



## Important 'knowns' in 2012

**Seafarers and Ainen Matawa** are identified high-risk groups but many **youth** also practice unsafe behaviors

**Land based FSW & MSM** are highly stigmatized & relatively neglected in terms of surveillance & prevention activities

**Sexual violence** is a major concern in Kiribati

**Alcohol** has been blamed for some risky behaviors

**Underlying socio-economic factors** are said to be fueling unsafe practices

## What do we know about HIV epidemiology at the end of 2012?

Derived from existing sources of data from MOH, SPC

Kiribati has reported the 2<sup>nd</sup> highest number of HIV cases in Micronesia after Guam. Fewer cases were diagnosed during 2001-10 compared to 1991-2000 (The number of tests and the number of testing sites have both said to have increased)

More men were diagnosed early in the epidemic (1991-2000) but there have been equal numbers of men and women diagnosed since 2001

Most cases have been among those aged 25-44 yrs with a large proportion among seafarers and their partners.

The spatial distribution of cases within Kiribati has not been described

Heterosexual transmission appears to be the main mode, but small numbers are attributed to vertical transmission and 1 case followed male-male sex

About half of all people identified with HIV have died. Only 6/28 PLWHIV are on ART. The Vice President said that some people with HIV were not accessing treatment (UNGASS statement 2011)

Periodic surveillance of pregnant women (2002-03, 2004-05, 2008) has not detected any cases of HIV, but other STIs, especially chlamydia, are common

## What do we know about risk behaviors?

Derived from data from surveys of youth & high risk groups

Knowledge of HIV transmission & prevention is relatively high compared with other PICTs but does *not* seem to be associated with safer behaviors for most risk groups (e.g. condom use remains low for youth, seafarers & FSW)

Compared to elsewhere in Micronesia, youth have their sexual debut at a later age but a high proportion then has multiple partners including transactional sex partners

Male-male sex is common among youth but highly stigmatized

Most youth do not perceive themselves to be at risk of STIs, and both youth & FSW do not regularly access health services for STI testing and treatment

Sexual violence is a major problem for women and men - many youth report being forced

IDU use is uncommon but alcohol is widely abused & linked to unsafe sexual behaviors

A small group of women (*ainen matawa*) sell sex to foreigner seafarers - numbers are said to be increasing, condom use is intermittent, and alcohol use and STIs are common



## Ideas about action...

Develop a surveillance strategy to ensure consistent, comparable data are collected from groups with different risk profiles to describe the evolution of the epidemic and contemporary risk behaviors

The epidemiology may have changed since the millennium – a case series of recently diagnosed HIV cases would be useful

A better understanding is needed of what works locally to change unsafe behaviors

The large proportion of cases among seafarers suggests offshore infection with HIV & points to a need for regionally coordinated preventive health programs including common efforts to provide education, testing & treatment to all seafarers operating in the Pacific

Gender dimensions of STI transmission are important locally (e.g. foreign seafarers & local men including police have all been cited as perpetrators of sexual violence) while economic drivers are believed to have a major influence on risk behaviors – prevention programs need to plan for and address these factors

All people living with HIV need to be under medical care for consideration of ART and other treatments

The Regional Strategic Plan for the Prevention and Control of STIs provides benchmarks for data management and programs – full implementation will be beneficial for HIV control

Recent reviews of STI programs, particularly from isolated yet mobile indigenous Australian communities, provide ideas worth considering for Kiribati



## What don't we know?

AND WHAT CAN BE IMPROVED

Longitudinal data disaggregated by site are not available to track trends in HIV and STI over time and in different parts of Kiribati (E.g. ANC clinics, STI clinics, VCT services, TB programs) – *fixed sites offer a ready means of routine surveillance & may help document trends in different parts of Kiribati (e.g. South Tarawa cf Kiritimati)*

Other than seafarers & women who sell sex to them, risk groups have not been well defined by sex, age, occupation or geography – *little is known about MSM, police, other mobile men with money, land based FSW and foreign seafarers.*

