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2013 ANNUAL EPIDEMIOLOGICAL REPORT

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EXECUTIVE SUMMARY

Through the actions of the Ministry of Health major epidemics have been averted in 2013. With the new restructuring in terms of disease surveillance and response, the Ministry of Health is in a better position to predict, detect and respond to epidemics of priority diseases.

Disease surveillance is now Web Based, all health facilities including the wards are now linked through a special network to the Disease Surveillance and Response Unit. This has been possible through the assistance received from the Indian Ocean Commission RSIE project and WHO. The Public Health Authority has been able to detect, confirm and mitigate outbreaks of dengue, hand foot and mouth disease and diarrhoeal diseases which could have impacted negatively on the nation and economy.

Seychelles is currently going through a process of epidemiological transition from communicable to non-communicable diseases. Our services recorded over 350,000 doctor's consultations in 2013 representing an average of four doctor's consultations per person in Seychelles in 2013. Non-communicable diseases notably Hypertension and Diabetes were the most prevalent with Hypertension representing 8.52% followed by Diabetes at 2.77% of total doctor's consultations in 2013. An increase of 3% in new Hypertension cases and a reduction of 48% in new Diabetes cases were reported in 2013 compared to 2012.

HIV and AIDS and Hepatitis C in the Seychelles can be seen as a major challenge in view of the increasing prevalence.

HIV prevalence amongst the general population is less than 1% in Seychelles according to the 2013 KAPB study. The cumulative reported HIV positive clients was 578(334M/244F) as of December 2013. Currently there are 376(209M/167F) people living with HIV and AIDS of which 218 (118M/100F) are on treatment.

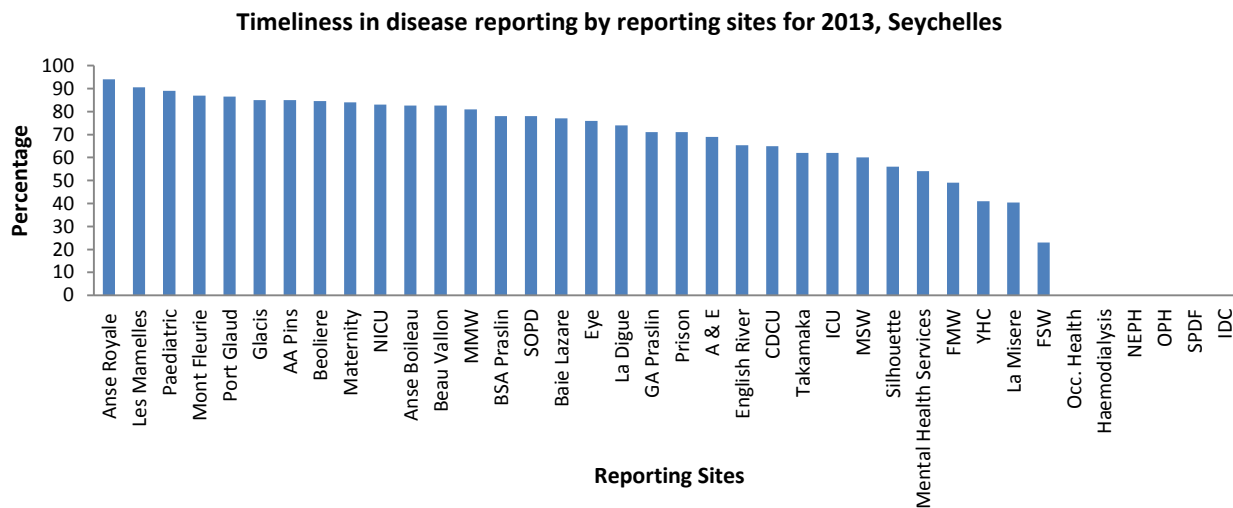
Since the introduction of Highly Active Antiretroviral Therapy (HAART) in 2002, the AIDS related mortality has declined from 15% in 2001 to 2% in 2013 but remains a major concern since 22% of known HIV & AIDS clients in 2013 were not adhering to treatment and follow-up and 15% of the newly diagnosed clients in 2013 reported in late stage of AIDS with opportunistic infections. There is still much to be done to change this trend.

Since 2002 to 2013, a cumulative of 394 cases of Hepatitis C has been detected of which 27(18M/9F) cases are both HIV and Hepatitis C co-infected and there were 6 Hepatitis C related deaths. The epidemic is predominantly in the productive age group as 51.5% of the reported cases for 2013 were aged 20 to 29 years. According to service data, 99% of cases who tested positive for Hepatitis C are intravenous drug users.

TIMELINESS OF REPORTS

Timely reporting is defined as notifiable diseases seen during the reporting week being notified to the DSRU via either web based surveillance, telephone or paper reporting on Tuesday of the following week by 3pm. It remains the most important component of effective disease surveillance whereby timely analysis and interpretation of data can be translated into effective recommendations and actions.

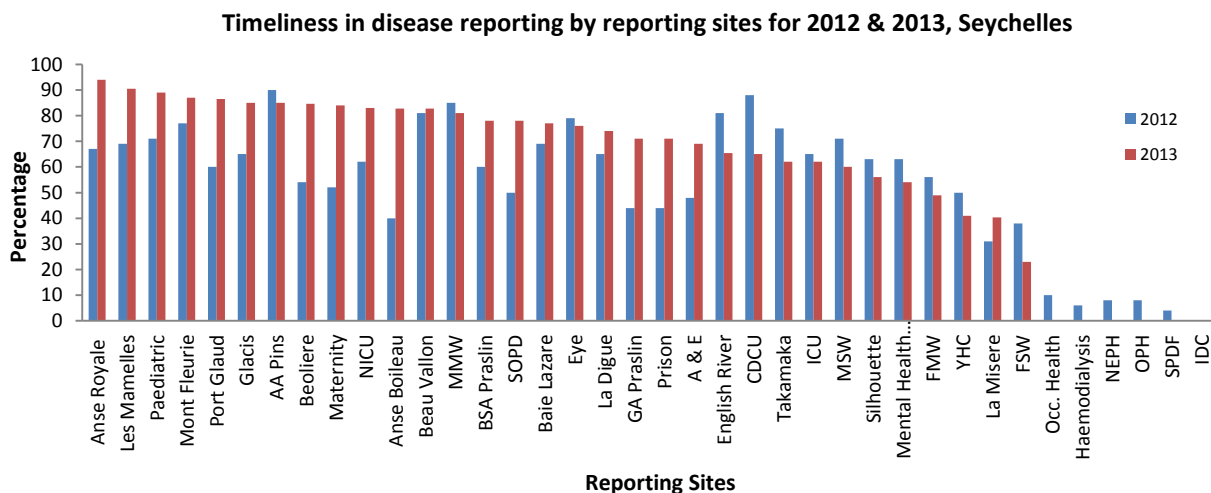
Graph 1. Timeliness in disease reporting by reporting sites for 2013



Throughout 2013, no reporting site attained a 100% timely reporting. Out of 38 reporting sites 17 (45%) have achieved an average timely reporting of 75% and above, an increase of 70% compared to 2012 and 15 (39%) reporting sites have had a timely reporting of less than 75%. Anse Royale recorded the highest percentage at 94%, Les Mamelles at 91% and Paediatric Ward at 89%.

In 2013, 5 (13%) government reporting sites did not report at all and the private sector which is responsible for an estimated 25% of consultations does not comply with the reporting requirements.

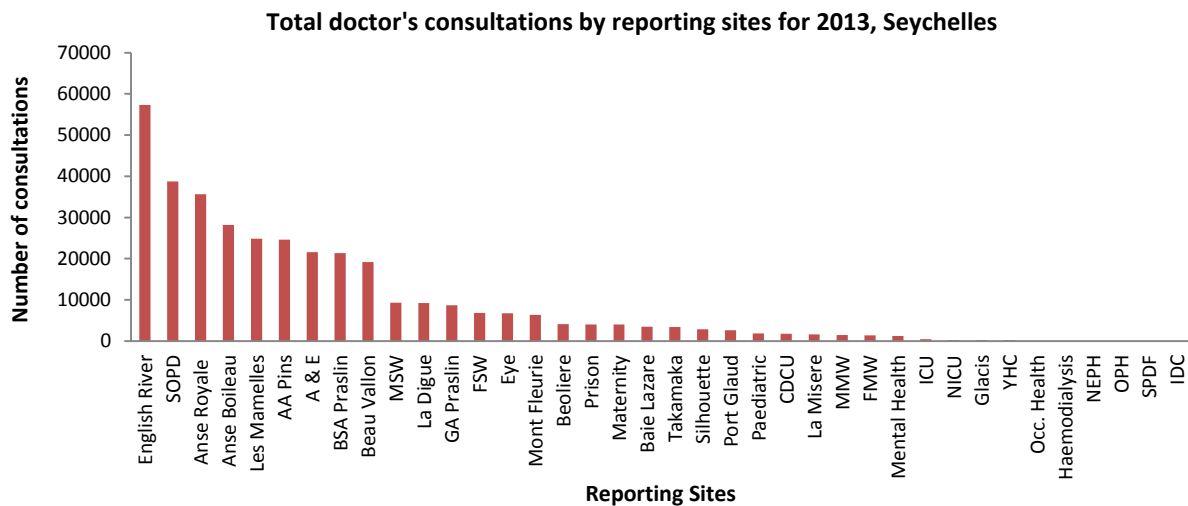
The year 2013 has reported an increase of 12% in timely reporting compared to 2012.



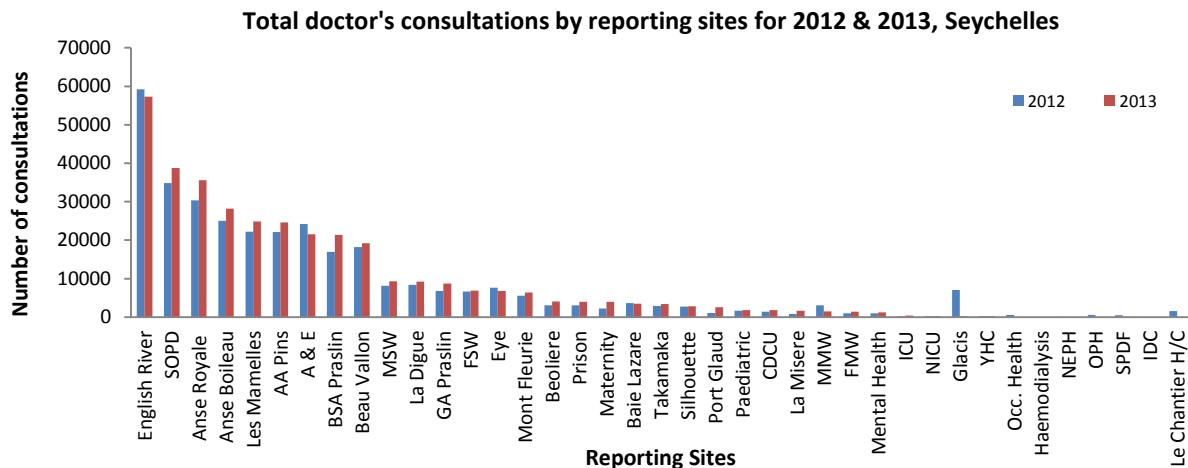
DOCTOR'S CONSULTATIONS

A total of 353,340 doctor's consultations were reported by web based surveillance in 2013 representing an increase of 6% in the total doctor's consultations compared to 334,847 doctor's consultations in 2012 and an average of four doctor's consultations per person in Seychelles in 2013. English River reported 57,285 consultations, representing 16% of the total number of doctor's consultations followed by the Surgical Outpatient Department with 38,785(11%) and Anse Royale with 35,615 (10%) doctor's consultations.

