Key features
2012

Health Situation
in New Caledonia
2012

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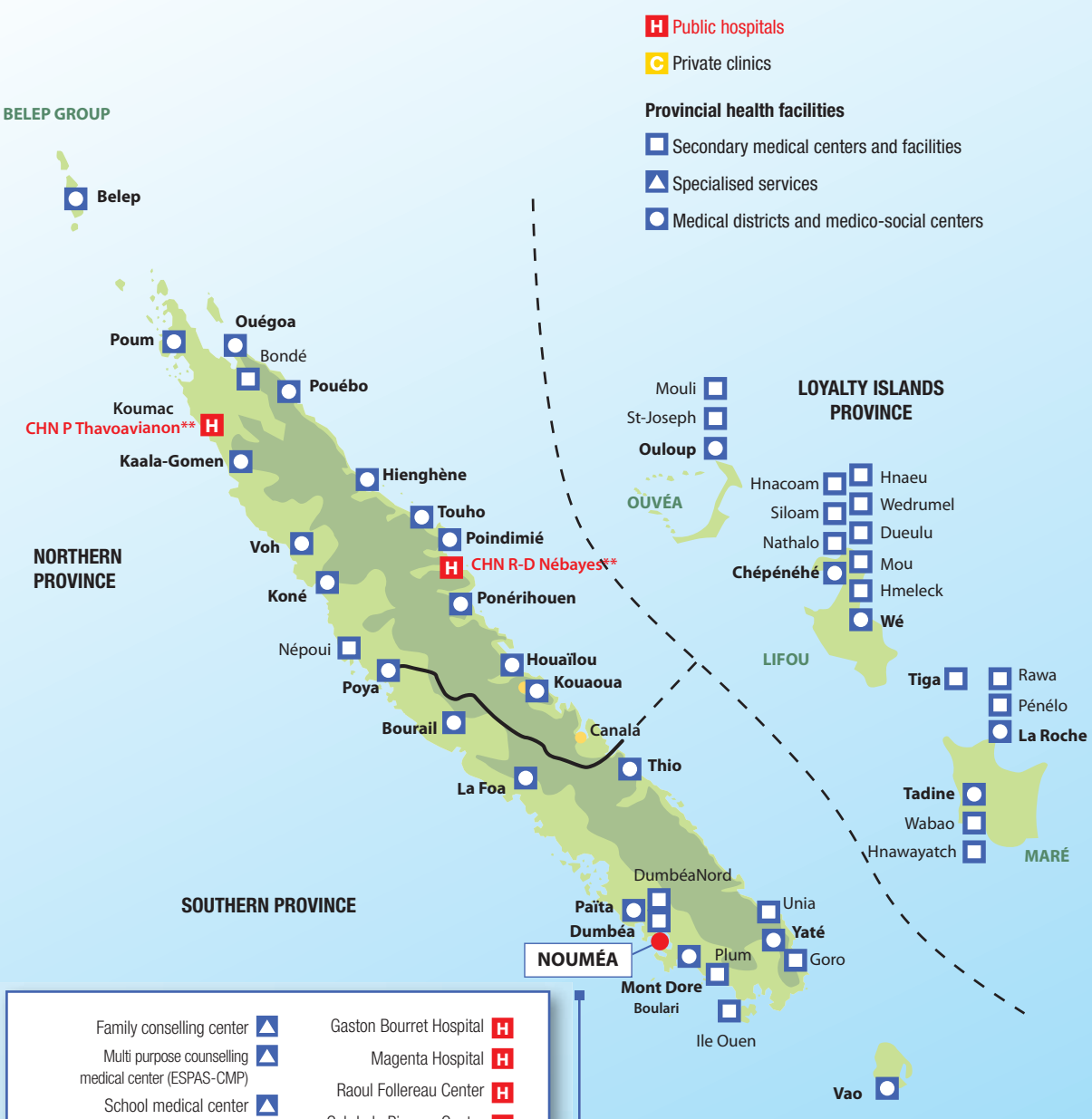
DASS
Direction des Affaires Sanitaires et Sociales

Main health facilities in New Caledonia



** The health facilities and staff available to the people of New Caledonia are detailed in Chapter II: Health Services*

*** The Koumac and Poindimié (Northern Province) hospitals each have a medico-psychological unit attached to the A. Bousquet 'CSH' (Specialised Hospital Centre)*

2012

contents

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DEMOGRAPHIC CHARACTERISTICS

The population of New Caledonia grew by 5.9% between the 2009 population census and the estimated population at 31 December 2012.

	Population as at 31/12/2012	Rate of increase [1]	Live births	Birth rate [2]	Fertility index [3]	Infant mortality [6]	Number of deaths	Crude mortality rate [4]	Crude perinatal mortality rate [7]	Life expectancy at birth [5]
New Caledonia	260 000	11.9	4 389	17	2.17 (2010)	4.6 (2010)	1 322	5.1	13.5 (2010)	74.4/80.7 (2010)
Islands Prov. * (2011)	17 500	10.6	314	18	2.8	19.1	129	7.4		74.2
Northern Prov. * (2011)	46 000	12.8	820	18	2.3	4.9	238	5.2		75.9
Southern Prov. * (2011)	188 500	11.9	3 028	16.2	2.2	3	803	4.3		78.2
Mainland France in '000 INSEE	65.585 857		792 000	12.5	2.01	3.3	560 000	8.8		81
French Polynesia (2012) ISPF	268 270	12.3 (2010)		16.6	2.01 (2012)	5.5 (2010)		4.6		76.2
Australia (mi 2011)	22.7 million	1.2		14	1.9	4		6		79/84
New Zealand **	4.400 000		62 543	15	2.2	5	28 964	7		79/83

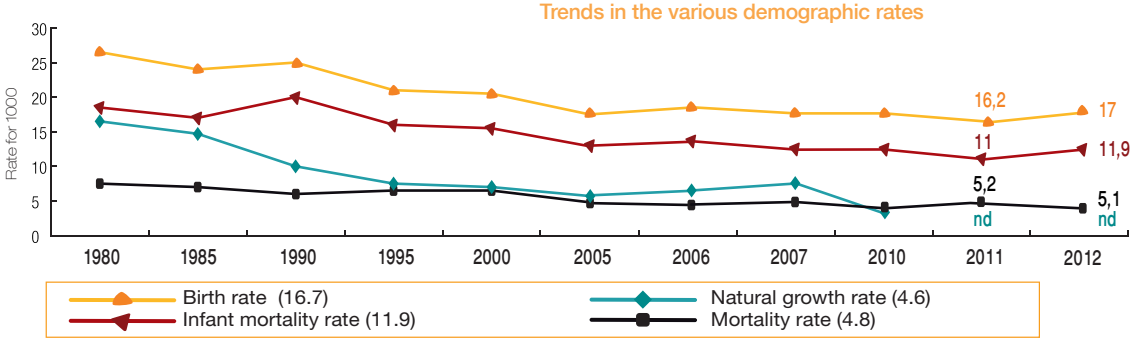
INSEE - ISEE - INED

The 2012 data relating to people residing in the Province are not available.

The natural growth rate [1] Representing the difference between the crude birth and crude death rates for the year concerned, this rate stood at 11.9‰ in 2012.

The birth rate [2] has been constantly falling since the 1960s, from 34.5 in 1965 to 23.4 in 1985 and 17‰ in 2012; a sharp rise in the birth rate was recorded in 2012, with 6.5% more births being recorded.

Trends in the various demographic rates



Fertility index [3] 2.17 per 1000 women of reproductive age.
A decrease in the fertility rate range by age between 1981 and 2005, with a rising average age for motherhood (from 26.4 in 1980 to 28.7 in 2010), can be observed.

Crude mortality rate [4] 4.8 per 1000. After a distinct drop in the 1970s and 1980s, the crude death rate decreased at a lower rate until 1998.
Since then, it has varied little and has remained slightly above 5 deaths per 1000 since 2005.
Male mortality is higher with a peak between the ages of 20 and 25.

In 2010, the crude death rate gradually rose in the Islands Province (7.4) and the Northern Province (6.1). It remained relatively stable in the Southern Province (4.3).

Life expectancy at birth [5] 77.4 years in 2010 (men: 74.4; women: 80.7).
Life expectancy at birth is characterized by a regular increase, with higher gains for men than for women over the last 20 years and a continuing gap between men and women.

Infant mortality rate [6] 4.6‰. After a sharp drop in the 1970s, this rate, which is an indicator of a country's socio-economic and health development status, fell more gradually until the early 1990s, when it dropped below 10‰. Since 2001, a regular but less marked decrease can be observed with the rate moving increasingly closer to that of metropolitan France and the European countries.

New Caledonia still has a young population (41.2% under 25 yrs old).
Improvements in socio-economic and health conditions have helped in raising life expectancy and reducing mortality, in particular infant mortality, which is now close to the developed country rate. However, the fall in the fertility rate, which is still higher than that necessary to maintain current population size, points to future difficulties associated with an ageing population.

MEDICAL CAUSES OF DEATH

Some 1322 medical death certificates were issued in 2012 (men: 774; women: 548).
The following classification by disease group varies only slightly from year to year.

