pacific Islands Mental Health Network (PIMHnet). A mental health policy has been drafted, but it has not been finalized or formally accepted by the government. There is no dedicated mental health funding, although mental health is included in the Tokelau Patient Referral budget, and there is no specific mental health legislation. As part of PIMHnet, a needs analysis and human resources plan have been created. A consultant psychiatrist (Dr David Chaplow) supported by WHO PIMHnet has visited the islands in 2010 to provide basic training to staff in mental health, and there are plans to provide further training of this nature in the near future.
HISTORY AND MILESTONES

1926
Tokelau is transferred from British to New Zealand administration (1).

1976
Formation of the General Fono (parliament).

2003
The Council for the Ongoing Government of Tokelau begins to take full responsibility for managing the national budget (previously managed by New Zealand) (1). The Council reports to the General Fono.

2004
Responsibility for managing the health system is passed from the Department of Health to each atoll's Taupulega (council of elders) (2)

2005
Situational analysis on mental health needs and resources conducted as part of a Pacific-wide review of mental health care by the World Health Organization and University of Auckland (New Zealand) (3).

2007
Representatives from Tokelau attend the inaugural WHO PIMHnet meeting and policy and planning workshop in Apia, Samoa (4).

2008
Representatives from Tokelau attend the second WHO PIMHnet Annual General Meeting in Nadi, Fiji and take part in the workshop on human resources and training plans (5).

2009
Development of a draft mental health policy (6).

2010
Human resource and training plan finalized (7). Dr David Chaplow, a psychiatrist, visits Tokelau, trains staff in mental health, run workshops on alcohol use and suicide (8).

2011
Routine visits to the three hospitals and the communities to manage patients with mental disorders continued.

2012
The Chief Clinical Advisor went for training in the Black Dog Institute in the University of New South Wales, Sydney
Further progress was made on the draft Tokelau Mental Health Policy
Tokelau comes under New Zealand administration

Transfer of management of health services on each atoll passed to their respective Taupulegas

Situational analysis of mental health conducted

Attendance at the first WHO PIMHnet meeting

Attendance at the second WHO PIMHnet meeting

Mental health policy drafted

Consultant psychiatrist visits to train staff in mental health continued

Consultant psychiatrist visits to train staff in mental health

Further progress on the drafting of the Mental health policy

Human resources and training plan finalised

The Chief Clinical Advisor went for training on depression in Australia

1926

2004

2005

2007

2008

2009

2010

2011

2012
OFFICIAL DOCUMENTS

DEVELOPMENT AND POVERTY REDUCTION POLICIES, STRATEGIES AND PROGRAMMES

- Tokelau National Strategic Plan (TNSP) 2010-2015
  http://www.tokelau.org.nz/Strategic+Plan.html
  United Nations Development Programme Samoa Multi-Country Office

HEALTH AND MENTAL HEALTH POLICIES, PLANS AND PROGRAMMES

- Tokelau National Strategic Plan (TNSP) 2010-2015
  http://www.tokelau.org.nz/Strategic+Plan.html
- Strategic Health Plan for Tokelau 2007-2009
  http://www.wpro.who.int/internet/resources.ashx/HSD/docs/Tokelau+HealthPlan07-09.pdf
- Tokelau Health Strategic Plan (THSP; draft) 2009 – 2015
- Reproductive Health Plan 2010 - 2013
- Mental Health Policy (draft), Department of Health Tokelau, 2009

LEGISLATION

- Tokelau Health Rules 2003 http://www.paclii.org/tk/legis/num_act/hr2003118/

SITUATIONAL ANALYSES

- Situational analysis of mental health needs and resources in Pacific Island countries, 2005,
  WHO and Centre for Mental Health Research, Policy & Service Development, University of Auckland
  http://www.who.int/mental_health/policy/pimhnet/Pacific_islands_needs_assessments.pdf
- Situational analysis of human resources (draft), 2011, WHO
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THE CONTEXT
1. COUNTRY DEMOGRAPHIC AND SOCIOECONOMIC PROFILE

GEOGRAPHY AND CLIMATE

Tokelau is a non-self-governing territory of New Zealand in the Pacific Ocean, located approximately halfway between New Zealand and Hawaii. It is made up of three coral atolls, Atafu, Nukunonu and Fakaofo, and has a combined total land area of 12 square kilometres (Figure 1) (1). Atafu is 92 kilometres north of Nukunonu, which is 64 kilometres north of Fakaofo. Each atoll is made up of a number of reef-bound islets that encircle a lagoon (10).

There is a village and administrative centre on each atoll, with one village spread over two islets in Fakaofo. Tokelau is only accessible by boat from Samoa, 483 kilometres and 24-36 hours to the south, and there is no access by air, even in emergencies.

The government owned ship, the MV Tokelau, takes approximately one week to make the fortnightly round trip through the atolls, supplying goods and transporting passengers (1). In emergencies, the MV Tokelau or a Samoan boat can be chartered at some expense (2).