Graph 3. The number of doctor's consultations by reporting sites for 2013



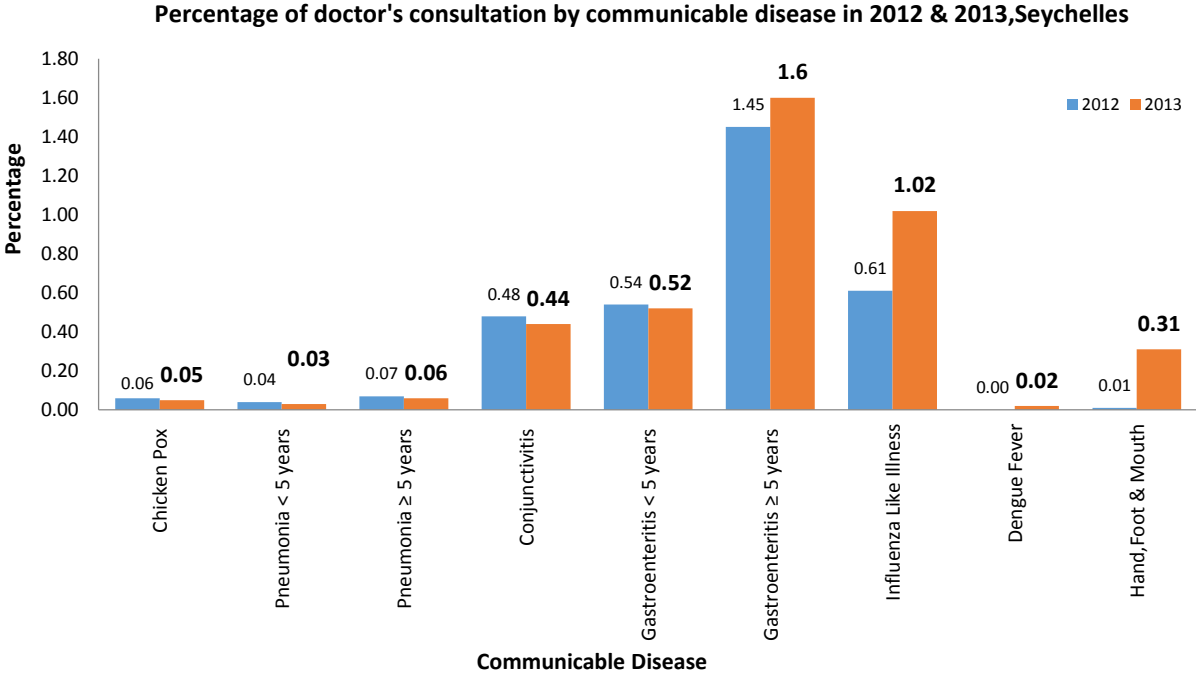
Graph 4. Number of doctor's consultations by reporting sites for 2012 and 2013



English River health center remains the reporting site with the most doctors' consultations for 2012 and 2013 followed by SOPD and Anse Royale respectively.

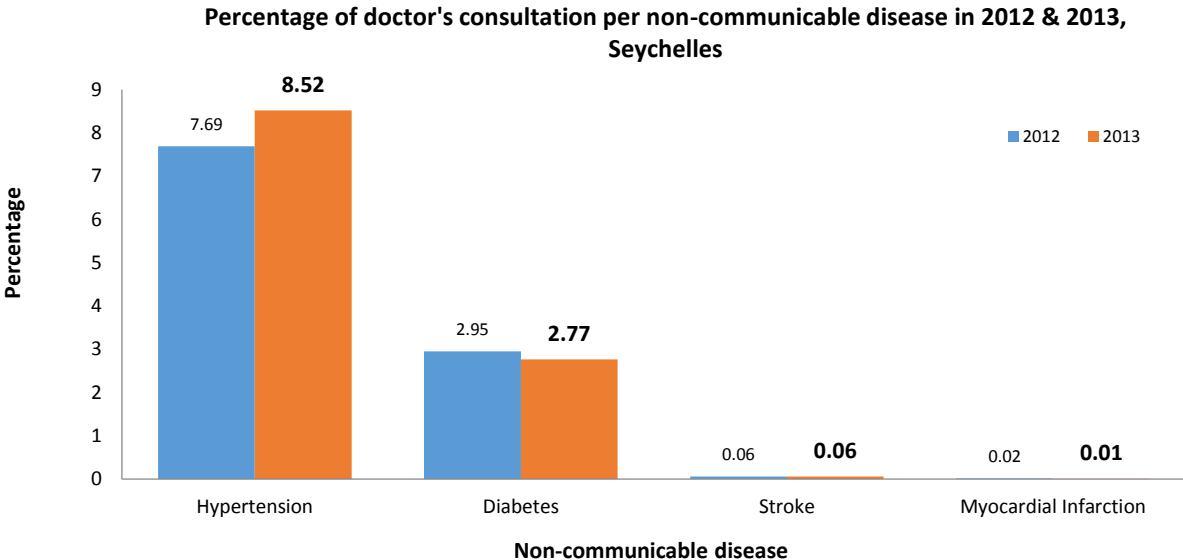
COMMUNICABLE AND NON-COMMUNICABLE DISEASES

Graph 5. Percentage of doctor’s consultations by communicable disease for 2012 and 2013.



Gastroenteritis in the five years old and above was the most prevalent communicable disease reported in 2013 with a percentage doctor’s consultation of 1.6% followed by the Influenza like Illness at 1.02% and Gastroenteritis in the less than five years old at 0.52%. Of note Gastroenteritis in the five years old and above, Influenza like Illness, Dengue Fever and Hand, Foot and Mouth had a higher percentage doctor’s consultation for 2013 when compared to 2012.

Graph 6. Percentage of doctor’s consultations by non-communicable disease for 2012 and 2013.



Non-communicable diseases notably Hypertension and Diabetes were the most prevalent in 2012 and 2013. Hypertension represented 8.52% (0.14% new cases and 8.4% chronic cases) followed by Diabetes at 2.77% (0.04% new cases and 2.7% chronic cases), Stroke at 0.06% and Myocardial Infarction at 0.01% of doctor’s consultations in 2013.

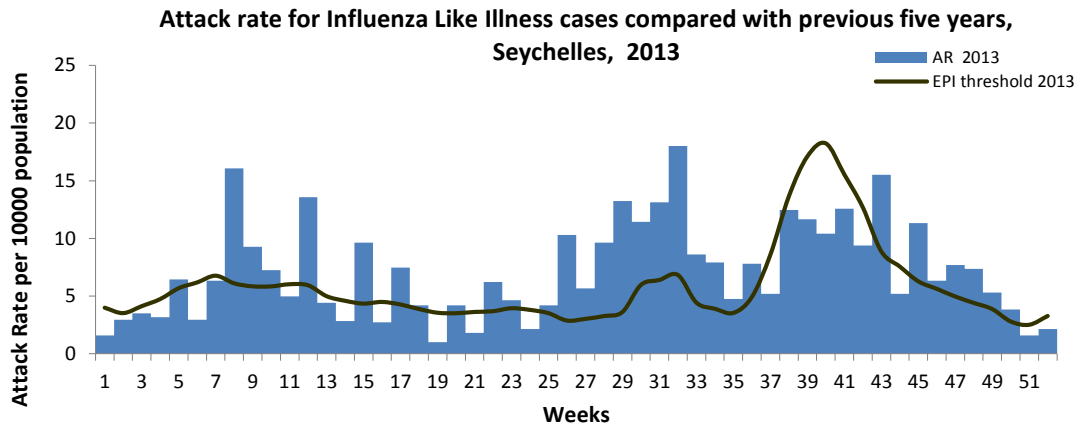
An increase of 3% in new Hypertension cases and a reduction of 48% in new Diabetes cases were reported in 2013 compared to 2012.

There were 16 stroke related deaths, an increase of 33% compared to 2012 and 12 Myocardial Infarction related deaths, an increase of 100% reported in 2013 compared to 2012.

SELECTED NOTIFIABLE DISEASES OF PUBLIC HEALTH IMPORTANCE

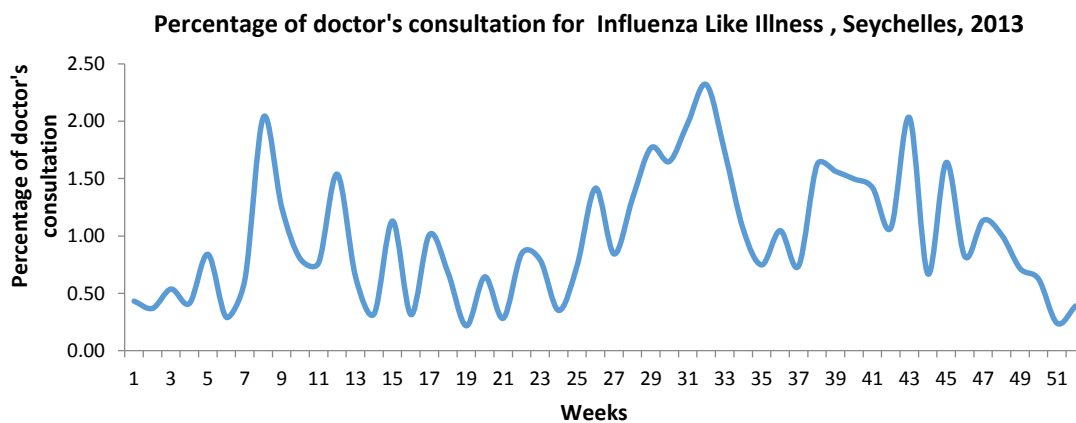
INFLUENZA LIKE ILLNESS

Graph 7(i). Trend of Influenza like Illness for 2013



During 2013, there has been fluctuating trends in influenza like illness cases and the attack rate (AR) which is the proportion of cases of influenza like illness in the general population has generally remained above the epidemiological threshold which is the average weekly AR for the previous five years. This was most probably due to the new web based surveillance system which has improved surveillance activities in general with an overall increase of 39% in the AR compared to 2012. There were no major outbreaks in 2013 but significant increases in influenza like illness were noted from week 7 to week 15, week 25 to 34 and week 38 to 45. The highest recorded AR was 18/10000 population for week 32.