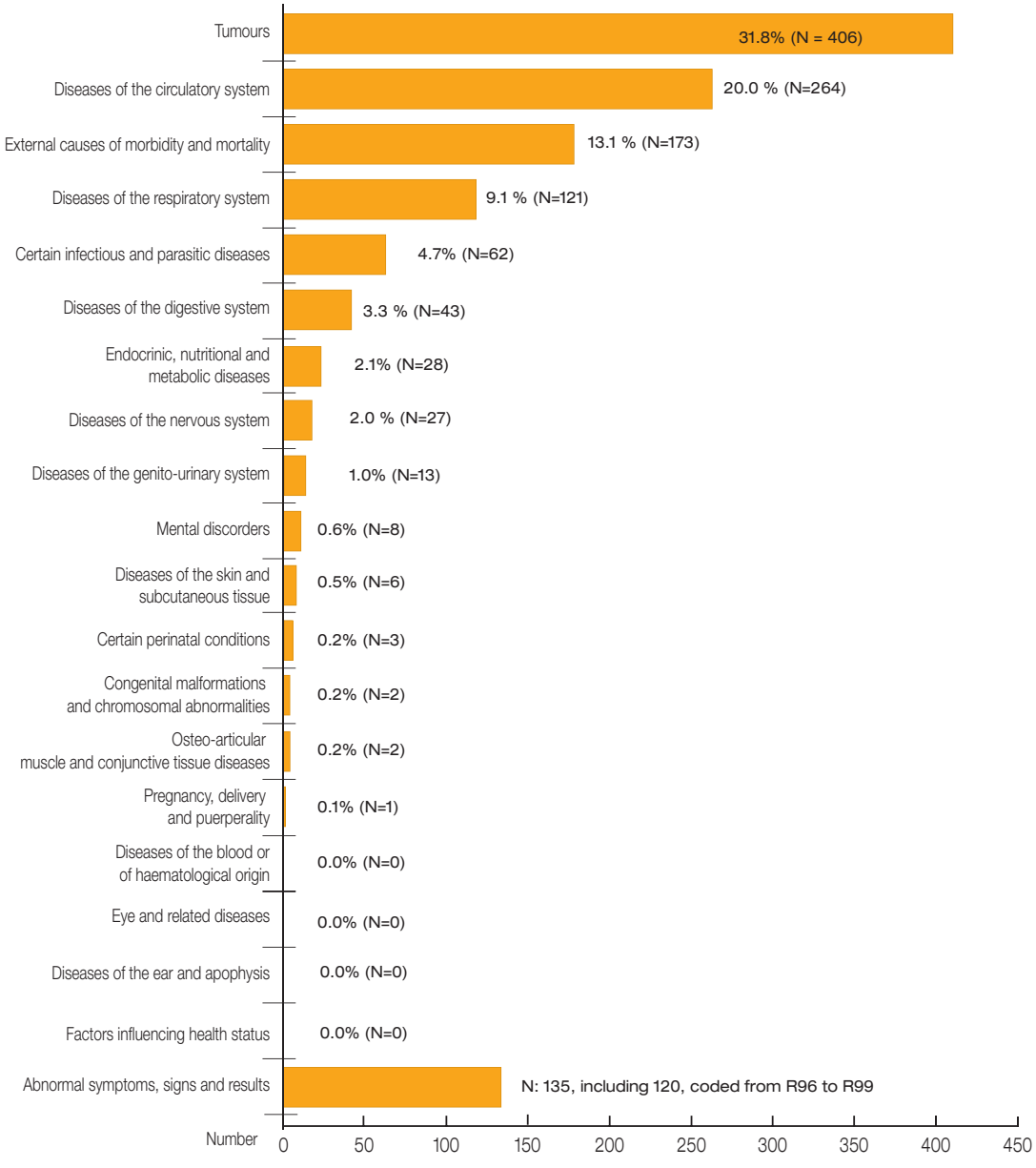
In 2011, gender-disaggregated, the 5 main causes of death were as follows:

	Men	Women
Tumours	31.5%	32.4%
Circulatory system	21.9%	23.6%
External causes of morbidity	15.4%	7.7%
Respiratory system	8.9%	7.7%
Abnormal symptoms. signs and results	9.6%	10%

It is noteworthy that the external causes of morbidity group remained the principal cause of death in the young population in 2012, accounting for 75.5 % of deaths in 1-24 year-olds and 8.2 % of deaths in 25-44 year-olds. This group represents the leading cause of premature death in both sexes in New Caledonia, with 4090 years of potential life lost (YPLL) in 2012 (YPLL is 5.8 times higher in men than in women).

1 Natural growth rate: difference between crude birth rate and crude death rate expressed as a per 1000 population figure.
2 Birth rate: ratio of annual number of live births to total population at the half-way stage of the year concerned expressed as a per 1000 population figure.
3 Fertility index or conjunctural fertility indicator: sum of all fertility rates by age for the year concerned.
4 Crude mortality rate: ratio of annual number of deaths to total population at the half-way stage of the year concerned expressed as a per 1000 population figure.
5 Life expectancy at birth expresses the mean number of years of life awaiting a new-born child if the mortality trends at the time of birth do not change.
6 Infant mortality rate: the ratio between the number of deaths in children under the age of one per 1000 live births in the year under consideration.
7 Crude perinatal mortality rate: number of stillborn children and deaths between 0 and 6 days for 1000 total births.

Breakdown of causes of death in 2012



MEDICAL CAUSES OF PERINATAL DEATH

In 2012, 6.4 child deaths were reported through specific perinatal death certificates making a total of 1346 deaths for the 1993-2012 period.
Some 73.1% of these deaths concerned very premature births (<32 weeks).

For the 1993-2012 period, 210 certificates involved **medical terminations of pregnancy** (MTP), the most frequent reasons for which were congenital disorders (nervous system: 26.6% ; chromosomal defects: 18.1% ; other congenital anomalies: 26.6%).

Of the 1136 neonatal deaths not including MTP, 31.1% had no determining foetal or neonatal cause.
For the remaining 783 certificates, the cause was child-related in 90.5 % of cases and mother-related (maternal condition or pregnancy complications) in 9.5% of cases. Among child-related causes, intra-uterine hypoxia and/or birth asphyxia accounted for 34 % of cases and congenital defects 15.6% of cases.

INFECTIOUS DISEASES

Notifiable diseases (not including cancers - see specific chapter)

In 2012, 1644 notifiable disease cases were reported, not including cancers.
Following the establishment of the register of acute rheumatic fever (ARF) patients, the Health Agency was not in a position to provide the 2012 figures for this report.

Two reporting categories exist:

Emergency alert an emergency procedure to issue an alert and communicate individual case data without delay and using any appropriate means with no specific form or format.

Notification a procedure for individual data transmission by the notifying physician or lab technician, using a specific form for each disease.

Notifiable diseases of group B	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Amoebiasis	13	20	11	6	0	1	1	1	0	0	1	0	0
Whooping cough	3	0	1	0	1	72	4	1	0	1	3	2	6
Dengue fever	12	34	105	5 673	792	46	48	47	1 179	8 410	122	15	718
Diphteria	0	0	0	0	0	1	0	0	0	0	1	0	6
Typhoid and paratyphoid fever	0	3	0	0	0	1	0	1	0	0	0	2	1
Viral Hepatitis B	40	49	31	39	29	11	9	31	102	33	5	6	5
Viral Hepatitis C	0	1	0	0	0	0	0	2	0	2	0	1	0
Leprosy	7	7	2	4	8	4	7	2	6	7	8	10	5
Leptospirosis	28	23	49	23	13	40	65	53	157	162	42	138	75
Meningococcal meningitis	4	9	10	11	3	5	7	13	9	8	10	10	5
Indigenous and imported malaria	3	1	1	5	6	0	0	0	2	0	10	1	2
ARF	55	56	66	34	287	305	80	296	136	190	122	86	ND
Measles	0	0	0	0	0	0	1	0	0	0	0	0	0
HIV related syndromes	21	15	17	8	7	13	10	21	15	13	14	18	26
Tetanus	0	1	0	0	0	0	0	0	0	0	0	0	0
Collective food poisoning (foci)	3	9	1	6	0	8	10	8	6	9	11	28	13
Tuberculosis (not inc.latent infection)	171	100	112	82	84	72	90	67	80	83	59	50	37
Vibrio vulnificus									3	1	0	1	2

In 2012, no cases of poliomyelitis, botulism or brucellosis were observed. A total of 75 cases of leptospirosis and 718 cases of dengue were reported.

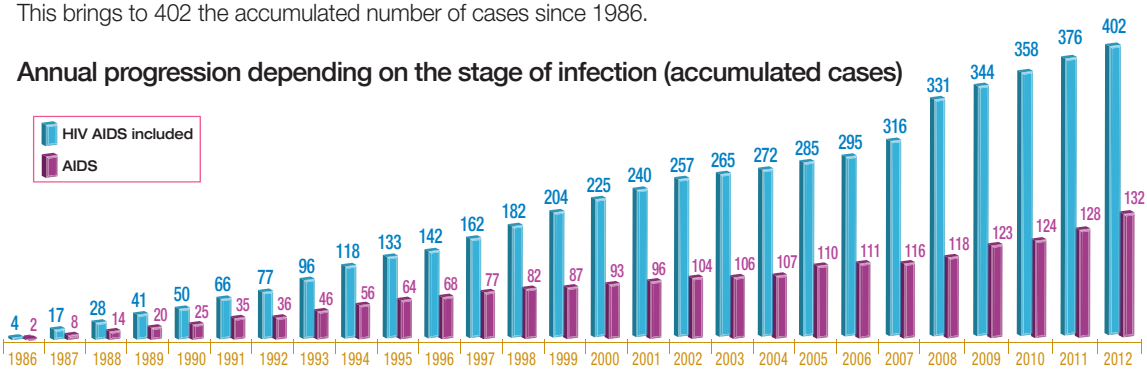
Sexually transmitted diseases:

Notifiable diseases of group C	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Condyloma acuminatum	26	27	28	26	17	3	12	22	28	25	30	1	6
Genital herpes	2	3	3	5	4	2	3	10	8	7	5	12	2
Mycoplama infections	115	119	107	90	93	108	134	219	184	160	104	3	3
Genital chlamydial infections	94	96	72	86	88	71	96	148	191	202	150	319	492
Gonococcal infections	52	55	49	31	33	35	58	82	90	77	68	141	152
Syphilis	24	16	11	10	20	15	21	38	36	46	38	49	66
Uro-genital trichomonasis	250	203	156	175	158	115	98	206	118	153	147	26	20
Other veneral diseases	198	121	77	75	55	40	50	60	72	86	13	3	2

The 2012 data relating to chlamydial genital infections, gonococcal infections and syphilis are drawn solely from the monthly laboratory records, because of extensive under-reporting.

Statistical data regarding HIV infection come from notifiable disease surveillance activities and from specific initial notification forms and supplementary notifications of HIV-induced syndromes.
26 new HIV-positive cases were recorded in 2012 (including 17 confirmed by laboratories outside New Caledonia and 9 diagnosed and confirmed by IPNC – New Caledonia Pasteur Institute).
This brings to 402 the accumulated number of cases since 1986.

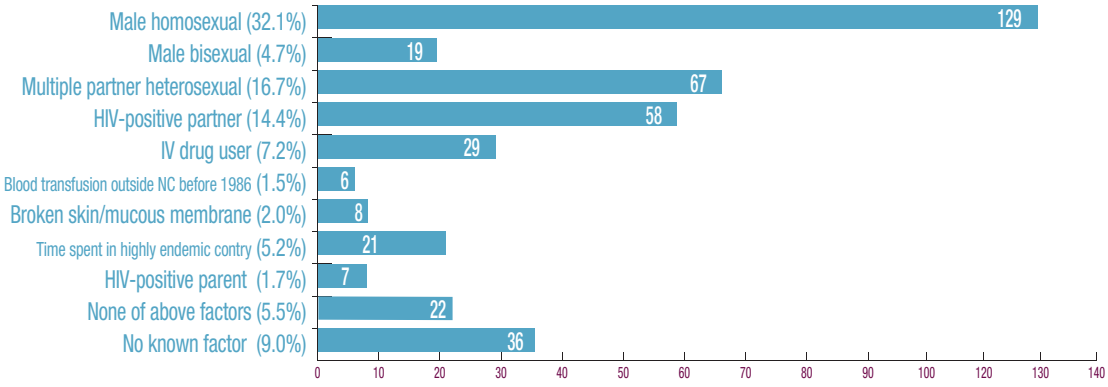
Annual progression depending on the stage of infection (accumulated cases)



As at 31 December 2012, the sex-ratio of accumulated cases was 2.9 males for 1 female.
The most affected age group, as in previous years, was the 20-39 year group with a rate of 33.1 per 10 000 population.