Like other Pacific nations, Tokelau is very vulnerable to natural disasters such as tropical cyclones, storm surges, and droughts (11). The low level and small area of the atolls also leave the whole country threatened by rising sea levels resulting from climate change, and Tokelau is at risk of a similar fate to Tuvalu (12).
DEMOGRAPHICS

As of 2006, the population of Tokelau was 1466 (13). The population is distributed fairly evenly across the atolls, with 36% of people normally residing in Atafu, 33% in Fakaofo, 29% in Nukunonu, and 2% in Samoa. As seen in Figures 2-4, the number of males and females is balanced, and the population is young, with 35% of people being under 15 years of age (figure 2) (13).

Figure 2
Age structure diagram illustrating the 2006 population in Tokelau

Source: reference (13)

Figure 3
Age distribution for the 2006 population of Tokelau

Source: reference (13)
Figure 4
Population breakdown by age group

Source: reference (13)

MIGRATION

Limited economic, healthcare, higher education and employment opportunities lead many residents to travel or emigrate to New Zealand, Samoa and other countries (12). There is a large population of Tokelauans living in New Zealand, estimated at 6819 people in the 2006 census. Of these, 68% were born in New Zealand (14). The population of Tokelau is fluid, with those living in New Zealand sometimes returning to the islands for months, and some families moving to New Zealand for short stays prior to returning. Tokelauans working or studying in Samoa also often return to Tokelau for holidays (2). The strong community focused values of Tokelau results in an attractive community care approach for people with mental illness. Tokelauan residents of New Zealand often send their relatives with mental illness back to Tokelau to be looked after by the community (7).

CULTURE

Tokelauans are predominantly Polynesian, and the main languages spoken are Tokelauan and English, though Samoan is also widely known. Tokelauans have cultural, linguistic and family ties with both Samoa and Tuvalu (1). The two main religions are Congregational Christian and Roman Catholic (13). On Nukunonu, the only religion present is Catholicism and on Atafu, approximately 98% of the population belongs to the Congregational Christian Church. Both Catholicism and Congregational Christian are practiced in Fakaofo.

The sense of community includes family, extended family and villagers in Tokelauan society. Community welfare is considered to be the first priority, with the individual placed second. It is the cultural practice to share food and resources equally amongst all in the community, and there is an obligation to care for all family and community members (11).

GOVERNMENT AND ADMINISTRATION

Tokelau is a Trust Territory of New Zealand, and has been under its administration since 1926. Referendums were held in 2006 and 2007 in an effort to establish autonomy from New Zealand, but both narrowly failed to meet majority vote (12). Residents of Tokelau are citizens of New Zealand and hold New Zealand passports, though the laws of New Zealand only apply to Tokelau when they have been specifically enacted there (7).

The official Head of State is Queen Elizabeth II of New Zealand and Tokelau is assisted by an Administrator based in New Zealand. Since 2004 Tokelau has been largely responsible for its own budget and administration (1). The local governance of Tokelau is decentralized. The villages on each atoll are governed by their own Taupulega (council of elders), which also hold ultimate authority over the national governing bodies (15). The Taupulegas are responsible for the day to day running of the villages and the local public service, including healthcare (2). At the national level, Tokelau is governed by the Council for Ongoing Government of Tokelau, made up of six
members: the three elected Faipule (village leaders) and three Pulenuku (village mayors). The position as Ulu-o-Tokelau (leader) is rotated annually amongst the Faipule (1). Each Faipule has their own ministerial portfolio, with one responsible for finance, transport and public utilities, one responsible for economic development, the environment and education, and the final Faipule responsible for health and support services (15).

There is also a 20 seat national assembly called the General Fono which consists of elected members from each of the three atolls (15). The Council for Ongoing Government and the General Fono are delegated responsibility by the Taupulega for matters of national significance. The Council reports to the General Fono.

Nearly every household has a telephone and radio, with internet access available. Each atoll has a local radio station broadcasting shipping, weather reports and other programs (2).

DEVELOPMENT INDICATORS

Tokelau's annual gross domestic product (GDP) has been US$1000 per capita on average over the last decade. Tokelau receives budget support from New Zealand and has very little revenue, including revenue from remittances sent from relatives overseas. The isolation and extremely limited natural resources in Tokelau restrict opportunities for business and primary production. The soil on Tokelau is of poor quality and consists of sand and coral rubble, so many crops are unable to be grown. Primary production is only sufficient to meet the needs of residents at a subsistence level, and consists principally of tropical fruits and small livestock (1). There is also a large Exclusive Economic Zone, which provides seafood and significant income through the sale of fishing licenses. It has been suggested that there is further potential to develop fisheries as a means of national and household income and development (12). Apart from fisheries, some income is also derived from sale of handicrafts, stamps and coins (1). The registration of internet domain names has also increased GDP in recent years (7). More than 90% of men are employed within their village, while most women are primarily involved with house-keeping (2). The Tokelau National Strategic Plan 2010-2015 has identified key areas for economic development.