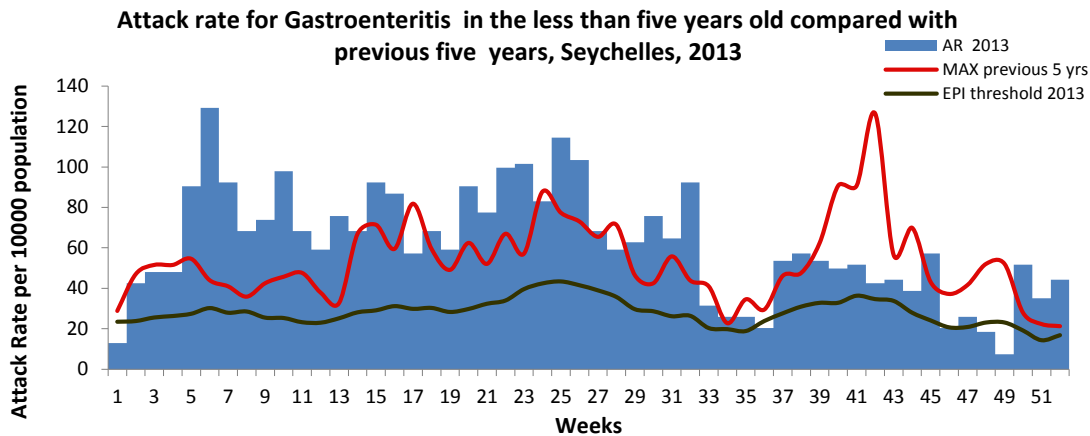
Graph 7(ii). Trend in doctor's consultations for Influenza like Illness in 2013



The increases in the trend of doctor's consultations for week 8, 32 and 43 in 2013 corresponded to the increases in AR and the highest percentage of doctor's consultations reported at week 32 at 2.32%. Of note, the second highest percentage of doctor's consultation for 2013 reported was related to influenza like illnesses.

GASTROENTERITIS

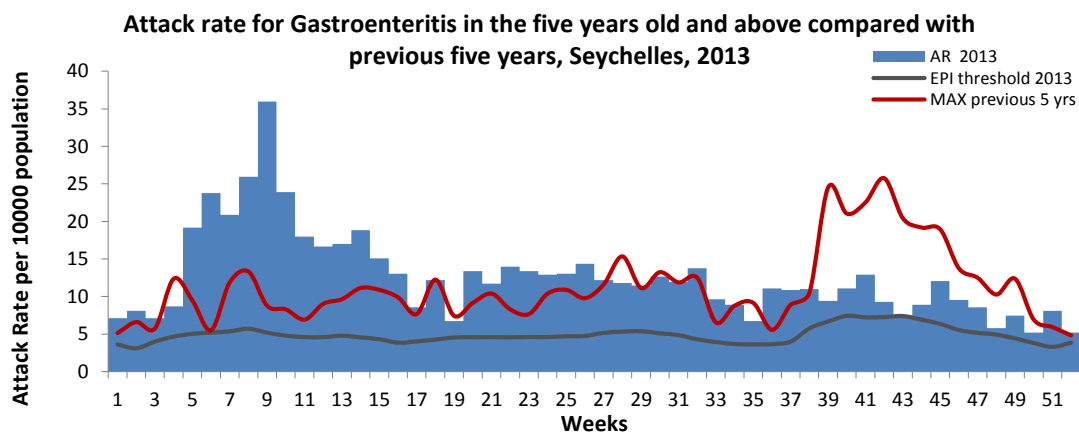
Graph 8 (i). Trend of Gastroenteritis in the less than five years old for 2013



For the year 2013, gastroenteritis was the notifiable disease with the highest disease burden with an increase of 18% in new cases compared to 2012 and was also marked by an outbreak in the first half of the year.

The AR for gastroenteritis in the less than five years old has generally remained above the epidemic threshold throughout the year with the exception of week 1, 36, 48 and 49 respectively, the highest AR reported was 129.20/10000 population for week 6. An increase of 6.3% in new cases was also reported in 2013 compared to 2012. Of note 17% of the cases reported were admitted to the Pediatric Ward.

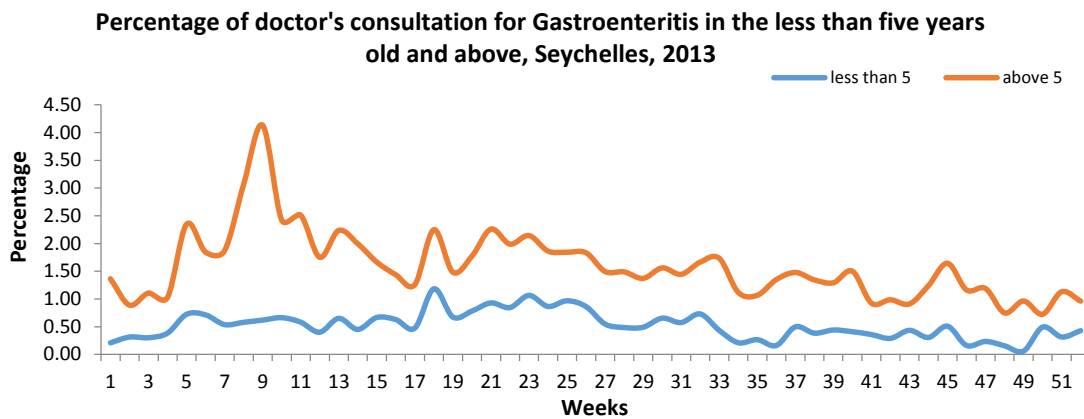
Graph 8 (ii). Trend of Gastroenteritis in the five years old and above for 2013



Gastroenteritis in the five years old and above has remained above the 2013 epidemic threshold throughout the year, the highest attack rate recorded was 35.95/10000 population for week 9. A similar outbreak was also observed as in the less than five years old in 2013.

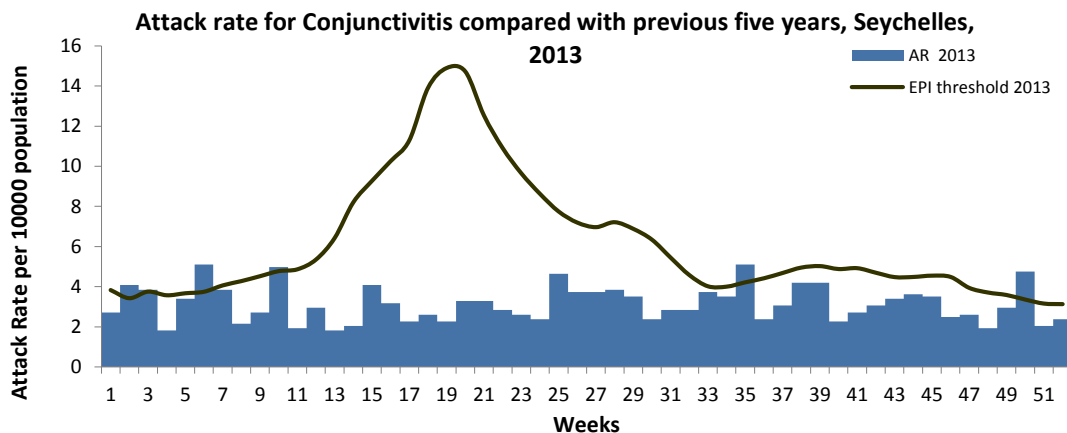
There was an increase of 22% in new cases compared to 2012, the highest percentage of doctor's consultation related to gastroenteritis in the five years old and above was 4.13% for week 9 which corresponded to the peak of the outbreak.

Graph 8 (iii). Trend in percentage of doctor's consultation for Gastroenteritis 2013



CONJUNCTIVITIS

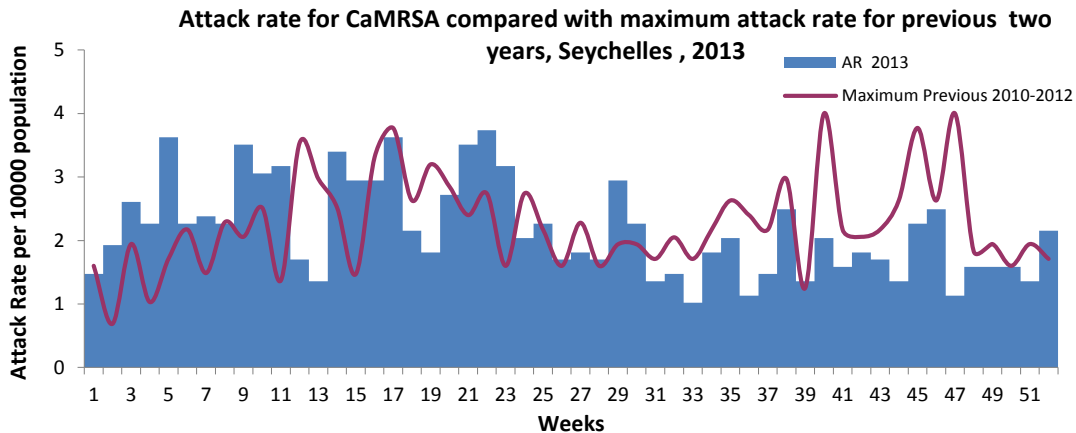
Graph 9. Trend of Conjunctivitis for 2013



During 2013, there was relatively no significant activity associated with conjunctivitis even during the epidemic prone period with the AR remaining generally below the epidemiological threshold for 2013. A reduction of 0.3% in the number of cases was reported for 2013 compared to 2012.