HIV risk factors

Breakdown of the 376 HIV-positive cases by risk factor



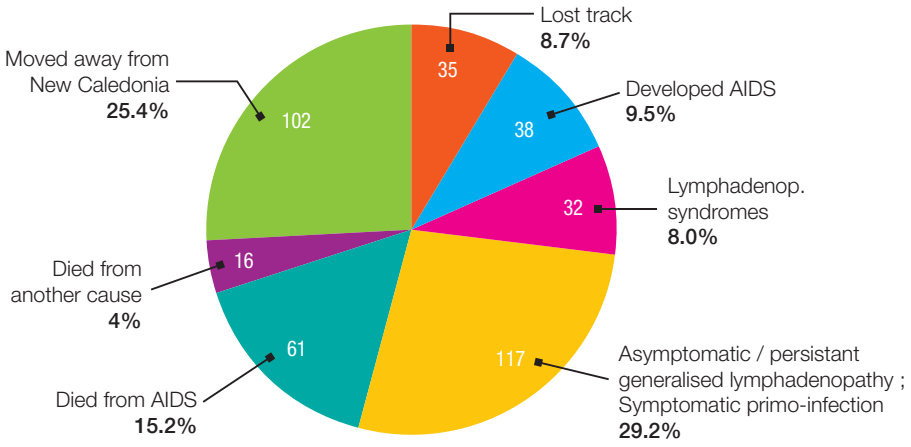
With regard to the cases whose risk factors are known, it can be noted that 79.4 % are linked to a sexual mode of HIV transmission, 54.2 % of which (148/273) are male homo/bisexuals.

After a gradual downward trend over the 1990-2005 period (58% to 40%), the male homo/bisexual risk factor percentage has again tended to rise over the past 6 years and has for a second time exceeded that recorded at the beginning of in the epidemic.

It should be noted that over time the 'HIV-positive partner' risk factor percentage has increased considerably from 10.3% (from 1986 to 1990) to 34% (from 2001 to 2005), then regularly fell to account for 22.6% of sexual risk factors in 2011. No further cases were recorded for this risk factor in 2012.

Trends in sexual risk factor distribution by age group from 1986 to 2012

Breakdown of the 402 HIV-positive persons by last known status



Last known status of HIV-positive persons

'Last known status' refers to the assessment contained in the latest supplementary report prepared by the attending physician. Of the 402 HIV-positive patients, 77 have died (including 16 of a cause other than AIDS) and 137 have moved away from New Caledonia or are no longer being monitored. Among the latter, some have probably left New Caledonia for good.

In New Caledonia, of the 26 cases recorded in 2012, 21 (80.8%) were at the asymptomatic stage, 2 (7.7%) were at the asymptomatic non-AIDS stage and 3 (11.5%) were at the confirmed AIDS stage.

Free and anonymous testing and counselling centres (CDAG)

In 1992, the Territorial Congress Standing Committee introduced free and anonymous testing and counselling centres (CDAG) for the human immuno-deficiency virus (HIV) (Resolution 211/CP dated 30 October 1992). This resolution was superseded by Resolution 154/CP dated 16 April 2004, specifying the standards of training required and the operating conditions for these CDAGs.

The visit is conducted by a consulting physician or a midwife approved by the Medical Inspector after receiving specific training on counselling in relation to HIV infection testing. Approved personnel receive patients either in their surgery (private practitioners and midwives) or at the counselling centres (these centres must meet requirements laid down in the resolution: the venue must be part of a multi-purpose medical centre, counselling must protect the confidentiality and anonymity of the process and the staff must have received special training for counselling).

Each visit must include a counselling session covered by a questionnaire developed by the Medical Inspector and completed by the doctor or midwife.

Since November 2005 and in 7 successive training sessions, 117 health professionals (80 doctors and 37 midwives) have been trained and are certified and active in New Caledonia. At the present time, depending on their movements and whether or not their certification was renewed, 74 of them (41 doctors and 33 midwives) have valid certification and are active in New Caledonia. For 13 of them (7 doctors and 6 midwives), their certification has only been operational since the second half of 2011.

The CDAG 2012 records were therefore compiled with contributions from 37 professionals (of the 74 possible i.e. 50% of them).

These figures show a sharp decline in comparison with 2011 (-17.8% of the number of contributing professionals).

An analysis of the 2239 strictly anonymous questionnaires completed in 2012 and returned to the DASS-NC Health Action Department showed a clear 7.1% decrease in the number of reports received in 2012 as compared to 2011.

- Under-35s accounted for over three-quarters (80.4%) of patients (45.6 % between 15 and 24 years and 33.8% between 25 and 34 years)
- European patients accounted for 45.7% of consultations. Melanesian patients represented a little over one third (38.3%)
- 'Risky behaviour' was referred to in 37% of cases, far more than 'early stage of relationship' (22.4%)
- 'Pregnancy' was a reason for coming in 14% of cases (82.2% were visits by pregnant women and 11.4% were spouse or partner visits).

It should be noted that 79 patients (3.5% of patients) reported a torn condom as the reason for coming in.

Conclusions

The 2012 analysis confirms conclusions from previous years:

• The majority (59.4%) of the data analysed in 2012 relates to the Noumea 'ESPAS CMP' (the Multi-purpose Medical Centre of DPASS Southern Province, referred to in previous years as the Noumea CDAG). The expansion since 2006 through 7 successive training sessions to120 professionals certified to conduct consultations has made it possible to gradually increase and diversify the CDAGs range of patients, mainly through increasing territorial coverage.

At the present time, with movements and/or non-renewal of certifications, 73 of these professionals (41 doctors and 32 midwives) are approved to conduct this activity in New Caledonia. It should however be noted that 13 of them (7 doctors and 6 midwives) have only been certified since the second half of 2011.

The number of consultations conducted outside the ESPAS CMP structure increased from 231 in 2006 to 909 in 2012.

The geographical distribution of these certified professionals is strengthening the supply of services to the community in the screening and prevention areas. It remains necessary however to improve the availability of screening facilities in some parts of New Caledonia and especially in the Loyalty Islands and Northern Provinces in order to offer a better service to all areas.

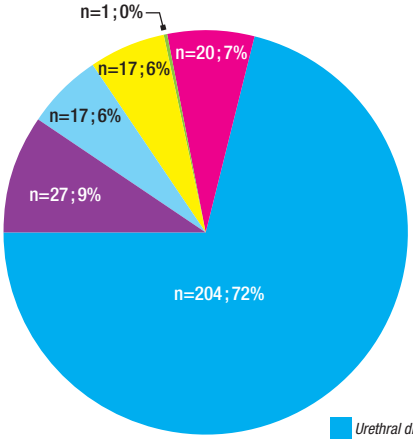
• The importance of the ESPAS CMP (especially the pilot training and incentive role played by the team there) is evident in the high number of tests carried out and the number of people who, over 20 years, have enjoyed personalised treatment whether or not followed by testing, but which only extends to the population located close to the centre.

• Research on patient characteristics has enabled us to detect risky behaviour and lack of understanding of preventive methods and virus transmission.

Sexually Transmitted Infections

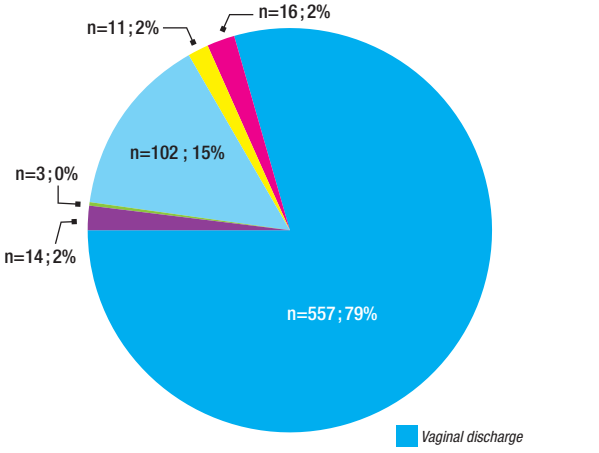
Apart from AIDS, only certain ISTs are notifiable (syphilis, including neonatal syphilis ; condylomata acuminate, Hepatitis B and Hepatitis C).
In 2012, 62 notifications were received by DFASS-NC, 61 of which related to syphilis and one to a single case of acute Hepatitis B. Syphilis incidence has been on the rise since 2003, because it has gone up from 0.4/10 000 pop. in 2003 to 2.4/10 000 pop. in 2012.
In order for STI notifications to more closely match clinical practice, in 2010 it was decided to move away from the above clinical causes of still-notifiable STIs and instead prefer syndromic STI surveillance. Clinicians can therefore now report STI syndromes on an anonymous and aggregate basis (urethral discharge, vaginal discharge, etc. instead of STI germs).
After an initial test phase, effective syndromic surveillance commenced in August 2010 in a limited number of centres.
In 2012, 989 STIs were notified on a syndromic basis, 703 in women and 286 in men. The number of notified cases in 2012 was similar to the number reported in 2011.

Syndromic surveillance of STIs in NC
Men: breakdown of syndromes in 2012



In men three-quarters of reported syndromes related to Urethral discharge. Genital ulcers were the second most observed syndrome (9% of cases).

Syndromic surveillance of STIs in NC
Women: breakdown of syndromes in 2012



In women, four-fifths of reported syndromes related to vaginal discharge. The rest of the observed syndromes mostly comprised lower abdomen pains (15% of cases).

Viral hepatitis

5 new cases of hepatitis B were recorded in 2012. All concerned adults.

The proportion of Hepatitis B cases in children under 15 years has diminished as a result of the introduction of systematic vaccination of all newborns in 1989 (38% in 1992, 5.8 % in 1996, 6.4 % in 1998, 2.5% in 2000 and 0 % since 2005).

The 3 cases in 2003, which raised the rate to 7.7 % for that year and confirm the need to vaccinate at childbirth, should be noted.

Tuberculosis

The World Health Organization has already advised that the number of tuberculosis cases has risen spectacularly in Europe and North America in the last few years.

Among the factors contributing to this resurgence, WHO reports the deterioration of tuberculosis control programmes and the link between tuberculosis and HIV. Also, new drug-resistant bacteria are developing throughout the world.

In New Caledonia, 37 new cases of tuberculosis were notified in 2012 (50 in 2011), including 24 cases of pulmonary tuberculosis (33 in 2011). After a drastic fall of the incidence rate in 2003 (17 per 100 000 population), the incidence rate in 2012 was equal to 14.7 per 100 000. Even though there has been a downward trend since the beginning of the 1990s, it remains at high levels in comparison to industrialized countries, and at a lower level than world wide incidence.

Some 12 cases were recorded from direct positive testing (12 in 2011), all involving pulmonary tuberculosis. Contagious tuberculosis enables tuberculosis infection to perpetuate itself. Diagnosis must occur as early as possible, treatment must be strictly followed and the identification of infected persons commenced as soon as reliable treatment starts. The incidence rate of tuberculosis from direct positive testing (smear-positive) was 4.8 per 100 000 (4.8 in 2011).