Available development indicators tend to be comparable with other countries in the East Asia-Pacific region. The life expectancy at birth of infants is 67.8 for males and 70.4 for females is slightly below the regional average of 72, but mortality rates are better than the wider region. The infant mortality rate is 0 per 1,000 live births (21 for East Asia-Pacific), the under five mortality rate is 0 (compared to 26 per 1,000 live births in the East Asia-Pacific), and there is no maternal mortality (compared to 89 per 100,000 live births for the region) due to early referral for at risk mothers to Samoa (16). School enrolment and literacy rates are fairly high, with free education available from ages 5 to 18 in Tokelau (similar to the New Zealand system), and many Tokelauans travel abroad for further education (2). However, according to a 2007 survey, 26% of the school age population have special needs. Key development indicators are displayed in Table 1.
<table>
<thead>
<tr>
<th>Indicator</th>
<th>Tokelau Male</th>
<th>Tokelau Female</th>
<th>Year of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth (years) (17)</td>
<td>67.8</td>
<td>70.4</td>
<td>2008</td>
</tr>
<tr>
<td>Death rate (crude), per 1,000 population</td>
<td>12.96</td>
<td></td>
<td>2002</td>
</tr>
<tr>
<td>Infant mortality rate per 1,000 live births</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under five mortality rate per 1,000 live births</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal mortality ratio per 100,000 live births (17)</td>
<td>0</td>
<td></td>
<td>2005–2009</td>
</tr>
<tr>
<td>Proportion of births with skilled attendants (17)</td>
<td>100%</td>
<td></td>
<td>2009</td>
</tr>
<tr>
<td>Adult (15+) literacy rate (17)</td>
<td>96%</td>
<td></td>
<td>2009</td>
</tr>
<tr>
<td>Gross primary school enrolment (% of school-age population) (18)</td>
<td>109</td>
<td>96</td>
<td>2004</td>
</tr>
<tr>
<td>Annual GDP per capita in USD</td>
<td>$1,000</td>
<td></td>
<td>2001–2008</td>
</tr>
<tr>
<td>Population with access to improved drinking water (19)</td>
<td>100%</td>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Population with access to improved sanitation facility (19)</td>
<td>100%</td>
<td></td>
<td>2010</td>
</tr>
</tbody>
</table>
2. CONTEXTUAL FACTORS INFLUENCING MENTAL HEALTH NEEDS AND SERVICES

SUICIDE

From 2008 to 2011, there was one completed suicide and two attempts, both of whom were assessed and referred to Samoa for psychiatric intervention. The reasons for the attempted suicides were marriage breakup and depression. For attempted suicides, the community rallies around and puts in a 'watch' mechanism until help can be organized either through distance consultation or transfer to Apia.

SUBSTANCE ABUSE

Rates of alcohol use are high, with 97% of males and 90% of females consuming alcohol, and 37.5% of males and 20% of females binge drinking in the past week (5 or more drinks on one day for males or 4 or more drinks a day for females). Data from the three Taupulega Offices and the Law Commissioner's records indicate that most of the crimes committed in Tokelau are alcohol related. There is no established tobacco or alcohol legislation or substance abuse policy in Tokelau and the village rules that exist are poorly enforced. However, the Taupulegas are currently implementing measures to reduce the importation of alcohol and tobacco to the villages of Tokelau.

Kava, a traditional Pacific Islands drink with sedative and anaesthetic properties, is becoming more widely used, with about 30% of males consuming it. Other substances such as cannabis, amphetamines, inhalants and injectable drugs are almost unavailable in Tokelau. Drugs have been imported from Samoa to Tokelau, but measures are being implemented to ensure efficient border control from Samoa and in Tokelau. Petrol sniffing has become a problem for some youth, but now that the Taupulega of the atoll concerned is aware of the issue, the youth are being counselled by one of the leaders.

NONCOMMUNICABLE DISEASES

The results of the 2005 Tokelau non-communicable disease STEPS survey indicate a very high rate of non-communicable disease and risk factors in the community. Of the adult population, 86% were overweight or obese, with 63% being classed as obese, 36% of people had high cholesterol, and 34% had diabetes (table 2). In addition, 59% of people smoked cigarettes daily.

A Whole of Population Screening program was carried out in mid 2010. Medical staff from New Zealand and Samoa travelled to Tokelau. The findings were that 74% of the adult population over the age of 16 years and 33% of children from 0-15 years were obese (all children were rated according to 95th percentile for their age group). Table 2 demonstrates some of the results from the program.
Changing dietary patterns are contributing to this increase in the prevalence of non-communicable disease. The traditional diet in Tokelau consisted chiefly of coconut and fish, with a high saturated fat content but low sucrose and cholesterol intake. Historically, vascular disease was uncommon and the saturated fat did not appear to have a harmful effect on health. However, Tokelauans are increasingly relying on imported and processed foods such as frozen or canned meats, fruits and vegetables, and biscuits and sweets.

Additionally, deep-frying is becoming a more popular method of food preparation. The STEPS survey found that 92% of the population consumed less than five combined servings of fruit and vegetables per day (2).

Each atoll experiences different health issues. On Fakaofo, chronic diseases are a major issue, on Atafu hyperthyroid hot spots, chordoma and breast cancer are the main problems, and on Nukunonu, mental health and alcohol use are of most concern.