MRSA

Graph 10. The trend of MRSA for 2013



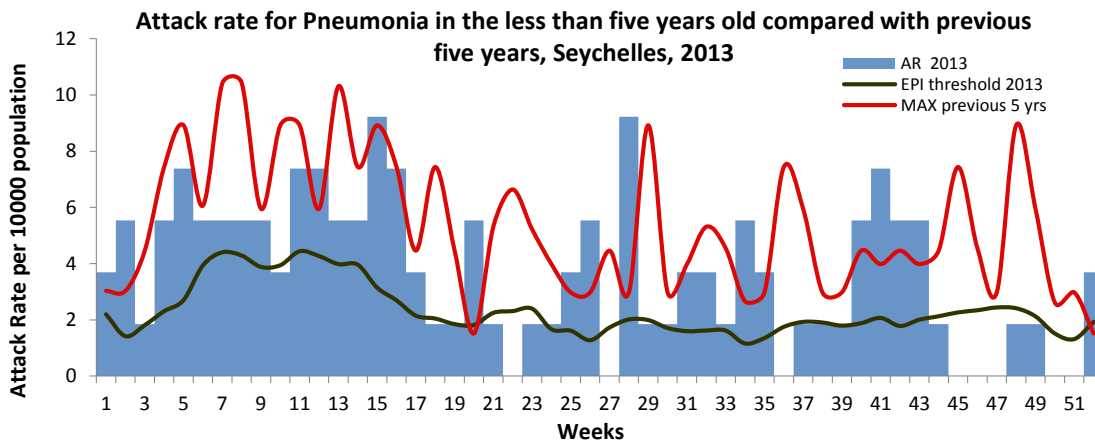
Since the first appearance of community acquired Methicillin Resistant Staphylococcus Aureus known as CaMRSA in the general population in Seychelles in 2010, newly confirmed cases are still being reported on a weekly basis. For the year 2013, 40% of the confirmed cases were males and 60% were females, 18% were aged less than 10 years old.

There has been a reduction of 0.38% in the number of new cases reported for 2013 compared to 2012.

Generally a fluctuating trend was observed throughout the year with AR remaining above the maximum AR for 2010 - 2012 for the first half of 2013 followed by a gradual decline from week 31 onwards.

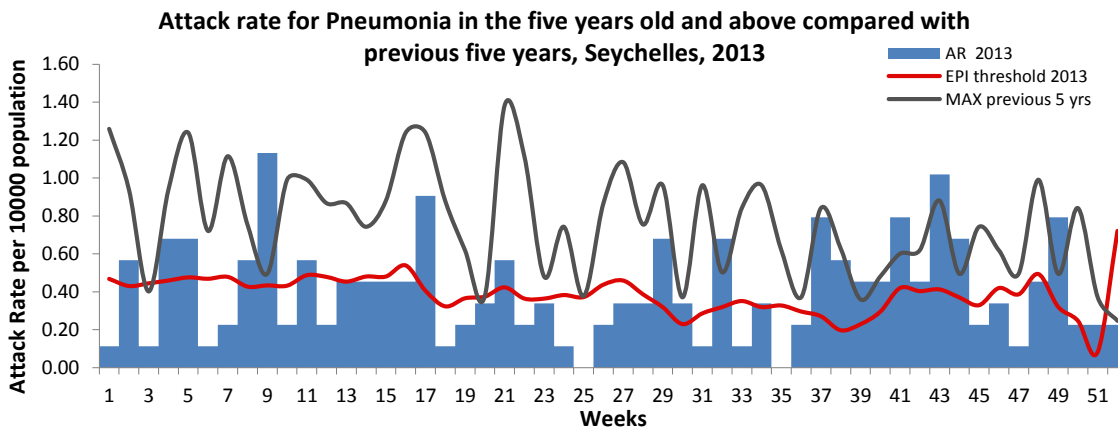
PNEUMONIA

Graph 11(i). The trend for Pneumonia in the less than five years old for 2013



Pneumonia in the less than five years has remained above the epidemiological threshold in 2013 though there has been a 21% reduction in the attack rate for 2013 compared to 2012. Similarly, the attack rate for pneumonia in the five years old and above has reduced by 10% in 2013 compared to 2012.

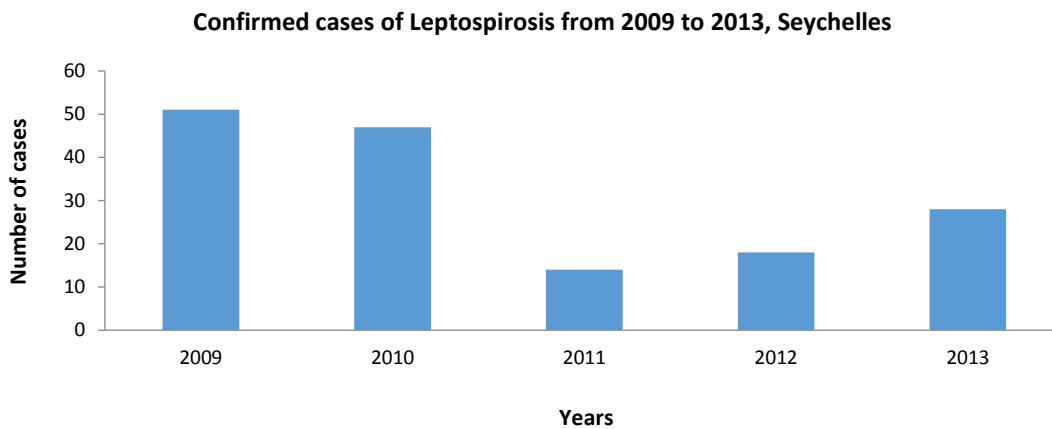
Graph 11(ii). The trend for Pneumonia in the five years old and above for 2013



LEPTOSPIROSIS

Leptospirosis in Seychelles remains a major Public Health concern. A total of 28 (26M/2F) confirmed cases of leptospirosis out of the 584 suspected cases were reported in 2013, representing an increase of 65% in confirmed cases compared to 2012. A total of 5 confirmed leptospirosis related deaths, all males were reported in 2013 age ranging from 30 to 51 years old, case fatality rate of 18% out of the total confirmed cases and a case detection rate of 4.8 per 100 tests.

Graph 12. Confirmed cases of Leptospirosis from 2009 to 2013, DSRU

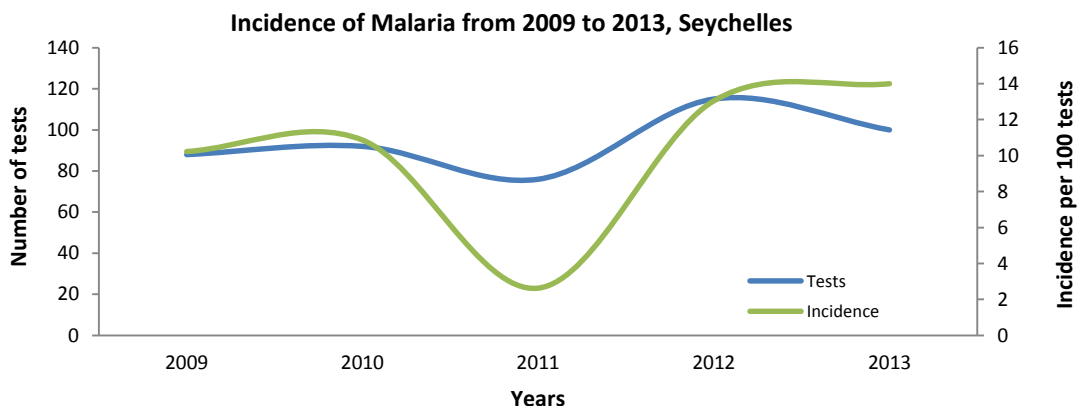


From 2009 to 2013, 158 positive cases of Leptospirosis were reported. More cases were reported in 2009 and 2010 followed by a decline in 2011 but have gradually increased from 2012 onwards.

MALARIA

A total of 50 (11%) positive malaria cases out of the 471 smears for malaria parasites conducted were reported from 2009 to 2013. In 2013, 14 positive malaria cases were reported representing a 7% reduction compared to 2012. All were imported cases since we do not have the vector anopheles mosquito in the Seychelles of which 71% were foreigners and the remaining 29% were Seychellois.

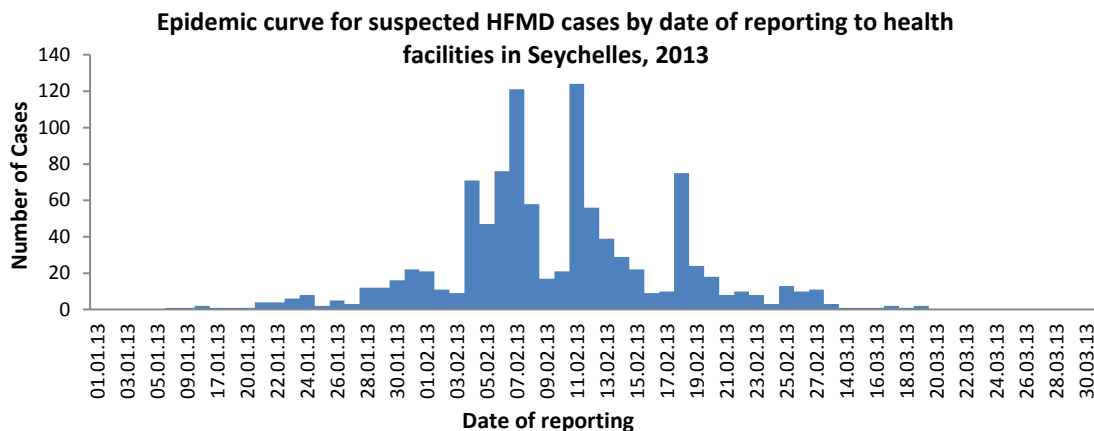
Graph 13. Incidence of Malaria from 2009 to 2013 in Seychelles.



EPIDEMICS IN 2013

HAND, FOOT & MOUTH

Graph 14. Epidemic curve for suspected cases of Hand, Foot & Mouth Disease by date of reporting to the health facilities for 2013

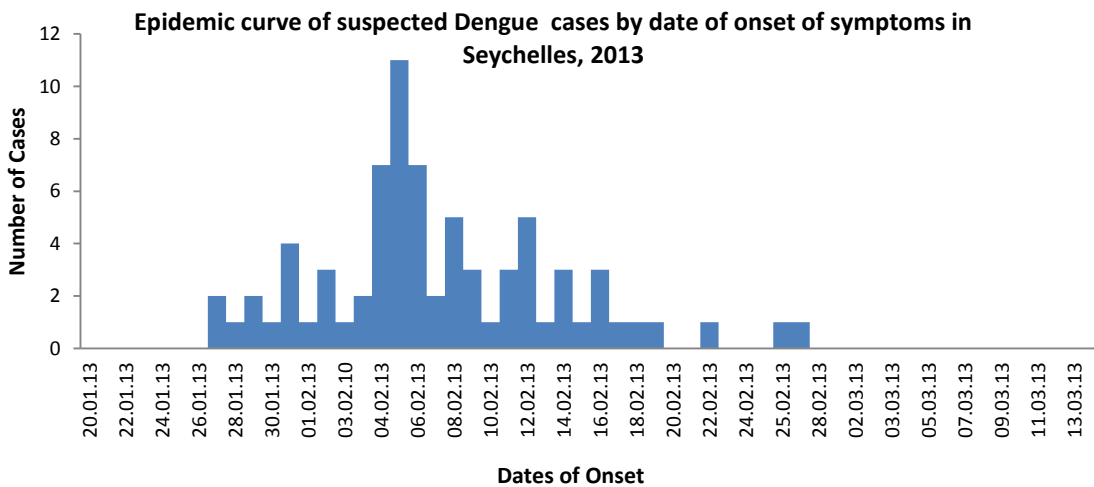


The first reported case of the Hand, Foot & Mouth Disease for the year 2013 was reported on the 6th of January 2013 and a total of 1090 cases were reported in total. Five out of the seven samples which were sent to South Africa were positive for Coxsackie A16 virus which is one of the viruses responsible for such epidemics.