Incidence/100 000 of all forms of tuberculosis and sputum-positive tuberculosis

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
All forms	64.4	50.1	51.1	40.1	48.3	28.8	30.1	17	28.5	22.8	21.6	19.6	20.9	25.7	24.1	19.8	14.7
Smear positive	21	17.5	18.7	13	11.4	9.8	9.6	6.3	8.8	7.3	5.1	5.8	5.3	7.3	9.4	4.8	4.8

Treatment

By definition, tuberculosis is considered cured when sputum specimens test negative two and five months after the beginning of treatment.

If these tests are not performed, treatment is said only to be completed or finished. The WHO strategy regards a programme to be efficient if the rate of cure is above the 85 % mark.

For patients tested in 2011, a rate of cure of 66.7% was observed.

Patient characteristics

A detailed study of the 480 tuberculosis cases notified over the last 10 years, all types combined (from 2003 to 2012), shows that 67% of the cases were pulmonary forms.

All municipalities are affected by the disease, which is more frequent however in Belep, Ponerihouen, Hienghène, Houaïlou and Kaala-Gomen, where incidence rates are higher than in other areas.

The diagnosis was made from clinical signs in 70% of the cases, 9% of new cases were relapses.

In metropolitan France, this disease still occurs with an incidence rate equal to 7.7 per 100 000 in 2011.

Regional disparities are observed, with the highest incidence in the Ile-de-France region, where it is similar to that of New Caledonia.

Note (2011)

High notification rates were observed in certain population groups such as persons born abroad (34.4/100 000), in particular in sub-Saharan Africa (103.1/100 000). Persons with no fixed abode, living in hardship, those born in high-incidence countries and prison inmates are among the most affected, as well as persons aged 80 years or over (14.3/100 000).

Acute rheumatic fever

Acute rheumatic fever (ARF) mostly affects children and adolescents and is a disease with severe medical, human, social and economic consequences.
Acute rheumatic fever is a possible consequence of a probably auto-immune mechanism of bacterial angina due to a group A beta-haemolytic streptococcus (GABHS). It is common among children but in New Caledonia outbreaks can occur very late in life (age 35).
With the adoption of a resolution dated 11 August 1994, the Territorial Congress decided that acute rheumatic fever was one of 9 priority preventive programmes.
A register was set up to monitor the situation in 1999.

In 2011, careful attention was given to the application specifically developed for ARF. This task follows on from the register update completed in 2008 which is now showing its limitations. This total reconstruction will enable secure data capture and make it easier to extract reliable epidemiological data. It should also enable health professionals to directly enter data.

The registered cases are also being validated at the same time. Through this process, many patients whose diagnosis was not prepared on the basis of international criteria can be removed from the register. It is likely that this extensive task will lead to a reduction in the prevalence figures for rheumatic heart disease.

The newly updated data will be available by the end of 2013. As at today's date, all we can say is that 86 new cases were recorded in 2011, almost half of whom were living in the Northern Province.

It should also be noted that the treatment protocols were changed to take into account the new recommendations from the World Heart Foundation (WHF) and also as part of a strategy to harmonise practices in the Pacific region, especially by New Zealand and Australia. The preferred treatment for long-term prevention of complications continues to be benzathine penicillin G (Extencilline®) whose injection frequency changes to once every four weeks with 2 different dosages depending on the patient's weight.

According to WHF, the Pacific is one of the most heavily affected regions by ARF in the world, with the highest incidence and the second highest prevalence.

A country is considered to be 'at risk' when:
- there is an incidence above 30 per 100 000 in the 5-14 age group;
- there is a prevalence above 2 per 1000.

The incidence rates in the 5 to 15 year-old age group population in New Caledonia is 116 for 100.000 children.

The New Caledonia prevalence rate (currently under review) is estimated at 7.6 per 100 000 population.

Using WHF criteria, New Caledonia can therefore be considered as a country at risk.

Conclusion

The ARF prevention programme is complicated by the duration of treatment, the young age of patients and the number of stakeholders involved. It has various original features, introducing novel public/private cooperation solutions and screening systems that are now pointless in developed countries because the disease has virtually disappeared, and which are too costly for developing countries where ARF is even more widespread than in New Caledonia.

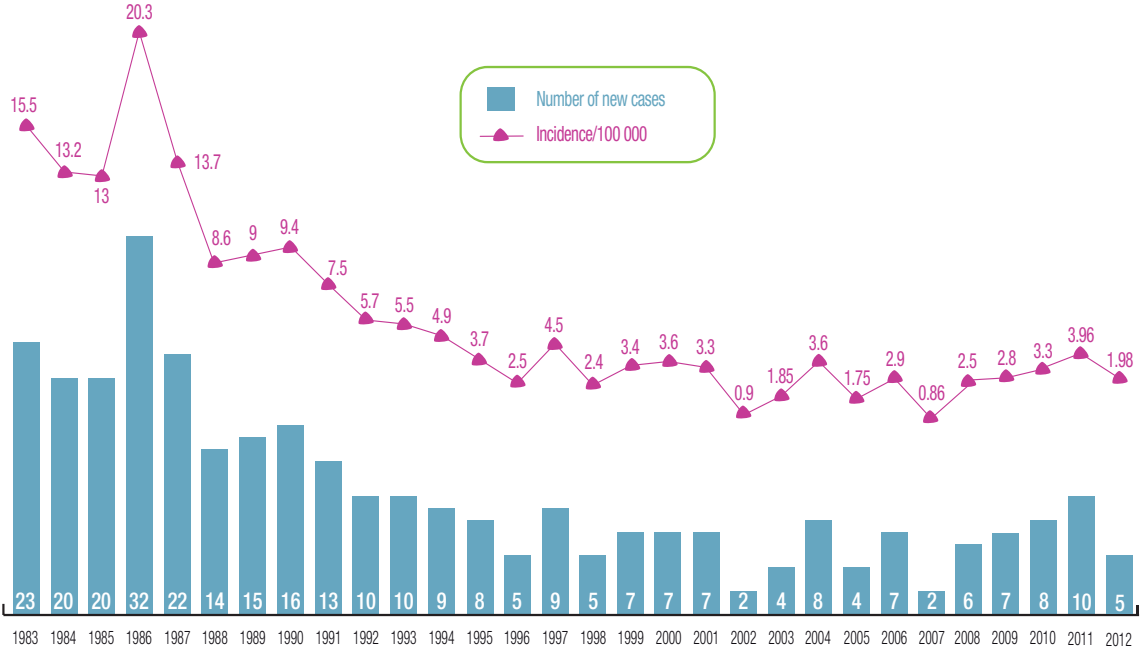
The Acute Rheumatic Fever (ARF) team at the New Caledonia Health and Social Services Agency (ASS-NC) organised a workshop on ARF and chronic rheumatic heart disease from 12 to 14 December 2011. Over the three days, participants expressed a strong wish to develop a close working partnership between the three French-speaking countries in the Pacific. It was further decided to keep track of the Australian strategy, and, if necessary, adapt it to the setting concerned, because it is currently the most responsive and the most influenced in its updating by evidence-based arguments.

Leprosy

Leprosy (or Hansen's Disease) is a chronic infectious disease caused by the acid-fast bacillus (Mycobacterium leprae, formerly Hansen's Bacillus), transmitted through direct, intimate and prolonged contact with an infected person. The leprosy registry covers 30 years, from 1983 to 2012 and comprises 315 records.

The Hansen's Disease control programme is conducted by the dermatology department of the Nouméa CHT (Territorial Hospital). Screening in New Caledonia is essentially passive, the large majority of patients being referred by either their attending physician or their public health clinic doctor.

The multidrug leprosy treatment (MDT) programme has reduced the prevalence of leprosy in New Caledonia and this disease is no longer a major public health problem.
With 5 new cases in 2012, the incidence rate is 1.89 per 100 000.
In 2012, 2 new cases were multi-bacillus.



In the 315 cases recorded since 1983, the following was observed:

- A male predominance: 208 men and 107 women
- An ethnic disparity, with higher representation of the Melanesian community (266 persons) than other ethnic groups (Europeans: 30 cases; others: 19 cases).

Prevalence:

In 2011, only 12 patients were treated with multidrug therapy, which represents a prevalence rate equal to 0.48 per 10 000 population.

International situation

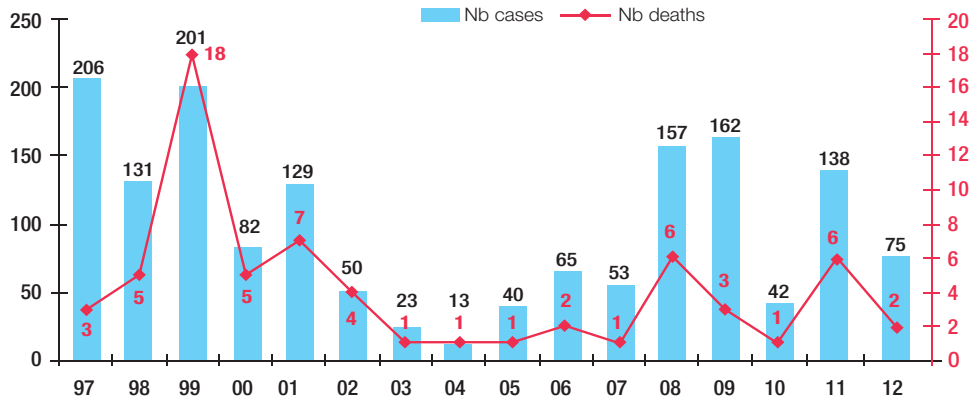
Source: WHO

The number of new cases detected in the world in 2011 was 219 075.
This number has fallen by 4.1% over 2010. More generally, the reduction in the number of leprosy cases has been less sustained in recent years.
In 2011, the number of cases in India represented 58.1% of the total number of cases in the world.

Leptospirosis

In New Caledonia, leptospirosis is an endemic disease that can surge to outbreak status depending on the weather.
In 2012, 75 cases were reported.

Number of cases of leptospirosis and deaths per year in New Caledonia from 1997 to 2012



In 2012, this disease mainly affected men (70.7%), and young adults: (the average age is 35 years). Infection is probably due to risky behaviour, daily or occupational contact with infected animals or contact with contaminated soil.
Infections in children and adolescents can be linked to exposure during leisure activities such as bathing in fresh water. Most cases were reported between January and June (89.9%).