**HEALTH SYSTEM**

There are no trained specialist mental health staff in Tokelau and mental health is not included in the regular training of Tokelau's physicians and other health workers. The geographical isolation and small number of health staff make it difficult for health workers to take time off to receive further training or ongoing professional development (7). The health system is not equipped to deal with severe mental illness and individuals with more complex needs are required to access psychiatric treatment overseas (2). There is also a limited list of available medicines. Individuals repatriated from overseas who are taking newer psychiatric medications may be required to temporarily switch treatment if their supply is exhausted without advance warning, as these medicines have to be procured from Samoa or New Zealand(8).

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**Table 2**

**Percentage of screened population affected**

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Percentage (%) of screened population affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Renal disease</td>
<td>3.1</td>
</tr>
<tr>
<td>Hypertension</td>
<td>17</td>
</tr>
<tr>
<td>Ophthalmology - pterygium</td>
<td>12.2</td>
</tr>
<tr>
<td>Type II diabetes</td>
<td>15</td>
</tr>
<tr>
<td>Type II diabetes, now on insulin</td>
<td>3.7</td>
</tr>
<tr>
<td>Obese Children (classified according to 95th percentile for age group: 0-15 yrs; n=390)</td>
<td>32.5</td>
</tr>
</tbody>
</table>
MENTAL HEALTH PROBLEMS AND TREATMENT IN TOKELAU
3. BURDEN OF DISEASE AND TREATMENT GAP

PREVALENCE AND BURDEN OF DISEASE IN COUNTRY

No data is available on the overall prevalence of mental illness in the Tokelauan community (20). Given the small population, limited resources, and fluid nature of the population, with many young people living in New Zealand, it is difficult to estimate an accurate prevalence of mental disorders in the community. Based on the World Mental Health Survey, it can be estimated that 13% of a country’s adult population will experience a mental illness in a 12 month period (3% experiencing a serious mental illness and 10% a mild to moderate form of mental illness) (21). Tokelau’s adult population (aged over 15 years) was 952 people at the last census. It would be expected that approximately 3% of the adult population, or 29 people, would have experienced a severe mental illness, and 10%, or a further 95 Tokelauans, would have experienced a mild to moderate form of mental illness in the past year. However, these statistics may overestimate the extent of the problem given the small size of Tokelau’s population.

TREATMENT AND SERVICE UTILIZATION DATA

Data on service utilization is poor. However, the Department of Health has purchased MedTech 32, a Patient Management System, which will assist in improving future documentation of patient management and data collection, including mapping and tracking of outcomes.

Recent figures indicate that in the past few years there have been 28 Tokelauans who have a diagnosed mental illness. Some individuals with a severe mental illness who previously lived in Tokelau have also emigrated to New Zealand or Australia. Most of these 28 people with a diagnosed mental illness are receiving treatment (in Tokelau), consisting primarily of medication. The Department provides medication for patients who have returned from New Zealand and ensures that their supply continues by procuring medications from either Samoa or New Zealand. The main diagnoses have generally been bipolar disorder and schizophrenia.

For the ten year period from 2001-2011, national data showed that there were eight admissions to hospitals in Tokelau for mental health problems (including multiple admissions for three people who experienced a relapse), with the length of stay being 2 to 4 days on average. During the same period, there were seven instances of individuals being referred overseas for mental health treatment, with two of these individuals being referred more than once. Most mental health treatment is managed in the community, with mental health consultations normally conducted as outpatient visits or weekly home visits.

TREATMENT GAP

The ‘treatment gap’ is the difference between the prevalence of mental illness in a country and the number of people who are receiving treatment for their illness. Figure 5 below illustrates the estimated mental health treatment gap in Tokelau for all mental disorders and separately for severe mental illness. It is difficult to ascertain if there is any treatment gap for severe mental illness, with the mobility of Tokelauans to and from New Zealand and other countries affecting the number of people with mental illness living in the islands. As the population is small, it is likely that most people with a serious mental disorder come to the attention of the community and health service staff. If we assume that the 28 people with a diagnosed mental illness had a severe form of mental disorder, then it is estimated that the treatment gap for people with a severe mental disorder is somewhere between 0-4%. That is, it is estimated that up to 4% of people in Tokelau with a severe mental disorder may not be receiving treatment. However, it is noted that very few to no people with mild to moderate mental disorders are receiving treatment.
Figure 5
The estimated treatment gap for mental disorders in Tokelau

Mild to Moderate mental disorders
95 people

Severe mental disorders
29 people

Total prevalence
MD = 124 people

Treatment gap
96% of people with severe mental disorders receive treatment

Estimated prevalence
Treatment provided

Number of people

0 25 50 75 100 125

Severe

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MENTAL HEALTH WITHIN THE GENERAL HEALTH SYSTEM
Tokelau's health system is illustrated in figures 6 and 7. Tokelau has a small health system with three local hospitals, one on each atoll. Due to the lack of health resources, there is also a Tokelau Patient Referral Scheme, which allows patients to receive further investigation or treatment in Samoa and New Zealand. Health care is provided free of charge to the population, including treatment overseas if required (2).