The age group most affected was the 1 to 5 years old with 76.25 % of the cases and the least affected was the 16 years old and above with 1.02% of the total number of reported cases.

DENGUE

Graph 15. Epidemic curve of suspected cases of Dengue by date of onset for 2013



The first suspected case of Dengue was reported on the 30th January 2013, from La Digue then followed by cases on Mahé and Praslin. A total of 76 suspected cases of which 40 (53%) were females and 36 (47%) males were reported from the 30th January to the 28th February 2013. The youngest was 8 months old and the eldest aged 64 years, both males. Out of the 76 suspected cases 17 were confirmed positive. There were 10 (7M/3F) cases with moderate illness that were admitted to Seychelles Hospital no fatalities were reported.

A total of 16 districts were affected, La Digue reported 25% and Baie Ste Anne Praslin reported 15% of the total suspected cases.

BURKHOLDERIA PSEUDOMALLEI

In January 2013, the DSRU received a notification from the ICU (Intensive Care Unit) of the Seychelles Hospital of two cases of SARI (Severe Acute Respiratory infections). The two patients were male, both cooks from the same facility and worked in the same kitchen. They presented with a history of fever, cough, and shortness of breath and chest pain. Both patients' general condition deteriorated upon admission and were both admitted to ICU and one passed away.

The deceased was a Seychellois with no history of travel and the other patient was a Mauritian living in Seychelles for the past 10 years. A third possible case, a Malagasy who worked at the same premises but not in the kitchen was identified through active case finding and was investigated.










Lung and blood samples from the deceased and blood samples from the surviving case and suspected case were sent to the Health Protection Agency (Colindale) in England and the National Institute for Communicable Diseases in South Africa for investigation.

Results from the deceased patient revealed a recent infection with *Burkholderia pseudomallei* confirmed from the post mortem lung sample and the surviving patient had *Burkholderia pseudomallei* isolated from the sputum culture consistent with a recent infection. The suspected case had equivocal antibody results suggestive of possible exposure to *B. pseudomallei*,

To our knowledge this is the first report of *Burkholderia pseudomallei* in the Seychelles with a novel sequence profile that has never been documented before.

HIV AND AIDS LOCAL SITUATION

Local Situation from 1987 to 2013

 Cumulative HIV Cases	578 (334M/244F)
 Cumulative AIDS Cases	261 (163M/98F)
 Cumulative Deaths	116 (70M/46F)
 Cumulative HIV Positive Pregnancies	98
 Living with HIV & AIDS	376 (209M/167F)
 Cumulative Cases on HAART	218 (118M/100F)
 Left Seychelles	86 (55M/34F)
 Cumulative Loss to Follow- Up Cases	77 (42M/35F)
 Cumulative Drop-outs on HAART	39 (20M/19F)

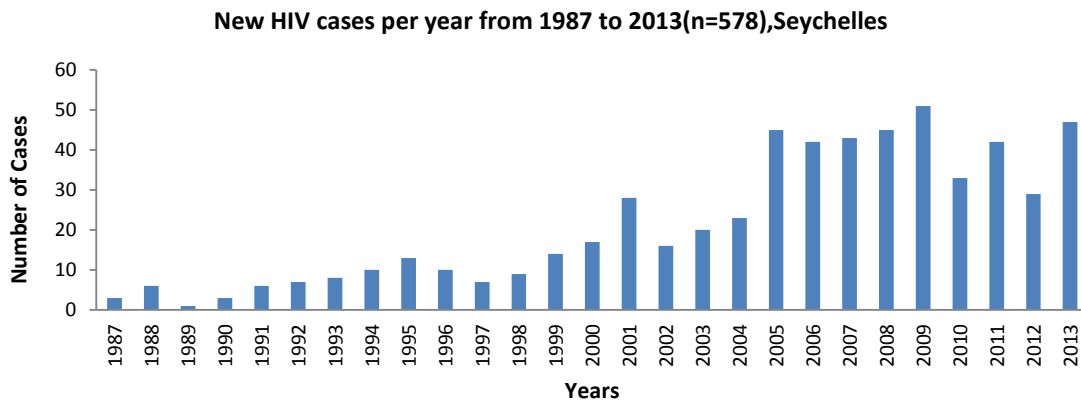
HIV

Over the past 26 years since the first HIV case was diagnosed in Seychelles, a cumulative of 578 (334M/244F) HIV & AIDS clients which represents 58% males and 42% females have been reported. Currently, 376 (209M/167F) cases are living with HIV & AIDS representing 60% males and 40% females.

For the year 2013, 47 (31M/16F) new clients have tested positive for HIV with age ranging from 9 months old (the youngest a female) to 69 years old (the eldest a male), the median age amongst the newly reported cases was 31 years old.

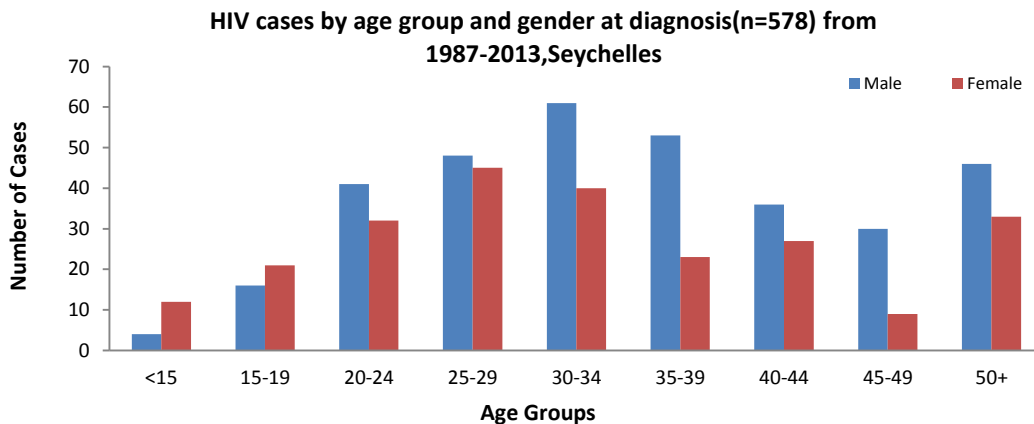
Out of the 346 (209M/167F) clients living with HIV & AIDS, 77 (42M/35F) cases did not accessed the service for over six months representing 22% of loss to follow-up (LTFU). A cumulative of 218 (118M/100F) clients are currently on Highly Active Antiretroviral Therapy (HAART) representing 58% people living with HIV and AIDS are currently on treatment. Of note, 39 (20M/19F) clients representing 15% of clients eligible for treatment as per WHO recommended guidelines defaulted treatment for more than three months in 2013.

Graph 16. New reported cases of HIV from 1987 to 2013 in Seychelles.



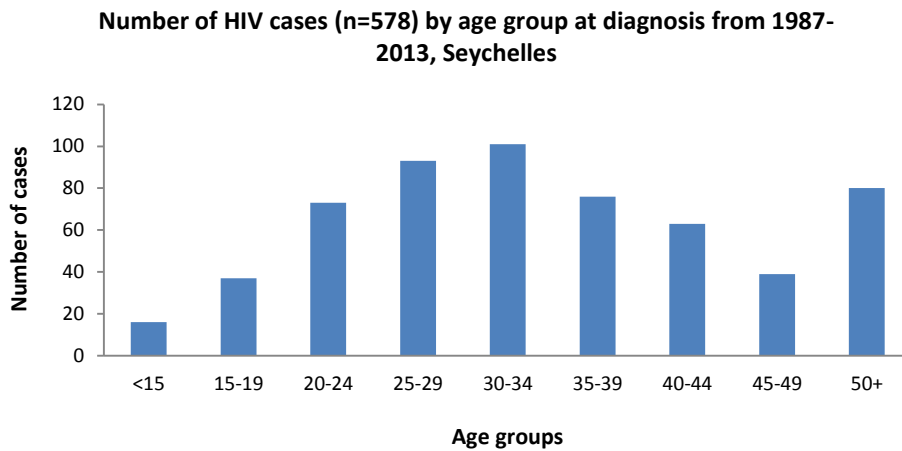
A fluctuating trend observed in the number of new cases reported each year. Of note, the year 2013 reported the second highest number of new cases, 47 compared to 51 cases in 2009, an increase of 62% in new cases compared to 29 cases in 2012.

Graph 17. New HIV cases by age group and gender at diagnosis from 1987 to 2013



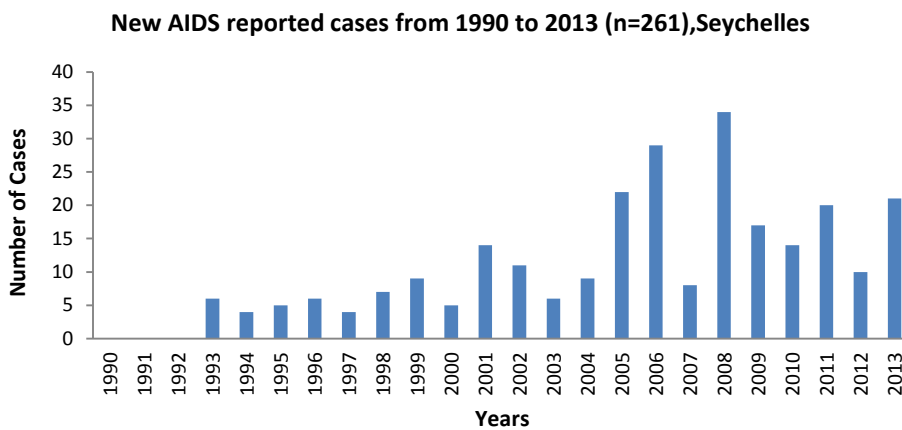
Males are more predominantly affected in all age groups throughout the years except the 0-19 year old age groups whereby there are more females. Age groups 25 to 39 years are more primarily affected but now with improvement in management of HIV and AIDS we have an increasing number of clients aging with the disease.