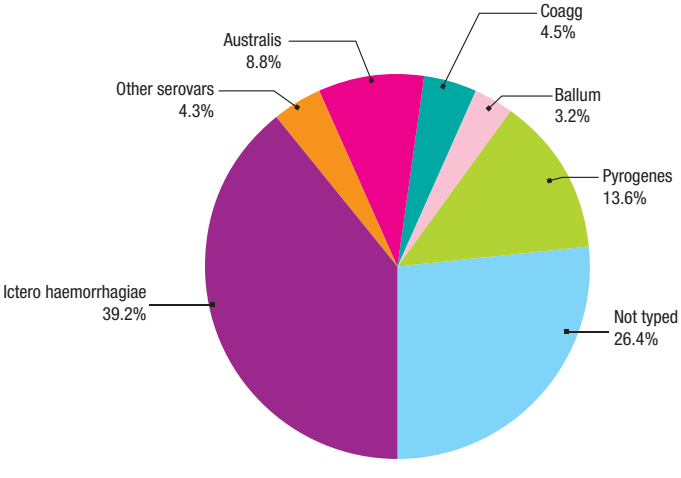
Monthly distribution of accumulated cases in 2012

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Confirmed cases	8	8	11	20	10	2	2	0	0	0	2	9
Probable cases	1	0	1	0	0	0	0	0	0	0	1	10

In 2012, 2 deaths were directly attributable to leptospirosis. A study of cases over the last 6 years shows geographical disparities, with average incidence higher in the north-east (from Houailou to Ouegoa) and in Bourail and Yaté.

The most frequently identified serogroups from 2006 to 2012 were:

- Ictero-haemorrhagiae.
- Pyrogenes.
- Australis.



Dengue

Dengue fever is a viral condition transmitted by the Aedes aegypti mosquito that lays its eggs in clean water (empty tin cans. etc.).
This arbovirus has 4 serotypes, without cross immunity, but giving permanent immunity for each of the serotypes.
Reinfection by another serotype can cause the onset of a more severe form of the disease.
After the 2003 epidemic, during which 5673 cases and 17 dengue-related deaths were recorded, the 2005-2007 period was quieter (46. 48 and 48 cases respectively, no deaths).

Residual virus transmission occurred during the first half of 2004, then no further cases were confirmed by identification of the viral genome apart from 2 imported cases of dengue 3 and 4 in September 2005.
In 2009, an unprecedented epidemic affected New Caledonia, when 8410 cases were recorded. Serotype 4 was dominant throughout the year.

The various dengue fever serotypes occurring during epidemics for the 1972-2012 period

Year	1972	1976-78	1979-80	1989	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Type 1							1				12	64	563	177		3	27	199	62	14	1	134
Type 2						1	154	1390	225		1							1	2	2		3
Type 3					2212	1123	7	5							1	1	1	1			1	
Type 4						12		1							1			25	253			
Total					2212	2121	251	2612	354	12	34	105	5673	792	46	48	48	1179	8410	122	15	718

It should be noted that typing of dengue cases began in 1996. The cases recorded during the 1995 outbreak were considered to be type 3. The same assumption was made for previous years.
2012 was characterized by an initial late-season outbreak (April/June), winter virus circulation and an early onset of the second outbreak (November).

Chikungunya

Chikungunya, a viral disease transmitted by the same vector mosquito as dengue, is due to an RNA arbovirus (alphavirus from the Togaviridae family). It was isolated to the first time in Uganda in 1953 during an epidemic in Tanzania. The name' Chikungunya' means "the man who walks bent-over" in the Makando language.

Clinical description: after a silent incubation period of 4 to 7 days on average, high fever suddenly occurs together with sometimes intense pains, mostly affecting the extremities (wrists, ankles and joints). Other signs may also occur: myalgia, headaches and rashes which are sometimes itchy. The acute phase of Chikungunya infection lasts 5 to 10 days on average. It equates to the viremic phase, during which the patient may be bitten by another mosquito and maintain the chain of transmission by infecting that mosquito.

According to a study by the French National Institute of Prevention and Education for Health (INPES) in 2008 on the 2006 Reunion Island Chikungunya epidemic, the acquired immunity seems to be a lasting status.

Clinical evolution: symptoms in the acute phase usually subside after between five and 10 days. During convalescence, the patient may be extremely feeble and this can be the case for several weeks. After an asymptomatic phase, relapses involving joint pains with or without fever may arise intermittently. These patients are not contagious. The disease may develop into a chronic phase featuring persistent pain causing partial incapacity for days, weeks or months.

The 2011 epidemic in New Caledonia

After the importation of 2 cases of Chikungunya by people returning from holidays in Indonesia, New Caledonia had to cope with an emerging outbreak with 33 biologically confirmed cases between late February and mid-June 2011 (29 cases in Nouméa, three in Dumbéa and one in Sarraméa). The total immediate responsiveness of all stakeholders in the control network (identical to the dengue one) meant that a major epidemic was avoided.

No cases of Chikungunya were identified in 2012, either resurgent or imported. Chikungunya surveillance is maintained for all suspected cases travelling home from an at-risk destination, as well as random regular testing throughout the country on dengue serology requests.

Diseases under surveillance

Weekly disease reporting using 'grouped data' was introduced in the provincial public health services. Theoretically, they come from the two hospitals in the Northern Province, 26 socio-medical districts in the Loyalty Islands, Northern and Southern Provinces, the mother and child protection centres and the multi-purpose medical centre in Nouméa.
The 2012 data presented in this report were provided by the Southern Province.

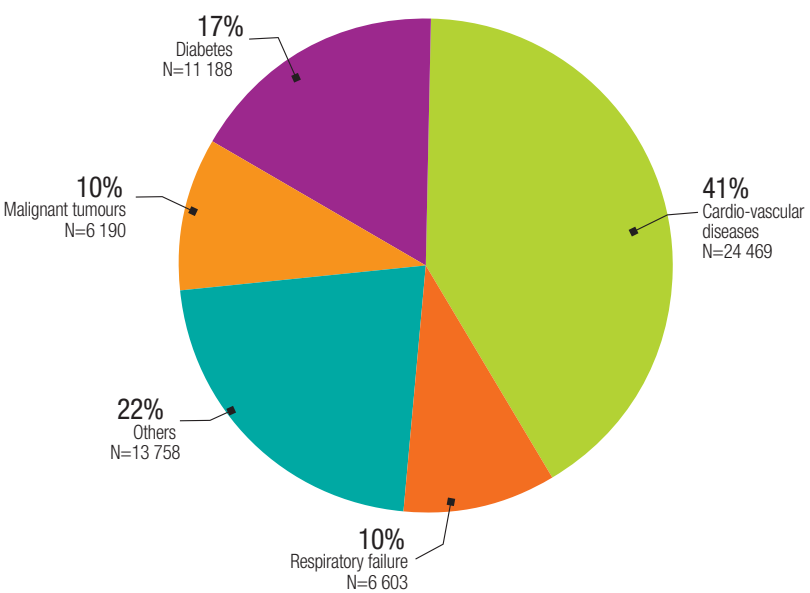
Disease	Nb of cases 2005	Nb of cases 2006	Nb of cases 2007	Nb of cases 2008	Nb of cases 2009	Nb of cases 2010	Nb of cases 2011	Nb of cases 2012
Acute conjunctivitis	224	438	304	109	79	103	128	64
Ear infection	628	1 547	949	245	145	242	236	153
Acute respiratory tract infection	3 261	7 503	3 372	1 089	183	885	757	671
Pneumonia	30	20	19	8	621	422	476	297
Influenza	254	975	571	144	1 055	316	144	148
Salmonella infection without typhoid	0	21	0	40	0	16	34	52
Shigellosis	0	5	0	14	19	18	38	13
Other Protozoal intestinal diseases	2	0	1	0	0	0	0	0
Diarrhoea	276	613	375	95	137	204	250	214
Acute viral hepatitis other than B or C	787	68	5	1	76	3	1	0
Meningitis other than meningococcal	0	8	4	2	1	0	2	5
Ciguatera	25	67	25	5	2	2	6	14

CHRONIC DISEASES

Most chronic diseases are covered as 'prolonged diseases' under the CAFAT social security system for insured persons and other entitled persons.

Since July 2002, with the creation of 'RUAMM', the number of insured persons has risen considerably to include public servants and other new contributors. It comprised 250 432 beneficiaries as at 31 December 2012.

In 2012, 40 205 persons were covered under the prolonged disease arrangement (56.3% of total RUAMM expenditure) for 64 208 conditions (certain patients may be covered for more than one disease).
This gives an indication of the main chronic diseases covered in New Caledonia as shown in the graph opposite.



Cancers

Cancers are notifiable under the relevant regulations, as required since 1994 by the notifiable diseases regulations. Most notifications come from pathologists and specialist doctors in public or private practice who attend these patients. The data sent to the Cancer Registry are checked by reference to the clinical file in order to check how complete they are.

All solid invasive tumours are recorded and assessed, as well as malignant haemopathies and benign tumours of the central nervous system, but for comparability purposes, the incidence data only contain invasive tumours. Baso-cellular and epidermoid skin tumours are no longer recorded, because doubt over their reliability and completeness mean they are of limited value.

Not included in the analysis are all in situ malignant tumours, recurrences and cancer metastasis from known previous tumours already included in the Register and other benign tumours. The data collected are registered in accordance with the recommendations of the European Network of Cancer Registries (ENCR) and of the 'Institut de Veille sanitaire (InVS – French National Healthwatch Institute). Topography and morphology are coded as per the third Edition of the International Classification of Diseases for Oncology (ICD-0-3).

Incidence assessments therefore only include invasive tumours and no skin tumours apart from melanoma.

The results given below relate to the cancers detected in 2010 (register as at 01 July 2013).

In 2010, 873 new malignant invasive tumours were registered: 786 solid tumours, 47 malignant haemopathies and 40 non-melanoma skin tumours. Also recorded were 13 non-malignant tumours of the central nervous system and 114 in-situ tumours (breast: 23 ; cervix: 60 ; colon/rectum: 9 ; bladder: 3 ; other: 19).

The following assessments only take into account the 833 invasive tumours and malignant haemopathies (not including non-melanoma skin tumours).

Cancer diagnosis results show gender-related differences (432 tumours in men as against 401 in women), with men over-represented in comparison with the general population (sex-ratio equal to 1.08 men for one woman, as against 1.03 in the general population (ISEE 2010).

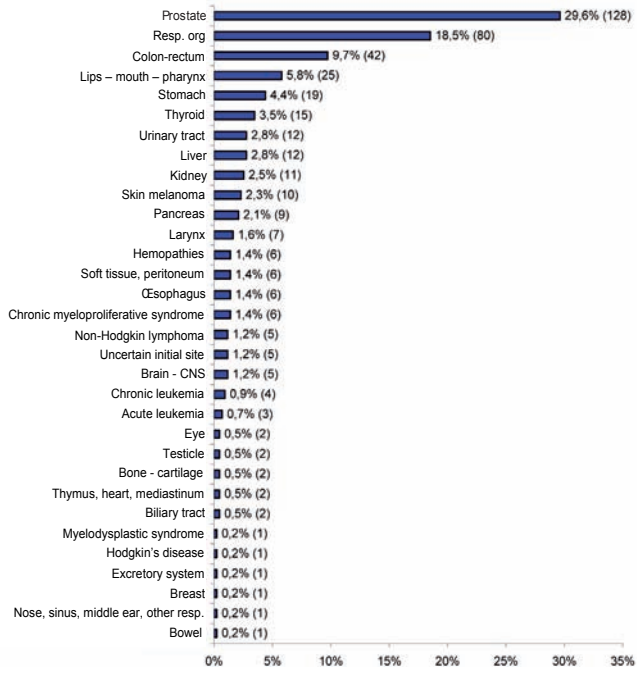
The mean age is equal to 61.2 years (median age 63 years) with 69.4% of patients aged between 50 and 79 years as against 20.2% in the general population.