Mental health is included in the Tokelau Patient Referral budget, and whilst there are no specialist mental health staff or services in Tokelau, the Health Department can immediately access mental health specialists remotely in New Zealand should an event occur. Mental health care is provided through the general health system at each atoll hospital, which provide both inpatient and outpatient services. Mental health community care is available for individuals who have a stable, pre-existing mental illness, delivered on a one to one basis either through outpatient visits or weekly home visits (20). Psychiatry consultation is available via telehealth support arrangements with New Zealand. Due to limited staff training and resources, for diagnosis and treatment of acute severe mental illness patients are referred overseas (3).
Figure 6. Human resource and training plan: Tokelau.

Source: reference (2, 7)

General Fono

Council for the Ongoing Government of Tokelau (includes the Minister for Health)

Taupulegas (Councils of Elders)

Department of Health

Director of Health

National Office, Apia, Samoa

Support for hospitals and government in health
Referral of patients overseas
Distribution of medical supplies
Recruitment of locum doctors
Health policy
Health training
Preventive health services
Public health and health promotion
NCD project

Nukunonu Taupulega

Atafu Taupulega

Fakaofo Taupulega

Hospital manager

St Joseph’s Hospital

Inpatient services
Outpatient services
Community treatment (including home visits)
Preventive health programs

Lomaloma Hospital

Inpatient services
Outpatient services
Community treatment (including home visits)
Preventive health programs

Fanuafalo Hospital

Inpatient services
Outpatient services
referrals
Figure 7. Mental Health Services mapped against the General Health System

Source: reference (11, 17, 22)

**Public Health System**

**Mental Health** in blue. The **general health system** is in green and the private sector is in grey.

**Traditional Health Practices**

**Referral hospitals in Samoa** (Tupua Tamasese Meaole TTM National Hospital) and **New Zealand** (Middlemore & Wellington Hospital if necessary)

- Psychiatric beds available

**Local hospitals**

- 3 hospitals
- 24 general beds
- Mental health inpatient (limited) and outpatient care

**Level of Care**

- **Tertiary**
- **Secondary**
- **Primary**

- Referrals for care of acute serious mental illness

**Traditional healers**

- Referrals for care of acute serious mental illness
**COORDINATION**

The responsibility for managing local health services was part of a Devolution process with New Zealand to the Taupulega (Council of Elders) in 2004. All local health staff are employed by each Taupulega, rather than by the Department of Health. The Taupulega is responsible for the budgeting, planning, and monitoring of all affairs. The village Health Committees make proposals to their respective Taupulegas. The management and implementation of local health programmes is done by the hospital manager and local staff (2).

The national Department of Health office is located in Apia, Samoa, and consists of a Director of Health and other personnel who provide support to the Tokelau government and Taupulega on health related matters. The Chief Clinical Advisor who is based on Tokelau advises and supports the local Medical Officers in executing their roles.

The Health Department is also responsible for:

- Advising the Minister of Health, the Council for On-going Government, the three Taupulegas and the General Fono (assembly) on health issues. The Director of Health and the Chief Clinical Advisors are members of the Senior Management Team, which is an advisory body to the Council for On-going Government.

- Facilitating and managing the referral of patients to Samoa and/or New Zealand for treatment. The Tokelau Patient Referral Scheme is a scheme of the Tokelau Government. Selection is based on clinical grounds and all Tokelau residents are entitled to it. The selection is done through the Clinical Forum, which comprises of all Medical Officers and the Director of Health; it is chaired by the Chief Clinical Advisor.

- National budget proposals and budget control, including donor funding.

- National health policies formulation.

- Clinical safety.

- Legislation proposals.

- Liaison with international and regional health organizations.

- National public health issues which include disease surveillance and response, health related emergencies, new emerging diseases, chronic diseases such as tuberculosis, leprosy, reproductive health, immunization, border control, water, sanitation, and vector control.

- Health human resources development.

- Advisor for the Council of on-going Government on matters pertaining to registration and deregistration of health professionals.
LEGAL FRAMEWORK

The laws of New Zealand only apply to Tokelau when they have been specifically enacted there (7). The villages also have the statutory power to enact their own laws to govern village affairs (10). There is no separate mental health legislation in Tokelau, although persons with mental disorders are included in the general Health Rules (20).

Rule 11 of the Tokelau Health Rules 2003 deals specifically with mental illness. It states:

(1) A person who by reason of a physical or mental condition is or is likely to be a danger to himself or herself, or the community, or to need protection from the community may be confined and restrained as the case may require under police supervision on the written order of the medical officer in charge on the island.

(2) No person confined or restrained under paragraph (1) shall be held: (i) for more than 24 hours without the written authority of the Commissioner; and (ii) for more than 48 hours without the written authority of both the medical officer in charge on the island and the Commissioner, given after consultation with the Director of Health.

MENTAL HEALTH POLICY AND PLAN

A draft mental health policy has been developed but not finalized. The policy proposes the following vision and strategies for mental health(6):

Vision
All Tokelauan enjoying the highest standards of mental health and well-being that is grounded in the *kaiga* through equitable access to comprehensive community based, integrated, effective, quality mental health services and care.