Regular comparable data are not collected from identified risk sites (e.g. bars in Betio, seafarers clubs, port area) and higher risk groups (subsets of youth, MSM) – *surveillance needs to be planned and coordinated*

Prevention activities have raised knowledge but not changed behaviors among key groups such as seafarers, youth & FSW – *it is important to know*

*what works and doesn't work locally to design effective preventive activities*

Access to and/or utilization of HIV testing & treatment services may be problem for key groups – *some studies suggest that youth, FSW and pregnant women are reluctant to be tested*

Stigma & discrimination and gender inequalities & violence remain obstacles yet to be fully addressed in prevention programs – *FSW/MSM are highly vulnerable & reportedly subject to sexual violence including by men with power, while preventive programs for men may need to focus more heavily on these structural issues*

Underlying factors appear to important drivers of risk behaviors in Kiribati – *the evidence is that unemployment and urban crowding is worsening*

STI rates are not well described among different groups and not routinely presented with HIV data – *STIs are an existing problem that can be partly addressed with strengthened responses to HIV*



## Some numbers.....

NB: not an exhaustive review of available data

### Epidemiology

**Total:** 55 or 56 cases notified from 1991-2011

35 cases in the decade 1991-2000 (64%); 18 cases in the decade 2001-2010 (33%); 2 cases in most recent year 2011; (+/- 1 year unknown)

28 cases known to be alive & still living in Kiribati

**Sex:** 34 or 35 cases among males (62%), 21 females (38%)

M:F ratio was 2.2 (1991-2000), 1.0 (2001-2011)

**Age:** 0-4yrs (5 cases), 5-14yrs (1), 15-24yrs (3), 25-44yrs (10), 45+ (1), Unknown age (8)

Most women aged between 30-34 at diagnosis (38%)

Most men aged between 40-44 at diagnosis (26%)

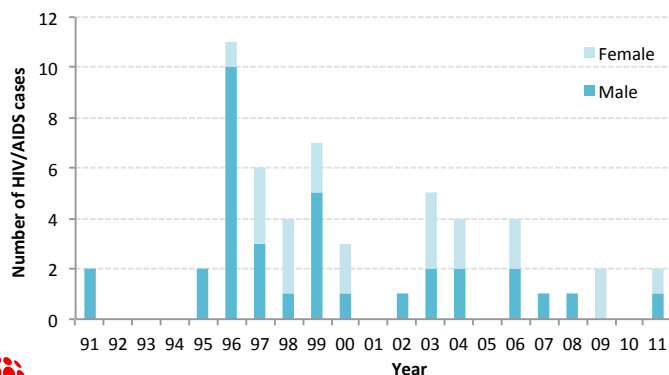
**Transmission:** incomplete data, only available until 2004: 31 heterosexual (67%), 6 mother-to-child (13%), 1 MSM (2%), 8 unknown (17%)

Until 2001, 22/35 (63%) cases among seafarers (NB: almost all seafarers had ulcerative STIs in 2004-05)

**Site:** Other specific details not available for cases - 'most' reported in South Tarawa but anecdotal information of increased *risk behaviors* in Kiritimati

**Mortality:** 23 deaths including 1 patient on ART

**Treatment:** 6 on ART at end of 2011



**ANC attendees:** 0% HIV in 2002-03, 2004-05 and 2008

**STIs:** Youth: 6.7% of males, 4.5% of females reported ever having an STI (2008)

ANC: *Chlamydia:* 13% overall, 20% aged 15-24yrs (2004-05); 11.2% overall, 13% of those aged 15-24 years (2008). *Syphilis:* 1.4% (2002-03); 2.1% (2004-05); 4.7% (2008)

Police: 1/145 had HIV; 17% had HepB surface Ag (2008)

**Other data:** Low fertility for women aged 15-19 years compared to elsewhere in Micronesia

High TB prevalence: 278 new cases notified in 2009 (288/100,000)

General surveys  
DHS (2009)

SGS surveys  
Pregnant women (2002-03, 2004-05, 2008)  
Seafarers (2002-03, 2004-05, 2008)  
Policemen (2008)  
Youth (2008)