When distribution by province of residence for cases recorded in 2010 is compared with the reference population (ISEE), a significant difference is observed between these two populations ($p<0.001$), with an over-representation of new cases residing in the Loyalty islands (10.9%: ISEE 6.9%) to the disadvantage of the Southern Province (70.6%. ISEE 74.8%).

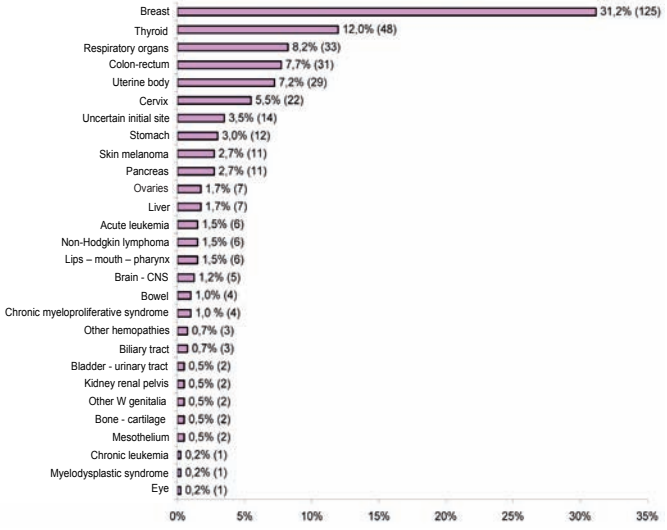
Taking both genders together, the 5 following sites alone account for more than half of all initial sites (60.4%):
Prostate: 128 cases (15.4%)
Breast: 126 cases (15.1%)
Bronchial tubes/lungs: 113 cases (13.6%)
Colon/rectum: 73 cases (8.8%)
Thyroid: 63 cases (7.6%)

2010 Cancer site distribution

Men



Women



The distribution by site of invasive tumours also varies with gender.

In men (N=432), the most frequent cancer sites were:
1. Prostate: 128 cases (29.6%)
2. Bronchial tubes/lungs: 80 cases (18.5%)
3. Colon/rectum: 42 cases (9.7%)
4. Lips/mouth/pharynx: 25 cases (5.8%)
5. Stomach: 19 cases (4.4%)

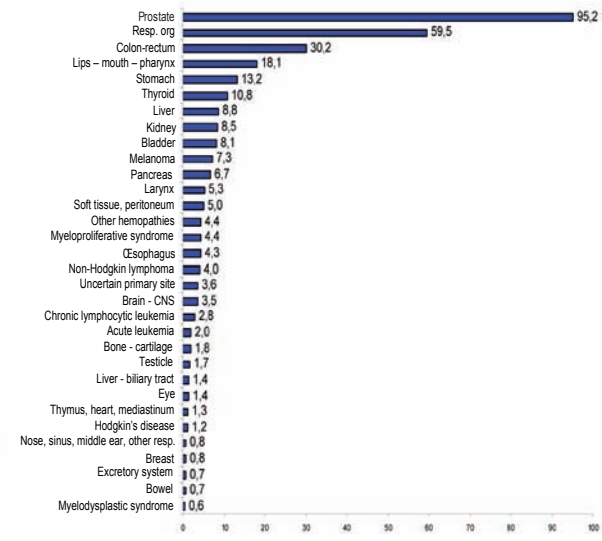
The distribution also varies by community, with a much higher frequency of prostate cancer in Europeans (33.3%) and Polynesians (22.2%) and a higher proportion of respiratory cancers in Polynesians and Melanesians (28.7%).

In women (N=401), the most frequent sites are:
1. Breast: 125 cases (31.2%)
2. Thyroid: 48 cases (12.0%)
3. Bronchial tubes/lungs: (33 cases (8.2%)
4. Colon/rectum: (31 cases. 7.7%)
5. Uterus (endometrium): 29 cases (7.2%)
6. Cervyx: 22 cases (5.5%)

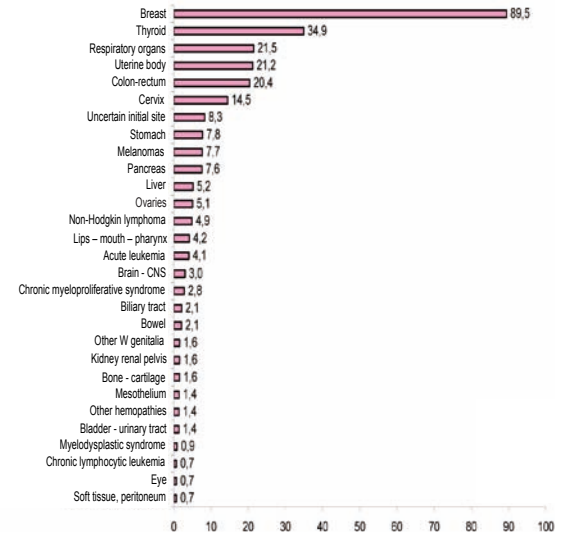
A much higher rate of breast cancer is observed in European women (46.9%) in comparison with the other communities (Melanesians: 25.1% ; Polynesians: 29.3%) and a higher proportion of thyroid cancer in Melanesian women (17.1% as against 6.3% in Europeans and 7.3% in Polynesians).
The standardised incidence rates (SIR), calculated from the reference world population, make it possible to carry out international comparisons by limiting the effect due to the differing age structures of the compared population groups.

When the New Caledonian standardized incidence rates (invasive cancers not including skin cancers except melanomas) are compared to France and neighbouring countries (Globoccan, 2008). the rates observed in men are comparable to French and Australian rates and higher than those in New Zealand, the Pacific Islands and French Overseas Departments.
In women, in 2010, incidence was higher than in nearby countries and France.

Distribution of main cancer sites in men



Distribution of main cancer sites in women



New Caledonia is a high-incidence country for some cancers such as breast, thyroid, endometrium and cervix in women and prostate and bronchial tubes/lungs in men.
Overall, in 2010 in New Caledonia the most common male cancers were of the prostate and the respiratory organs, while the most frequent female cancers were of the breast and thyroid.

Chronic renal failure

Chronic renal failure (CRF) can be defined as the gradual deterioration of filtration, excretion and endocrine secretion functions by the renal parenchyma, as a consequence of irreversible anatomical lesions.
Most renal diseases develop, albeit at different speeds, towards a stage called chronic uremia. When CRF reaches an advanced stage, it becomes essential for the patient's survival to offset the failure of the sick organ, by either a kidney transplant or a kidney graft or by extra-renal purification.
Three facilities provide extra-renal purification through hemodialysis or peritoneal dialysis.

Hemodialysis can be received at a centre, a medical unit or a local unit. If the dialysis unit has a reverse osmosis water treatment capability, it can replace the conventional dialysis process by a more effective hemodiafiltration process.
Peritoneal dialysis comprises continuous ambulatory peritoneal dialysis (CAPD) and automated peritoneal dialysis (APD).
The third compensatory technique is renal transplantation.

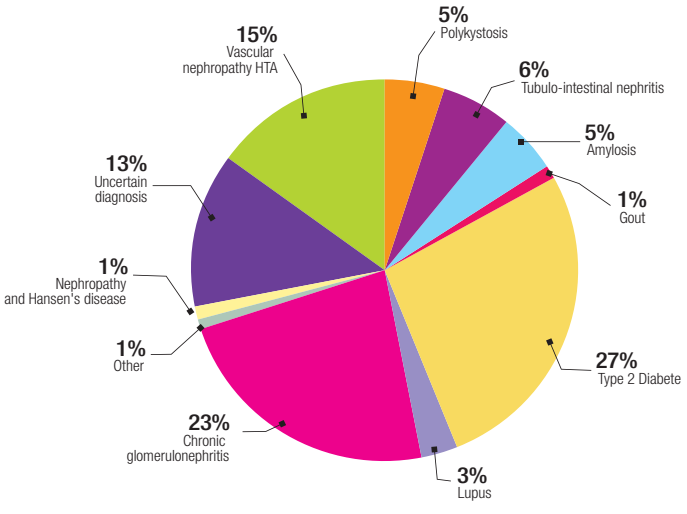
The increasing number of patients treated for chronic renal failure justifies considering this condition a public health problem. In 2012, 503 person-years were under treatment for CRF, an increase of 3.7% over 2011 and a prevalence rate equal to 1864 per million population (PMP), a crude rate 1.7 times higher than in metropolitan France in 2007 (1094 PMP).

With 88 new patients in 2012, the incidence rate is equal to 343 per million, which is the rate in Taiwan. where the prevalence rate was also higher than 2400 PMP.

The breakdown by mode of treatment shows that hemodialysis remains the principal method of treatment and concerns 66 % of patients, followed by peritoneal dialysis (9 %). Kidney transplants (25%) began in 1984.
Chronic glomerulonephritis and Type 2 diabetes remain the two major causes of chronic renal failure in New Caledonia.

These two conditions represent half of all new patients being treated, as shown in the following figure.

Breakdown of diseases causing chronic renal failure



The crude incidence and prevalence rates of renal failure treated in New Caledonia are relatively high overall and comparable to those of countries such as Japan and the United States.
The different age structure of the New Caledonian population, however, makes it likely that the standardized rates are in fact lower.
These figures characterise the breadth of the range of health care services available for renal dysfunction in New Caledonia, but do not permit an accurate assessment of the frequency of chronic renal failure. To do so, further research would have to be considered.

Chronic respiratory failure

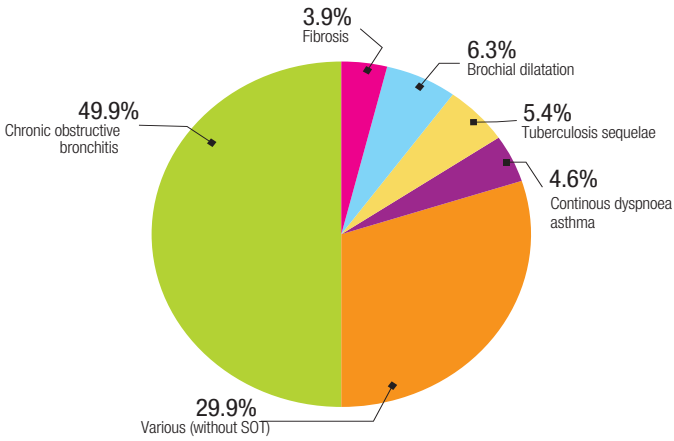
Six facilities offer home treatment for respiratory failure patients in New Caledonia.