Strategies

(1) Establish mental health legislation
(2) Allocate additional funds for the development of mental health services
(3) Ensure the integration of mental health services with general health services at both the hospital and primary health care level
(4) Develop human resources for mental health
(5) Initiate community education
(6) Ensure the availability of essential psychotropic medications
(7) Strengthen psychosocial support through advocacy activities and community involvement in mental health care
(8) Ensure quality assurance in mental health service delivery
(9) Enhance information systems and data collection
(10) Encourage continuous research on etiology of mental health problems

HUMAN RIGHTS AND EQUITY

The Tokelau Human Rights Rules 2003 state that human rights in Tokelau are based on the Universal Declaration of Human Rights and the International Covenant on Civil and Political Rights (23). However, Tokelau is not a signatory to the United Nations Convention on the Rights of Persons with Disabilities (24). It has been noted that current community health services fail to meet basic standards of privacy, security and capacity (7). Mental illness is not recognized as a criterion for disability, so there are no disability benefits available for people with a mental disorder (20).
4. MENTAL HEALTH WITHIN THE GENERAL HEALTH SYSTEM

FINANCING

Health services are funded by the Tokelau government from the national budget and provided to the population free of charge, including referral outside of the islands. For the fiscal years from 2001 to 2008, health received 10.5% of the national budget, or about US$5.61m over the whole period. Per capita health expenditure for the last decade averaged about US$107 per year. The government budget is made up of locally generated resources, aid from the New Zealand government and assistance from international agencies such as WHO, the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), and the Australian Agency for International Development (AusAID). There is no dedicated mental health funding, but mental health is included in the Tokelau Patient Referral budget.

HUMAN RESOURCES

Each of the three atoll hospitals is staffed by one general practitioner, three registered nurses and one or more community nurses or nurse's aides (7). There is also a Chief Clinical Advisor who travels between the hospitals and provides additional support to other physicians, either by providing primary care and/or helping to facilitate the coordination of health services. The hospitals are still somewhat reliant on recruiting locum doctors to fill positions, although in November 2010 only the doctor at St Joseph's Hospital in Nukunonu was in a locum role (8). There is a Hospital Manager at each hospital that is responsible for the day to day management of the local health service (2). The general health staff have very little training in mental health care (8). However, the Chief Clinical Advisor has some prior experience working in a mental health unit in Tuvalu for a 12 month period and has received on site training from visiting psychiatrists. Two medical officers have attended training conducted as part of PIMHnet. The health staff are still reliant on advice from psychiatrists in Samoa and New Zealand for mental health expertise.

Table 3 shows the number of government employed health staff of each profession. It must be noted that due to Tokelau's small population and its distribution over the three distant islands, services need to be integrated and staff multi-skilled to meet local needs. There would not be enough work, for example, to employ three mental health clinicians or pharmacists. There are no private health facilities. Table 4 displays the staff distribution by hospital.
Table 3
Health Personnel (selected categories) by Health Sector in Tokelau

<table>
<thead>
<tr>
<th>Profession</th>
<th>Government</th>
<th>Private</th>
<th>Non-government organizations</th>
<th>Faith-based organizations</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Doctor</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4*</td>
</tr>
<tr>
<td>Psychiatrist</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>12*</td>
</tr>
<tr>
<td>Registered Midwife</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Community Nurse</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Nurse's Aide</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>Psychiatric Nurse</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Psychologist</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Social Worker</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Occupational Therapist</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Eye Care Technician</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

*1 doctor and 3 nurses are based in the Department of Health. The current Director of Health is a Registered Nurse.

Source: reference (7)
Table 4. Human Resources by Facility in Tokelau

<table>
<thead>
<tr>
<th>Facility/Level</th>
<th>General Health</th>
<th>Mental Health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Medical Doctor</td>
<td>Nurse</td>
</tr>
<tr>
<td>ADMINISTRATIVE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department of Health</td>
<td>1*</td>
<td>3</td>
</tr>
<tr>
<td>PRIMARY LEVEL CARE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Hospitals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St Joseph’s Hospital (Nukunonu)</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Lomaloma Hospital (Atafu)</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Fanuaalio Hospital (Fakaofo)</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

*The Chief Clinical Advisor who is based at the Department of Health also works in primary health care
Source: reference (7).
TRAINING

General health training is coordinated by the Department of Health. Table 5 illustrates the training available in Tokelau and the number of health professionals currently working Tokelau. Undergraduate training of health professionals is available at the Fiji Schools of Nursing and Medicine, with postgraduate and continuing education conducted in Samoa, New Zealand or Fiji. Each hospital also recruits staff locally and trains them on the job to become nurse's aides (2). Nurse aides who are partially trained to look after patients are involved in managing patient treatment but within given limits. Nursing training prioritizes expertise in mid-wifery, operating theatre training and public health, in that order. Access to the Pacific Open Learning Health Net (POLHN) and the HINARI research database were offered to all local health staff in 2009 but have yet to be taken up.

There is no mental health training available in Tokelau, and regular training of staff in mental health is not conducted elsewhere due to difficulties in arranging coverage for time away (7). One doctor has attended numerous training sessions and meetings over the last four years and developed mental health documents. An informal in-service training for other staff based on this learning is being planned.