Youth surveys  
Youth (2008, unpublished MoH data)

Behavioral surveys  
Youth (2008-09)  
Women who board foreign fishing vessels (2010)

### Youth behaviors

While sexual debut is late compared to other northern PICTs, condom use is low at first sex (8%) and last sex (27%). An important minority has sex before 15yrs (13%, 2008-09)

Sexually active youth have a high number of partners – average of 3.6 for males, 3.3 for females - with 79% of men and 44% of women having had >1 partner in the last year (2008)

27% of sexually active youth had exchanged sex for cash or goods in the last yr (2008)

18% of male youth had sex with another man in the last year (2008); 35% had ever had sex with a man & condom use was low (35%) at last sex (2008-09)

Forced sex is common (43% in 2008-09)

Binge drinking is common and associated with unsafe sexual behaviors (2008, 2008-09)

Most youth believe that they are low risk of STIs (2008-09)

An increasing number of young women are working as *ainen matawa* - 58% of had 1 or more STIs and reported only intermittent condom use. These women are socially marginalized & at risk of abuse from local men (2007)

### Key references

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## UNGASS indicators

Indicators #7, 10, 12 not particularly relevant for low prevalence settings

Indicator #6 Percentage of estimated HIV positive incident TB cases that received treatment for TB and HIV – *at this stage it is more useful to know the coverage of HIV testing for newly diagnosed TB patients*

## Surveillance system components

Routine or periodic surveillance needs to be established in key facilities – ANC clinics, STI clinics, TB clinics, VCT clinics

Previous cases of parent-to-child transmission might suggest that routine screening of all pregnant women would be useful

100% screening of blood products needs to be maintained

Comparable behavioral surveillance needs to be conducted regularly among key risk populations to track trends. Foreign seafarers might also constitute an important risk group for Kiribati

Special studies such as incidence studies among specific cohorts and investigations to assess why prevention activities worked or did not work in changing behaviors might be useful

Molecular epidemiology may assist in determining the historical spread of HIV within Kiribati if stored sera are available for testing

Prevalence studies may not be particularly useful at this stage unless there are suspicions of many hidden infections or unless combined with STI prevalence studies deemed to be necessary in their own right

AIDS case reporting relies on health seeking behaviors and trained health staff – raising awareness may improve earlier diagnoses

Treatment and care data should report whether PLWHIV are eligible for and accessing treatment

Relevant non-HIV data are not yet routinely compiled and reported with HIV surveillance data



## Comments on possible risk factors & drivers

FROM EXISTING DATA

*Sexual debut & multiple sexual partners– youth have sex at a relatively late age but a high proportion then has multiple partners*

*Male-male sex – one case attributed to male-male sex but behavior is highly stigmatized*

*Transactional sex– no organized sex industry but known sex between visiting fishermen & local girls, and land-based trade remains undocumented*

*Condom use – low among seafarers, FSW and youth; reports of inadequate supply & distribution of condoms back in 2006*

*STIs – rates appear high – 15% of ANC attendees had an STI in a 2004 study; identified as a key issue in the 2008-11 national health plan*

*Male circumcision – no local data; international source claims it is uncommon*

*Knowledge – reasonably good for most groups studied including youth but does not seem to have resulted in safer behaviors*

*Commercial industries – said to be >1,000 Kiribati seafarers on merchant ships at any time and a high proportion of cases in 90's were among seafarers*

*Internal and international migration – in addition to seafarers, a large population of contract agricultural workers travel to NZ; movement of people to urban centers linked to crime, alcohol & drug use, overcrowding, teenage pregnancies and STIs*

*Gender inequalities and violence – domestic violence thought to be endemic across all of Micronesia, and in Kiribati domestic violence said to be an increasing problem linked to alcohol*

*Young and rapidly growing population – high proportion under 25 years (38% <15yr)*

*Other socio-cultural factors – poverty, unemployment, stigma, lack of social opportunities (e.g. sporting facilities) except bars, alcohol seen as a “common social problem faced by society”*