- *'Service d'Assistance Respiratoire à Domicile' (SARD-NC), an association set up in 1990;*
- *'Oxygène Confort', a private company established in September 2004;*
- *'Respire', a private company set up in August 2007;*
- *'Respidom', a private company incorporated in November 2007;*
- *'Assistéo', a private company incorporated in 2009;*
- *Pacific Air, a private company incorporated in March 2011.*

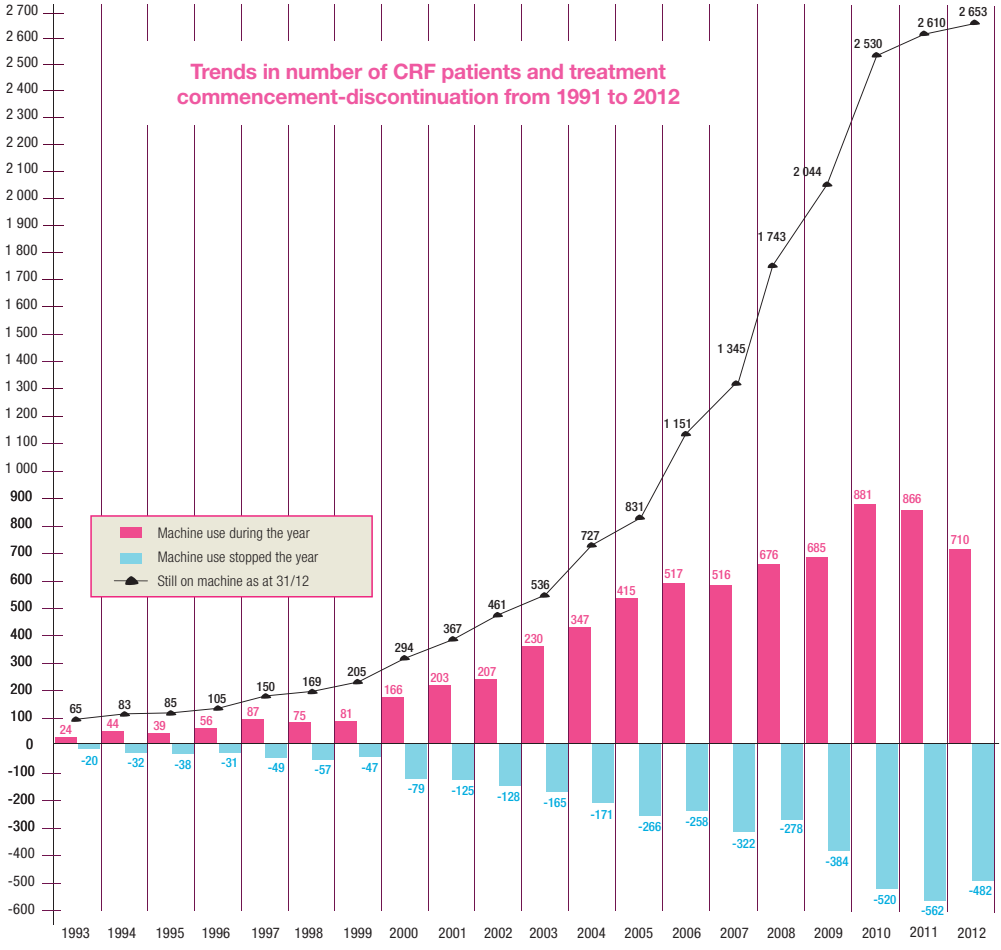
The diseases covered can be broken down into two major groups: chronic respiratory failure (CRF) and sleep apnea syndrome (SAS), which require two main kinds of treatment: oxygen therapy and positive-pressure ventilation. To these two categories, in significant numbers since 1997, can be added cancers (terminal care

or otorhinolaryngology) and various diseases that remain unknown because of the mode of decision on treatment for short-term oxygen therapy (SOT), which is offered on prescription and yields no information on the disease requiring such treatment. The leading cause of chronic respiratory failure in New Caledonia remains chronic obstructive broncho-pulmonary disease (50 %).

Leading causes of chronic respiratory failure in New Caledonia



Trends in number of CRF patients and treatment commencement-discontinuation from 1991 to 2012



The number of patients under treatment has tended to grow exponentially since 2000, when SOT was introduced. One reason why treatment with machines ceased was patient death (15.6 % of cases of treatment discontinuation in 2012).

Deaths mainly occurred in patients with respiratory failure and terminal cancer.

The average age of patients enjoying machine treatment is 60 years.

The group concerned comprises 72.7% men and 27.2% women.

Management

Patients are either cared for in the private sector by specialists (psychiatrists, psychologists) or in the public health care system.

In the public health care system, the hospital sector is structured as follows:

1 - The General Psychiatry Department

with a number of 'Functional Units' divided into two sectors:

- **In-patient hospital sector with 6 units:** (Ward 2 - 3; Ward 4; Ward 5; Ward 6; Ward 7; Ergotherapy).
- **Out-patient hospital sector with 7 units:** (Psychiatric Treatment, Orientation and Emergency Unit ('UAOUP'); day hospital; Medico-psychological Centre (CMP); Medico-psychiatric unit for prisoners (UMP); consultation and ambulatory care services unit (UCSA). Medico-psychological units in Poindimié, Koumac and Lifou; therapeutic workshops.

In-patient hospital activity 2012	Short stay				Long stay		Total
	Ward 5	Ward 5 bis	Ward 6	Ward 7	Ward 2-3	Ward 4	
Direct admissions	392	6	15	317	60	1	791
Days of hospitalisation	6680	3165	4662	5172	11232	7222	38133
Average length of stay	14.6	24.7	71	13	97.7	267	36.1
Occupation rate	87	96	64	84.5	77	99	80

Out-patient hospital care 2012:

UAOUP: 1828 consultations;
Day hospital: 4236 hospitalisation days;
CMP: 9031 psychologist consultations; 4153 home calls;
Penitentiary: psychological and psychiatric consultations: 2 588;
Medico-psychological centres: 5972 consultations at Koumac and Poindimié.

2 - The general child psychiatry department

comprises 5 functional units at 4 sites in Nouméa:

- The Medico-psychiatric Centre (CMP);
- The Anse Vata site, with the Part-time Treatment Centre (CATTP) and the Day Hospital;
- The Rue Dezarnaud site, with the Treatment and Care Centre for Adolescents (CASADO);
- The Vallée du Tir site and Koutio for the Greater Nouméa CMP.

In 2012, the active list, with 2347 patients, was shorter than that for 2010 (-9.3%).

3 - The Geriatric Service

- The number of consultations was 1637 (+ 11.7% since 2011). The average duration of a consultation was 46 minutes and the average patient age was 78 years.
- The most frequent needs were memory monitoring and memory (70%) and standardized geriatric assessments (16%).

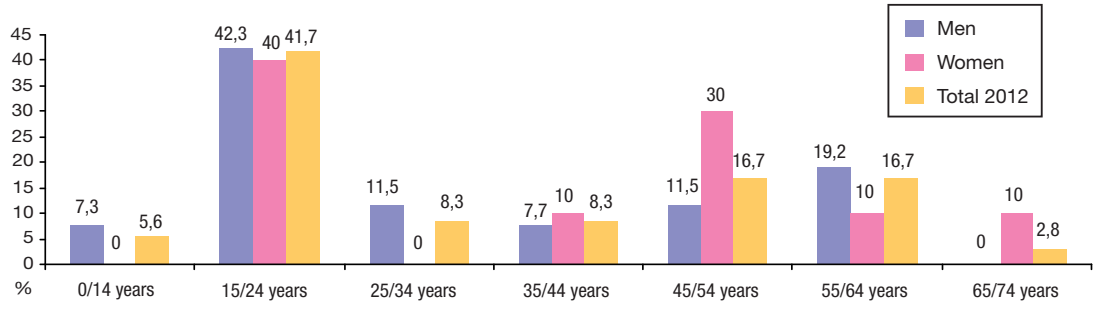
Suicide : one aspect of mental illness

Suicide is a major public health problem in the world, particularly among adolescents. In metropolitan France, suicide is one of the major causes of premature deaths compared to other causes, especially among young adults. Since we do not have data concerning attempted suicides, only data on deaths by suicide will be used.

In 2012, 36 deaths by suicide were recorded, or 2.7 % of all deaths (N=1322) and 22.3% of violent deaths, representing a crude mortality rate equal to 14.4 per 100 000 of the population (men: 20.5 per 100 000; women: 7.8 per 100 000) and a standardised rate equal to 14.1 (men: 20.9 per 100 000; women: 7.8 per 100 000).
Male suicides account for more than 72% of all suicides, or 2.5 times more suicides in men than in women in 2012 (26 men and 10 women).

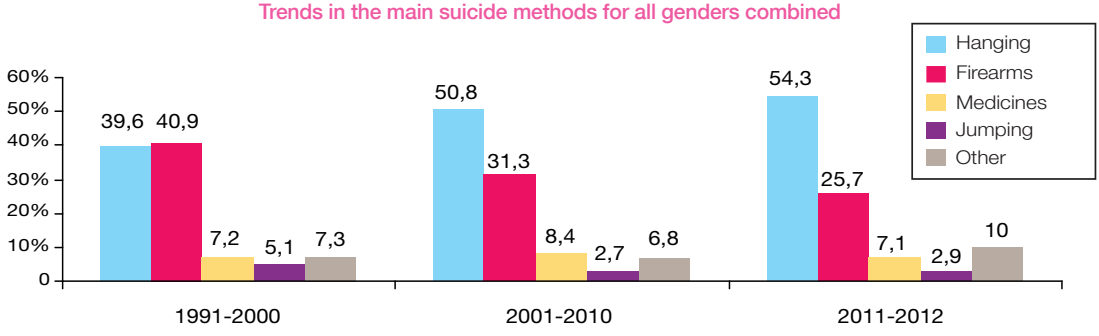
Age varied between 14 years for the two youngest and 73 years for the oldest.
As regards the number of suicides by age group, the most affected group in men and also in women is the 15-24 year-olds with 42.3% of suicides in men and 40% in women.