During the past six years, basic initial training in mental health has been provided for some of the health staff in the local hospitals through visiting consultants from the Samoan Mental Unit (Dr Ian Parkins and team), and Dr David Chaplow from Ministry of Health New Zealand. In November 2010, WHO PIMHnet supported sending Dr Chaplow to Tokelau for one week to provide some basic mental health training to doctors. This included review and discussion of individual cases with the respective doctors, incidental teaching on mental health topics, and provision of handouts on examining mental status and managing suicide (8).

There is no formal training for traditional healers in Tokelau. General knowledge is passed down through families for health conditions. Traditional healers are not registered in Tokelau, so their number is not specifically known, however they are often consulted in conjunction with conventional doctors for general health problems. Traditional healers generally do not treat mental health conditions.

Table 5

<table>
<thead>
<tr>
<th>Human Resources</th>
<th>Training available in Tokelau</th>
<th>Currently working in Tokelau</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Degree courses</td>
<td>Continuing Professional Development number/training years</td>
</tr>
<tr>
<td>Physicians</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Nurses</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Traditional healers</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
MEDICATIONS

Most medications are purchased from New Zealand, and obtained from Samoa in emergencies. Medication is provided free of charge to patients in Tokelau at the primary care level (20). The available psychiatric medications are mostly first generation psychiatric drugs, with newer forms not always accessible. People who are prescribed some newer medications overseas and then return to Tokelau will continue to take their medication until the supply is exhausted, but then must switch to a drug available at the local level (8). Table 6 lists the available essential psychotherapeutic medicines in Tokelau. In addition to the listed medicines, risperidone is also available (22).

Table 6
Comparison of the WHO List of recommended psychotropic medications and the National Essential Medicines List in Tokelau

<table>
<thead>
<tr>
<th>Drug</th>
<th>WHO Essential Psychotherapeutic Medicines 2009</th>
<th>Tokelau National Essential Medicines List</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpromazine</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Fluphenazine</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Amitriptyline</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Fluoxetine</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Diazepam</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Clomipramine</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Carbamazepine</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Sodium Valproate</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Lithium Carbonate</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Methadone</td>
<td>✔</td>
<td>X</td>
</tr>
<tr>
<td>Nicotine replacement therapy</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Source: reference (22, 25)

INFORMATION SYSTEMS

In general, data are collected on the number of people with mental disorders treated in primary care as both inpatients and outpatients, as well as their age, gender and diagnosis, and the interventions provided by each hospital. Collection of mental health information is integrated into the overall general health information system (22).

PUBLIC EDUCATION AND LINKS TO OTHER SECTORS

A public education programme for mental health is run in conjunction with the HIV destigmatisation programme. Local churches and non-government organizations are being encouraged to support and advocate for all non-communicable disease programmes, including mental health.
Figure 8. **Mapping Health Care Services in Tokelau**

*Source: reference (9)*
FACILITIES AND SERVICES

1. **Specialist facilities/hospitals**
   There are no specialist mental health facilities in Tokelau (3). The organization of services is schematically represented in Figure 9(a) and (b), and described below.

2. **General hospitals**
   There are three local hospitals, one on each atoll, providing primary care and inpatient facilities to the local population (Figure 8). The hospitals are similarly equipped, and each hospital has 12 beds, although ongoing renovations mean that not all beds may be available at any time (17). Most recent data indicates that there are currently a total of 24 hospital beds in Tokelau (22). Basic psychiatric inpatient and outpatient services are provided in this general hospital setting, and for more complex care patients are referred overseas to Samoa or New Zealand. Tokelau has informal partnerships with two district health boards in New Zealand and the National (Tupua Tamasese Meaole) Hospital in Samoa, with access to doctors in Samoa for specialist interventions (17). Hospital occupancy rates are less that 30 per annum across Tokelau. The average length of hospitalization for mental illness is three days, however there has only been one admission in the past two years, and eight admissions in the past ten years.

   Mental health patient consultations are normally implemented by Medical Officers on each atoll on a one-to-one basis, either through outpatient visits or weekly to fortnightly home visits by a medical officer and nurse or nurse aide. Occasionally, a patient’s family may be called to the hospital to provide assistance in the case that the patient becomes violent or irritable and requires sedation or confinement.

3. **Formal community mental health services**
   Apart from the mental health treatment provided by the three local hospitals, there are no other formal community mental health services in Tokelau (3).

4. **Mental health services through primary health care**
   Primary health care is provided through the local hospitals, with no other health services available in Tokelau (Figure 8). Community care is available for patients with mental illness who are stable (3).

5. **Informal community care**
   - **Traditional healers**
     Western medicine is well established in Tokelau. When ill, Tokelauans will usually seek assistance from a hospital facility (26). However, there are also traditional healing practices that still exist today and some Tokelauans may prefer these health practitioners as a first line treatment. The traditional Tokelauan view of health is an integrated concept, including the health of the body, mind, spirit and community. Some beliefs attribute causes of illnesses to evil spirits. Traditional healers use oils, massage and plant extracts to treat physical ailments and drive away evil spirits, which are considered responsible for causing mental health illness. Traditional healers may refer their patients on to a Western trained doctor if they feel that the individual's symptoms are not consistent with their range of expertise (11).

   - **Non-government organizations (NGOs)**
     There are local non-government organizations working in Tokelau (3). The traditional Aumaga (village able bodied men) and Fatupaepae (village women's group), Kautalavou (youth group), and sport association. All these organizations play a vital role in supporting mental health cases in Tokelau.