Graph 18. HIV cases by age group at diagnosis from 1987 to 2013



AIDS

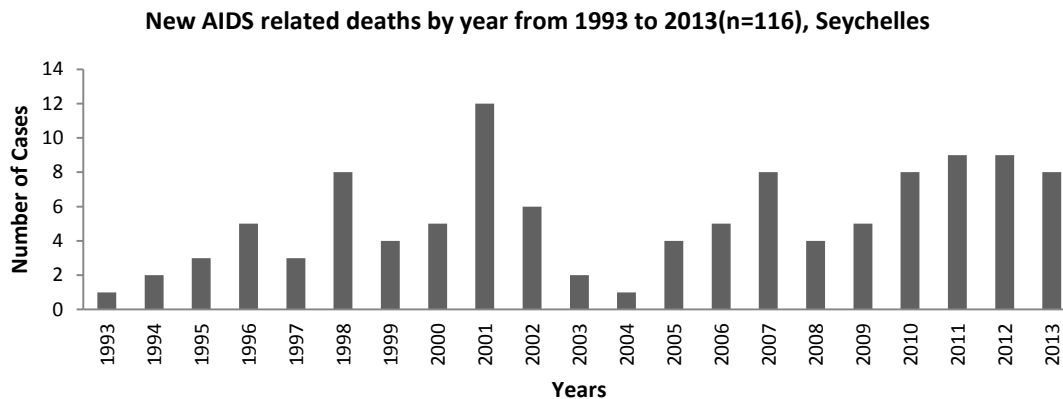
Graph 19. New AIDS reported cases from 1993 to 2013 in Seychelles.



The first AIDS case was reported in 1993, a cumulative of 261(163M/98F) AIDS cases has been reported by December 2013 representing 62% males and 38% females. There were 21(16M/5F) new cases reported in 2013, an increase of 110% compared to 10 new cases in 2012, 10 were newly detected HIV cases and 11 were cases who have defaulted treatment and review over the years and who reported in late stage of AIDS.

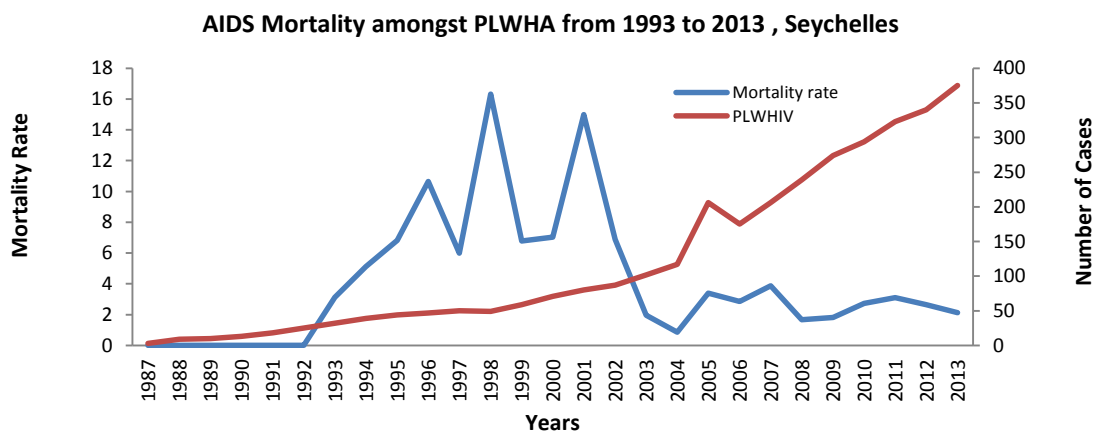
AIDS RELATED DEATHS

Graph 20. New AIDS related deaths by year from 1993 to 2013 in Seychelles.



A cumulative of 116 (70M/46F) HIV and AIDS deaths have been reported since 1993 to 2013, 60% of deaths occurred in males and 40% in females. There were 8 (4M/4F) AIDS related deaths reported in 2013 compared to 9 cases in 2012. Of note, 75% of the cases were newly diagnosed HIV and AIDS clients in 2013 and 25% of the cases were those who have defaulted treatment and follow-up, the youngest a 9 months old female and eldest a 69 year old male.

Graph 21. AIDS mortality amongst People Living with HIV and AIDS (PLWHA) from 1993 to 2013 in Seychelles.



AIDS mortality from 1993 to 2000 has generally been on the increase but gradually declined from 2001 when the Highly Active Antiretroviral Therapy (HAART) was introduced and accessible to all HIV & AIDS clients eligible for treatment as per WHO guidelines.

Before the introduction of Highly Active Antiretroviral Therapy (HAART), the AIDS related mortality was relatively high, 5 deaths (11%) out of 47 PLWHA in 1996, 8 deaths (16%) out of 49 in 1998 and 12 deaths (15%) out of 80 in 2001.

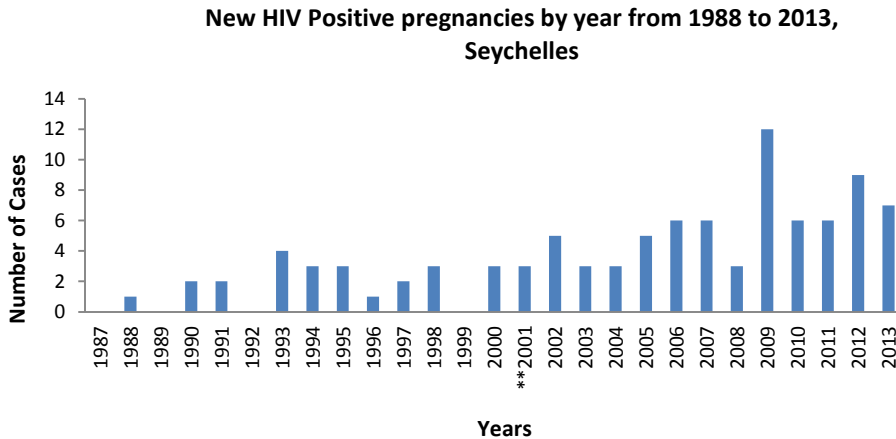
From 2002 onwards, a decreasing trend in AIDS mortality was noted from 6 deaths (7%) out of 87 PLWHA to 7 deaths out of 206 PLWHA (3%) in 2005, 8 deaths (3%) out of 294 PLWHA in 2010 to 8 deaths (2%) out of 376 PLWHA in 2013.

The AIDS mortality remains a challenge, 22% of known HIV & AIDS clients in 2013 were not adhering to treatment and follow-up and 15% of the newly diagnosed cases in 2013 reported in late stage of AIDS with opportunistic infections and died of AIDS.

PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV (PMTCT)

A cumulative of 98 HIV positive pregnancies have been reported from 1987 to 2013, of which 74 (76%) have benefited from the PMTCT program since its introduction in 2001 from monotherapy to tritherapy today.

Graph 22. New HIV positive pregnancies from 1988 to 2013 in Seychelles.



**2001: The year in which the Prevention of Mother to Child Transmission program was introduced in Seychelles.

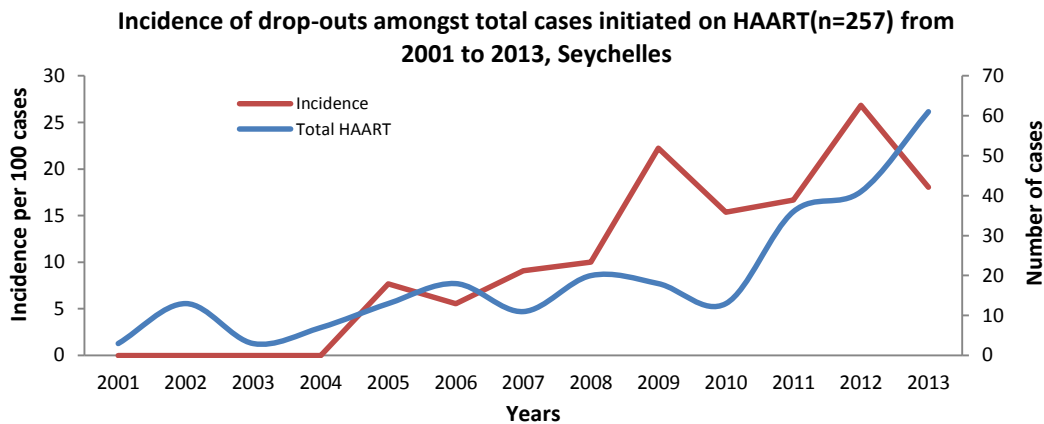
For the year 2013, 7 new HIV positive pregnancies were reported, a reduction of 30% compared to 2012. Before the PMTCT era, 8 out of the 23 babies born from HIV positive mothers were infected with HIV representing a mother to child transmission rate of 35% compared to 2 out of the 74 babies since the introduction of PMTCT program representing a mother to child transmission of 3%.

Two babies were reported HIV positive at 9 months of age in 2013 and both their mothers tested HIV negative at 36 weeks gestation. There is a possibility that they could have been infected either late in pregnancy, during delivery or whilst breastfeeding hence further emphasise the need of testing of both partners.

HIGHLY ACTIVE ANTIRETROVIRAL THERAPY (HAART)

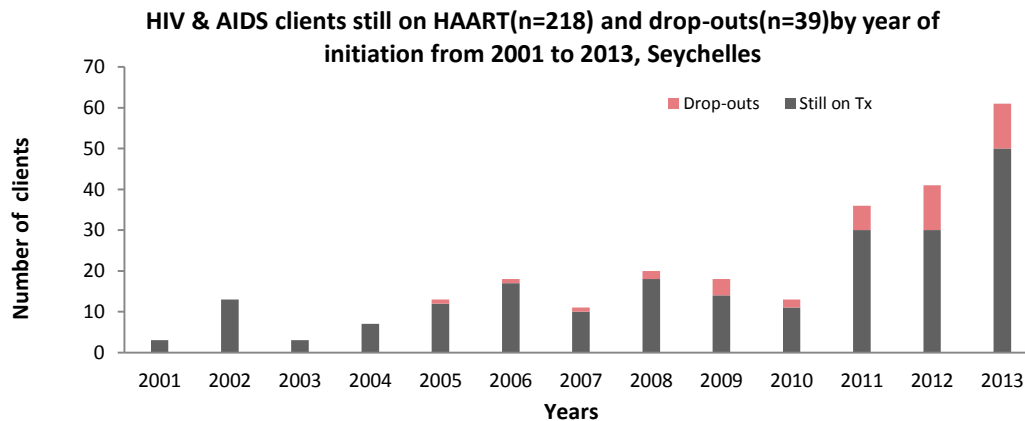
From 2001 to 2013, 257 (138M/119F) HIV & AIDS clients were initiated on Highly Active Antiretroviral Therapy (HAART), which represents 54% males and 46% females. However, increasing number of treatment drop out cases are reported every year.

Graph 23. Incidence of drop-outs amongst total number of cases initiated on HAART



As of December 2013, a total of 39(20M/19F) HIV & AIDS clients representing 15% who are eligible for treatment have defaulted treatment for more than three months. A fluctuating trend in the incidence of drop-outs from 8% in 2005, 10% in 2008, 17% in 2011, 27% in 2012 and 18% of cases initiated on HAART in 2013 respectively.

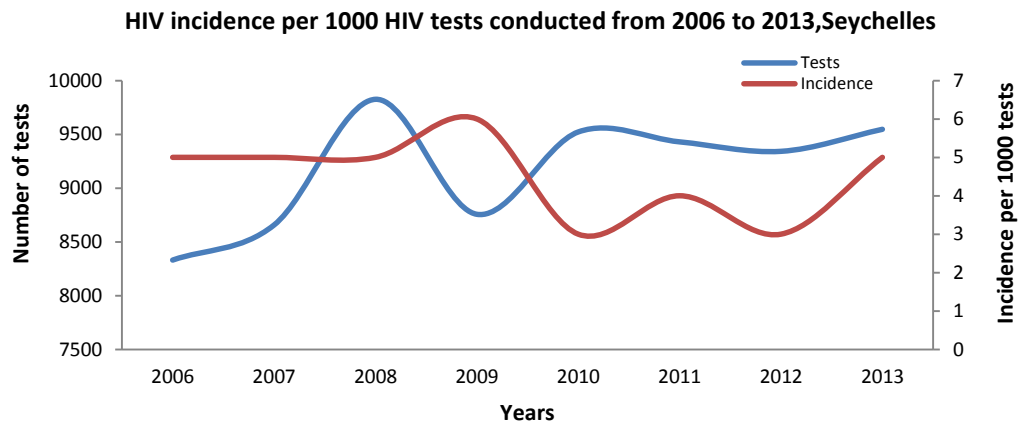
Graph 24. HIV & AIDS clients still on HAART and drop-outs by year of initiation, Seychelles



In 2013, 61 (38M/23F) HIV & AIDS clients were initiated on Highly Active Antiretroviral Therapy (HAART), representing 62% in males and 38% in females respectively, an increase of 33% in new cases compared to 46 in 2012. Of the 61 new cases initiated on HAART in 2013, 11(7M/4F) cases representing 18% have defaulted treatment for more than three months.

HIV TESTING

Graph 25. Incidence of HIV amongst total number of HIV tests conducted from 2006 to 2013



The HIV incidence has remained constant at 5 per 1000 HIV tests for the year 2006 to 2008 but increased to 6 per 1000 HIV tests in 2009. From 2010 to 2012, there was a decreasing trend in the incidence. The incidence for 2013 was 5 per 1000 HIV tests.

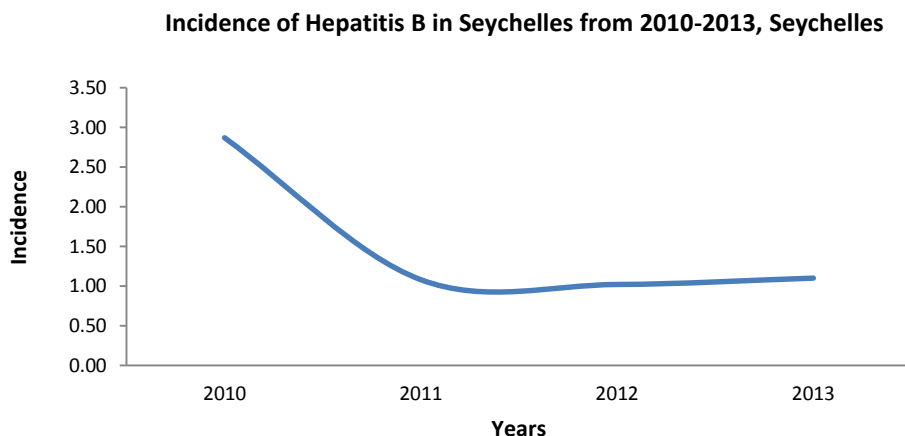
A fluctuating trend in the number of HIV conducted between 8000 and 10000 tests. A total of 9547 HIV tests were conducted for 2013, an increase of 2% compared to 2012. HIV tests were conducted in all VCT centers, Wards, Antenatal Clinics and the Blood Transfusion Center.

OTHER COMMUNICABLE DISEASES OF IMPORTANCE

HEPATITIS B

A cumulative of 29 cases have been detected since 2008 to 2013 out of which 7 cases (24%) were females compared to 22 cases (76%) which were males. Out of the 29 cases, 1 case, a male has Hepatitis B and HIV Co-infection. A total of 5(4M/1F) cases were reported in 2013, an increase of 25% compared to 2012.

Graph 26. Incidence of Hepatitis B from 2010 to 2013



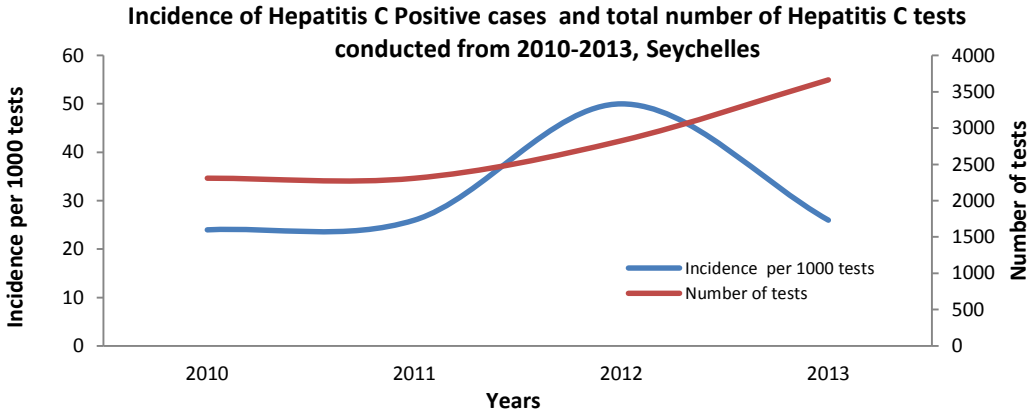
The incidence of Hepatitis B has remained constant at 1 per 1000 tests since 2011 to 2013, an increase of 16% in the number of Hepatitis B tests conducted in 2013 compared to 2012. The majority of the tests were carried out in Prison, Mental Health Services, CDCU, Occupational Health Clinic and Blood Transfusion Centre.

HEPATITIS C

From 2002 to 2013, a cumulative of 394 cases of Hepatitis C were detected, 322(82%) males and 72(18%) females. Out of the 394 cases, 27(18M/9F) were HIV and Hepatitis C co-infection and 6(3M/3F) Hepatitis C related deaths.

For the year 2013, 97(81M/16F) new cases of Hepatitis C were detected representing a reduction of 45% in new reported cases compared to 2012. The age group most affected was the 20 to 29 years representing 51.5% of the total cases reported for 2013, the youngest was a 15 year old female and the eldest a 52 year old male. There were 5 (1M/4F) new cases of HIV & Hepatitis C co- infection, 1 Hepatitis C related death (1F) and 2 Hepatitis C related pregnancies reported.

Graph 27. Incidence of Hepatitis C per 1000 Hepatitis C tests conducted from 2010 to 2013.

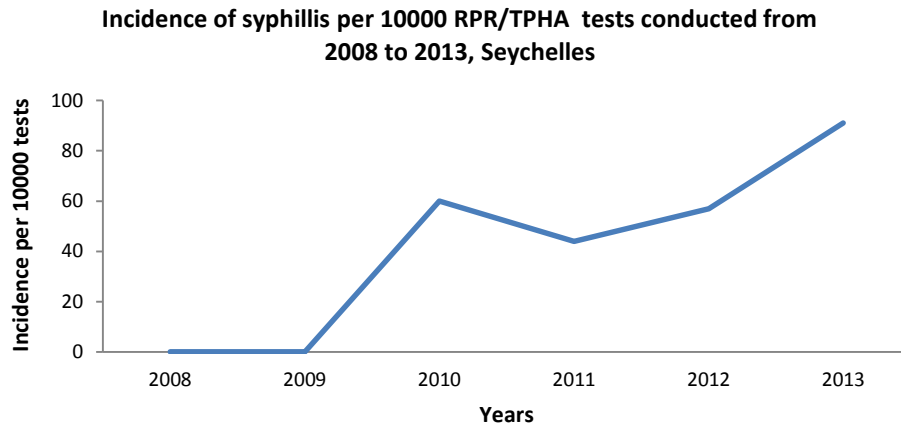


No data is available for 2005 to 2007. There was a gradual increase in the incidence of Hepatitis C reported from 24 per 1000 tests in 2010 to 50 per 1000 tests in 2012 followed by a rapid decline to 26 per 1000 tests in 2013. Out of the 394 cases reported to date, 391 (99%) cases were confirmed to be Intravenous Drug Users. An increase of 30% was also observed in the number of Hepatitis C tests conducted in 2013 compared to 2012. From 2008 to 2013, 37% of the Hepatitis C cases were reported from the Mental Health Services, 30% from the Prison and 19% from the CDCU.

SYPHILIS

An increase of 53% in new syphilis cases and a reduction of 4% in the number of RPR/TPHA tests performed for 2013 compared to 2012.

Graph 28. Incidence of syphilis per 10000 RPR/TPHA tests conducted from 2008 to 2013.