   - **Faith-based organizations**
     There are no faith-based organizations working in mental health in Tokelau. However, there are three churches present across the islands. The pastors or priest are usually involved in providing some support to individuals with a mental illness.
**Mental health services users or family associations**

There are no mental health service user and family associations in Tokelau (22). There is Community support services in an acute event. The villages have a process for looking after at risk people, including the involvement of Church leaders or those identified by the family/patient as support.
Figure 9. **Ideal and actual mental health pyramid**

*Source: reference (27)*

**Figure 9(a)**
The ideal structure for mental health care in any given country

**Figure 9(b)**
The reality of mental health care in Tokelau

*The levels of care that are non-existent, poorly developed or inappropriate have been removed from the pyramid of care.*

*Services are delivered through hospitals but are at the same time community/primary care based. This type of service organisation for a country with a population and resources like those of Tokelau makes sense.*
INTERNET RESOURCES

Mental health and development: Targeting people with mental health conditions as a vulnerable group

Improving health systems and services for mental health

WHO/Wonca joint report: Integrating mental health into primary care - a global perspective


The WHO Mental Health Policy and Service Guidance Package

- The mental health context
- Mental health policy, plans and programmes - update
- Organization of services
- Planning and budgeting to deliver services for mental health
- Mental health financing
- Mental health legislation & human rights
- Advocacy for mental health
- Quality improvement for mental health
- Human resources and training in mental health
- Improving access and use of psychotropic medicines
- Child and adolescent mental health policies and plans
- Mental Health Information Systems
- Mental health policies and programmes in the workplace
- Monitoring and evaluation of mental health policies and plans

### APPENDIX

**Essential psychotherapeutic medicines**  
(WHO Model List of Essential Medicines, 16th list, March 2009)

Where the [c] symbol is placed next to the complementary list it signifies that the medicine(s) require(s) specialist diagnostic or monitoring facilities, and/or specialist medical care, and/or specialist training for their use in children.

#### Psychotic disorders

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpromazine</td>
<td>Injection 25 mg (hydrochloride)/ml in 2ml ampoule</td>
</tr>
<tr>
<td></td>
<td>Oral liquid 25 mg (hydrochloride)/5 ml</td>
</tr>
<tr>
<td></td>
<td>Tablet 100 mg (hydrochloride)</td>
</tr>
<tr>
<td>Fluphenazine</td>
<td>Injection 25 mg (decanoate or enantate) in 1ml ampoule</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>Injection 5 mg in 1ml ampoule</td>
</tr>
<tr>
<td></td>
<td>Tablet 2 mg; 5 mg</td>
</tr>
</tbody>
</table>

**Complementary list [c]**

| Chlorpromazine         | Injection: 25 mg (hydrochloride)/ml in 2 ml ampoule |
|                        | Oral liquid: 25 mg (hydrochloride)/5 ml             |
|                        | Tablet: 10 mg; 25 mg; 50 mg; 100 mg (hydrochloride) |

| Haloperidol            | Injection: 5 mg in 1 ml ampoule                    |
|                        | Oral liquid: 2 mg/ml                               |
|                        | Solid oral dosage form: 0.5 mg; 2 mg; 5 mg         |

#### Depressive disorders

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amitriptyline</td>
<td>Tablet 25 mg (hydrochloride)</td>
</tr>
<tr>
<td>Fluoxetine</td>
<td>Capsule or tablet 20 mg (present as hydrochloride)</td>
</tr>
</tbody>
</table>

**Complementary list [c]**

| Fluoxetine             | Solid oral dosage form: 20 mg (present as hydrochloride) |
|                       | a >8 years                                                |

#### Bipolar disorders

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbamazepine</td>
<td>Tablet (scored) 100 mg; 200 mg</td>
</tr>
<tr>
<td>Lithium carbonate</td>
<td>Solid oral dosage form: 300 mg</td>
</tr>
<tr>
<td>Valproic acid</td>
<td>Tablet (enteric coated): 200 mg; 500 mg (sodium valproate).</td>
</tr>
</tbody>
</table>

#### Generalized anxiety and sleep disorders

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diazepam</td>
<td>Tablet (scored): 2 mg; 5 mg</td>
</tr>
</tbody>
</table>

#### Obsessive-compulsive disorders and panic attacks

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clomipramine</td>
<td>Capsule 10 mg; 25 mg (hydrochloride)</td>
</tr>
</tbody>
</table>

#### Medicines used in substance dependence programmes

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Formulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicotine replacement</td>
<td>Chewing gum: 2mg, 4mg</td>
</tr>
<tr>
<td>therapy</td>
<td>Transdermal patch: 5mg to 30mg/16 hrs; 7mg to 21mg/24 hrs</td>
</tr>
</tbody>
</table>

**Complementary list [c]**

| Methadone*             | Concentrate for oral liquid 5 mg/ml; 10 mg/ml    |
|                       | Oral liquid 5 mg/5 ml; 10 mg/5 ml                 |

*The square box is added to include buprenorphine. The medicines should only be used within an established support programme.*
REFERENCES