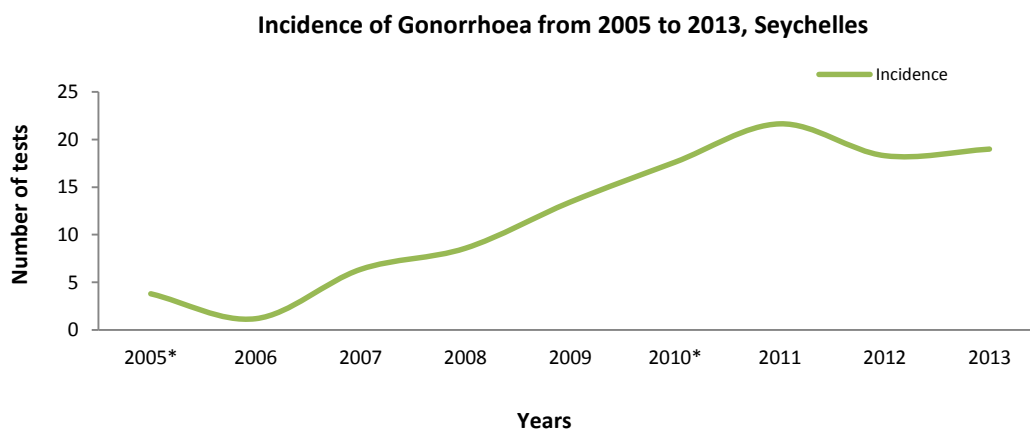


A significant increase in the incidence of syphilis has been observed over the past four years from 60 per 10000 RPR/TPHA tests in 2010 to 91 per 10000 RPR/TPHA tests in 2013, a growing epidemic.

GONORRHEA

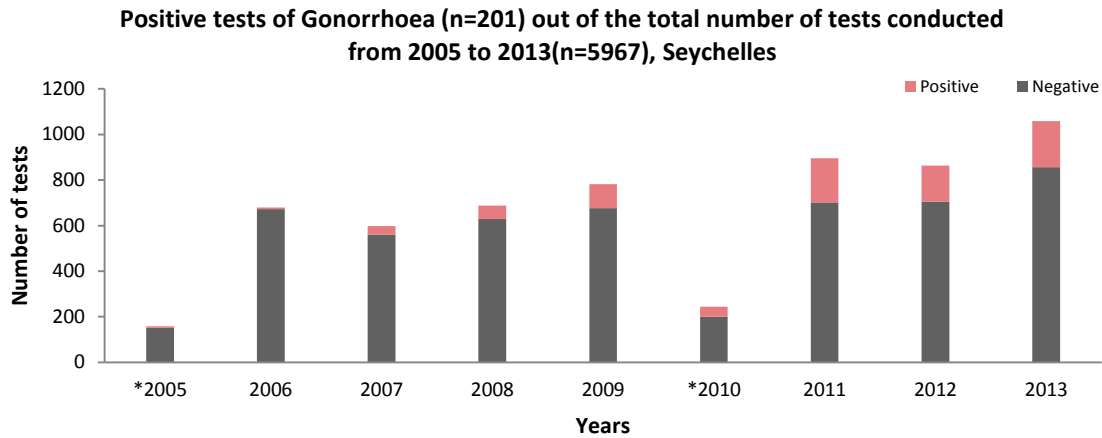
The incidence of Gonorrhoea has generally been on the increase over the years from 1 per 100 tests in 2006 to 13 per 100 tests in 2009, 22 per 100 tests in 2011 and 19 per 100 tests in 2013, a reduction of 6% compared to 2012.

Graph 29. Incidence of Gonorrhoea per 100 tests conducted from 2005 to 2013.



A total of 5967 tests for Gonorrhoea were conducted from 2005 to 2013 with 812 positive cases representing a case detection rate of 14%.

Graph 30. Positive gonorrhoea out of the total number of tests conducted from 2005 to 2013



The year 2013 reported 201 (146M/55F) Gonorrhoea cases, an increase of 20% in positivity and 23% increase in the number of tests conducted as compared to 2012. The youngest affected was a 14 year old and eldest a 62 year old, both males, age group more predominantly affected was the 15-29 years, representing 58% of the total reported cases.

Table 1. Sensitivity and resistant pattern of gonorrhoea detected in 2013

	Resistant	Sensitive
Ciprofloxacin	76%	9%
Ceftriaxone	12%	78%
Cefixime	10%	73%

Amongst the 201 positive gonorrhoea cases detected in 2013, antimicrobial sensitivity testing were conducted for Ciprofloxacin, Ceftriaxone and Cefixime.

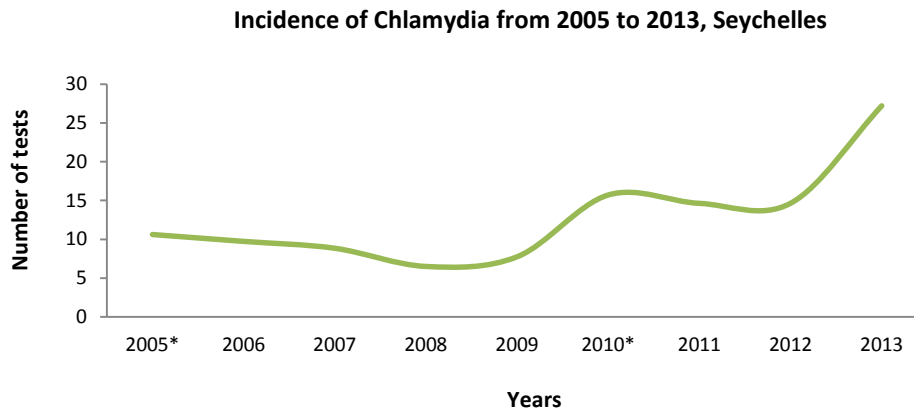
Of note, 76% of the positive cases were resistant to Ciprofloxacin and 78% of the positive cases were sensitive to Ceftriaxone.

CHLAMYDIA

A total of 3828 tests for Chlamydia Trachomatis were conducted from 2005 to 2013 with 590 positive cases reported representing a case detection rate of 15%.

A gradual increase in the incidence for Chlamydia Trachomatis was observed from 6.53 per 100 tests in 2008 to 14.65 per 100 tests in 2011, 14.66 per 100 tests in 2012 and 27.21 per 100 tests in 2013, an increase of 86% in 2013 compared to 2012. The year 2013 also reported an increase of 50% in the number of tests conducted compared to 2012. The youngest was a 14 year old and eldest a 68 year old, both males. The age group most predominantly affected was the 15-29 years, representing 58% of the total positive reported cases. To note that 3 cases of ophthalmia neonatorum due to Chlamydia were also reported in 3 neonates.

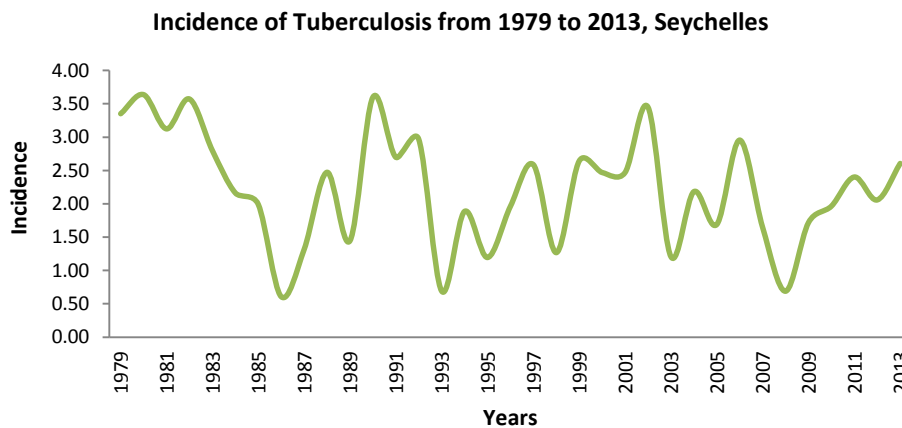
Graph 31. Incidence of Chlamydia Trachomatis per 100 tests conducted from 2005 to 2013.



TUBERCULOSIS

A cumulative of 580 confirmed tuberculosis cases have been reported from 1979 to 2013, 412 (71%) cases were males and 168 (29%) were females. There were 31 tuberculosis related deaths out of 580 cases since 1976 and 31 cases of HIV & TB Co –infection reported from 2000 to 2013. No data available for the previous years.

Graph 32. Incidence of Tuberculosis in Seychelles from 1979 to 2013.

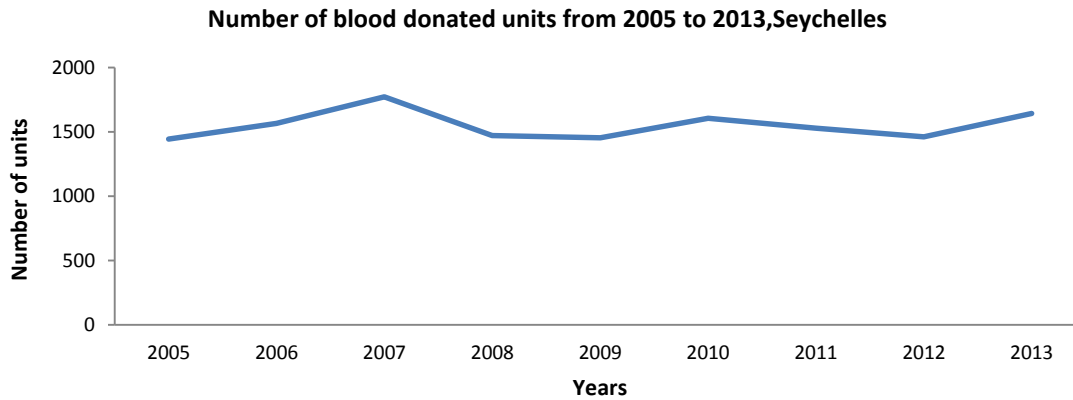


In 2013, 23(16M/7F) newly confirmed tuberculosis cases were reported , 20(87%) cases of Pulmonary TB and 3(13%) cases of Extra Pulmonary TB were reported, an increase of 28% in the total number of cases compared to 2012. Of note 35% of the new cases were expatriates. There was 1 HIV & TB Co- Infection reported, a male, and 5 (4M/1F) tuberculosis related deaths of which 60% were Seychellois. No cases of MDR or XDR TB have been reported to date.

BLOOD SAFETY

From 2005 to 2013, 13,949 blood units were donated at the Blood Transfusion Centre at the Seychelles Hospital, and the donations varied from regular, voluntary and family replacement donations.

Graph 33. Illustrates the trend in blood donated units from 2005 to 2013 in Seychelles



The number of blood donated units donated from 2005 to 2013 has remained fairly constant over the years with an average ranging from 1400 to 1700 units annually.

A total of 1644(1376M/268F) blood units were donated in 2013, an increase of 12.5% compared to 2012, of which 25% were regular donors, 19% were voluntary donors and 56% were family replacements. Of note, 16% of the total blood donors for 2013 were newly recruited blood donors. All donated blood units are screened for HIV, Hepatitis B, Hepatitis C and Syphilis in a quality assured manner at the Blood Transfusion Centre prior to transfusion. In 2013, 0.19% of blood donated units tested positive for syphilis and 0.06% tested positive for Hepatitis C and not a single unit tested positive for HIV or Hepatitis B.