Distribution of deaths by suicide by gender and age group in 2011



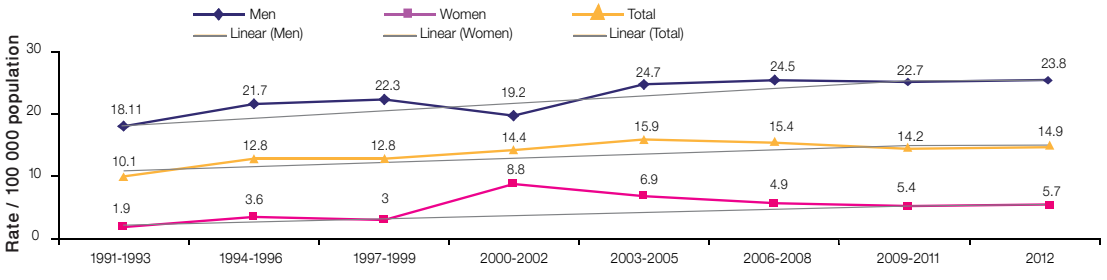
The main method of suicide in 2012 for all genders was hanging (58%).
No suicides by medicine consumption or jumping were recorded in 2012.
For all gender groups, the proportion of suicides by hanging increased in comparison with suicides by firearm.

Trends in the main suicide methods for all genders combined



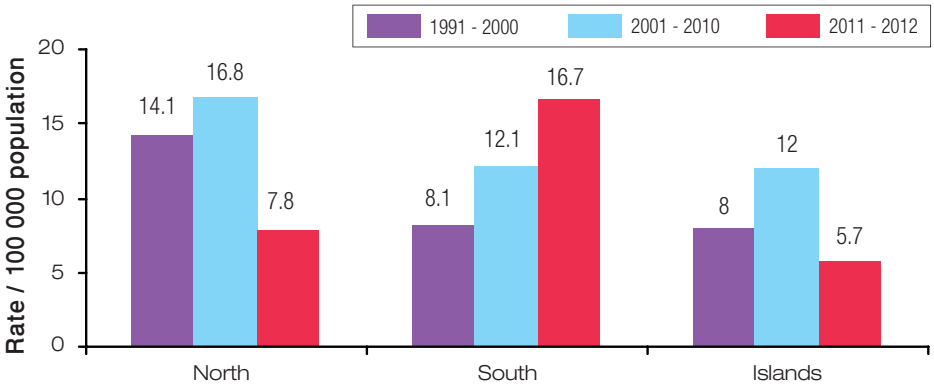
As the following figure shows. the crude annual mean rate has been tending to decrease in women since 2000 and in men since 2003.

Trends in the crude annual mean rate by gender



When these death-by-suicide rates are related to the population concerned, an increase in the mean annual rate is observed between the 1991-2000 and 2001-2010 periods in the Northern and Islands Provinces and a decline in 2011-2012. The mean annual rate in the Southern Province continues to rise.

Crude mean annual rate of death by suicide by province of residence



Comparison with Europe

The standardised mean rate observed in New Caledonia was 23.8 per 100 000 in men and 5.65 per 100 000 in women. The combined rate was 14.4 per 100 000 depending on age and is lower than for metropolitan France (16.0 deaths per 100 000 in 2006).
France is third position in Europe behind Finland and Austria (26.3 and 24.0 per 100 000 respectively).

Conclusion

Suicide is a public health problem that, according to the WHO, can to a great extent be avoided and each death by suicide has devastating emotional, social and economic consequences for many families. Numerous underlying and complex causes are described as producing suicidal behaviour, especially poverty, unemployment, the loss of someone close, arguments, separations in relationships and work-related worries or brushes with the law. Family precedents as well as abuse of alcohol and drugs, sexual abuse during childhood, social isolation and some mental disorders like depression and schizophrenia play a determining role in many cases.

In New Caledonia, suicide seems to be a less worrying cause of death than in European countries and less significant than deaths by road accident. However, even if the rate of suicide is lower than the rate of deaths by road accident, it is still a significant cause of death, especially among young men, that could be avoidable. Early detection of mental disorders and appropriate treatment are a good preventive strategy, particularly for young people. Health care professionals, teachers and social workers have an important role to play in this area by creating youth mental health care networks.

Psychotropic drug consumption

All importations of psychotropic drugs for human use from mainland France are recorded by DASS-NC. Consumption levels remained stable over the observation period.

Tetrazepam had been prescribed in significantly growing quantities for several years. This drug is a benzodiazepine not indicated for its psychotropic properties (that do exist nevertheless) but for its myorelaxant qualities.

This drug was taken off the European market on 8 July 2013: infrequent but extremely serious, and sometimes mortal, skin reactions are the reason why the medicine was banned.

After showing a significant increase in consumption until 2010, meprobamate use fell considerably after it was taken off the market on 10 January 2012. The ban extends to specialities containing meprobamate only (by mouth) or Mepronizine® (meprobamate. Acepromazine) indicated for the treatment of occasional or temporary insomnia, for which the risk/benefit ratio is now considered unfavourable.

Road accidents

Number of vehicles on the road:

Annual vehicle sales have constantly increased since 2000.
In 2012, 12 784 new vehicles were registered in New Caledonia.

The total number of vehicles on the road in New Caledonia is estimated at 150 000 according to the 2010 National Police report, or 1 vehicle per inhabitant over 20 years old.

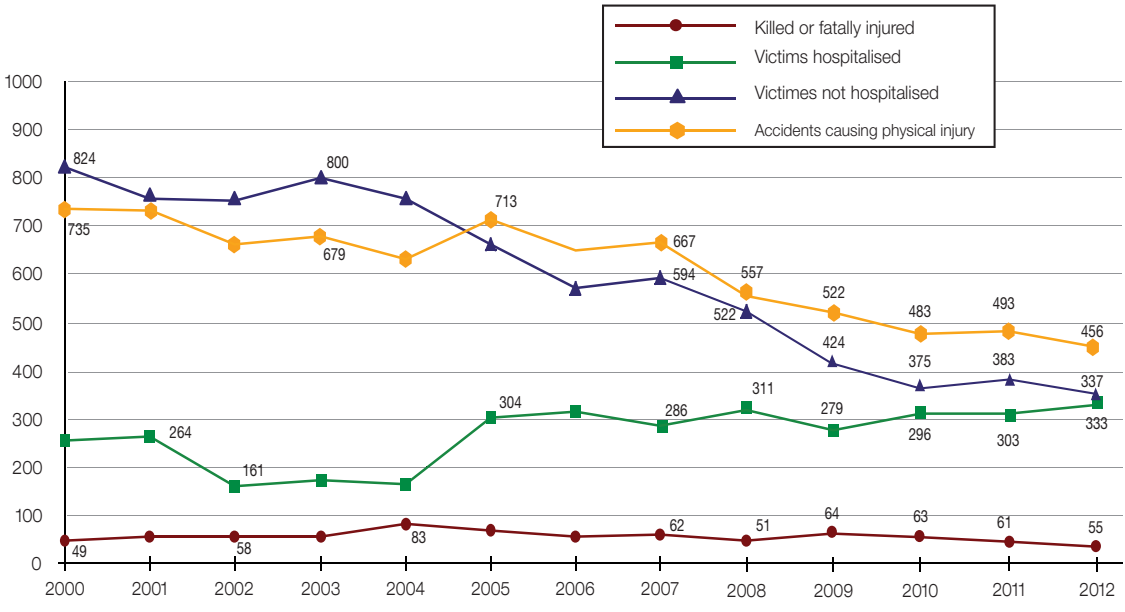
Accidents causing physical injury:

In 2012, 456 accidents causing physical injury were recorded for the whole of New Caledonia, producing 55 deaths or fatal injuries, or 7.6 % of the 725 victims (333 injured and hospitalised and 337 injured but not hospitalised).

The 2012 record shows a reduction (-7.5%) in the number of accidents causing physical injury over 2011 with 3% less accident victims overall.

The number of road accident deaths in 2012 is well below the mean annual figure for the past 9 years (2003-2011), which is 63 deaths annually.

Annual trends in physical injury, death or fatal injury, victims hospitalised, victims not hospitalised



In New Caledonia as a whole, in 2012, the two main factors involved in fatal accidents were:

- inappropriate or excessive speed: **32%**;
- drink-driving and/or driving under the effect of drugs: **46.8%**, with 6.4% of deaths showing joint alcohol and cannabis use.

In France, in 2012, (provisional figures), the percentage of behavioural factors contributing to accidents or which influence the how serious accidents are, is lower than in New Caledonia in the two main groups:

- **26%** of accidents show speeding as the identified cause;
- **31.6%** were due to drink-driving, including 14.5% in which at least one driver had consumed drugs.

In comparative terms, New Caledonia has a crude rate of 224 deaths per 1 million population (pop. at 01 January 2009), a figure 3.8 times higher than in metropolitan France (58 deaths per million population).

INDUSTRIAL MEDICINE

Three agencies offer industrial medicine services in New Caledonia.

1 - 'Service Médical Interentreprises du Travail' (SMIT, the Business Industrial Medicine Service). responsible for occupational medicine for workers under CAFAT coverage for companies that do not have their own service. In 2012, SMIT catered for 92 635 workers in 14 416 companies. In 2012, 32 859 examinations were conducted in comparison with 33 217 in 2011.
The number of regular examinations was 14 036 and the number of non-regular examinations was 19 181.
Counted in the non-regular examinations were hiring examinations, work resumption examinations and occasional examinations.

A total of 31 628 decisions was taken during 2012. Of the persons examined, 27 918 were found to be fit for work. The others were declared to be fit with restrictions or unfit, 5 occupational diseases were detected, 5 musculo-skeletal disorders and one case of asthma were reported by the SMIT doctors and accepted by the CAFAT 'AT' (Industrial Accident) Service.
Others were lesions due to noise (2 cases), and 1 case each of infectious diseases and chronic spine complaint.

2 - Medical department of the SLN (Société Le Nickel) company, comprising two services: care medicine and preventive medicine. The medical care service takes staff without appointments and performs vaccinations. The preventive medicine service examines new staff at the hiring medical examination and conducts regular examinations. Most staff are examined annually. Highly exposed workers, such as electrode welders, undergo a regular six-monthly examination. It conducts special medical surveillance, work resumption examinations and additional screening.
It also attends to the disabled and pregnant women. Workers under special medical surveillance are those assigned to dangerous work environments or involving risks specified in **Order no. 4775-T dated 10 December 1993, article 1134 para. 1, line 2 and line 3**. Work resumption examinations are carried out after work accidents, occupational diseases, absences of more than one month and repeated absences.
Additional examinations carried out are: blood tests, urine tests, x-rays, cardiology, neurology, gastro-enteric, ENT, ophthalmologic, toxicology, dermatology and special screening tests like nickeluria, functional respiratory tests, large-format chest x-rays and screen work.

2012 figures: 6 worksites, employing 2239 workers altogether, were monitored by the industrial medicine physician.
A total of **4681** medical examinations were carried out, including 2138 regular examinations and 2543 for hiring examinations, work accidents and resumption examinations. A total of 13199 additional examinations were performed.

3 - The Occupational Medicine Service at CHT Gaston Bourret opened in January 1998. It is located at Gaston Bourret Hospital. It is responsible for the medical surveillance of staff at the four CHT sites: Gaston Bourret, Magenta, Raoul Follereau leprosy centre and Col de la Pirogue tuberculosis treatment centre. It also oversees staff working at the Albert Bousquet (CHS) psychiatric hospital and the Pasteur Institute.

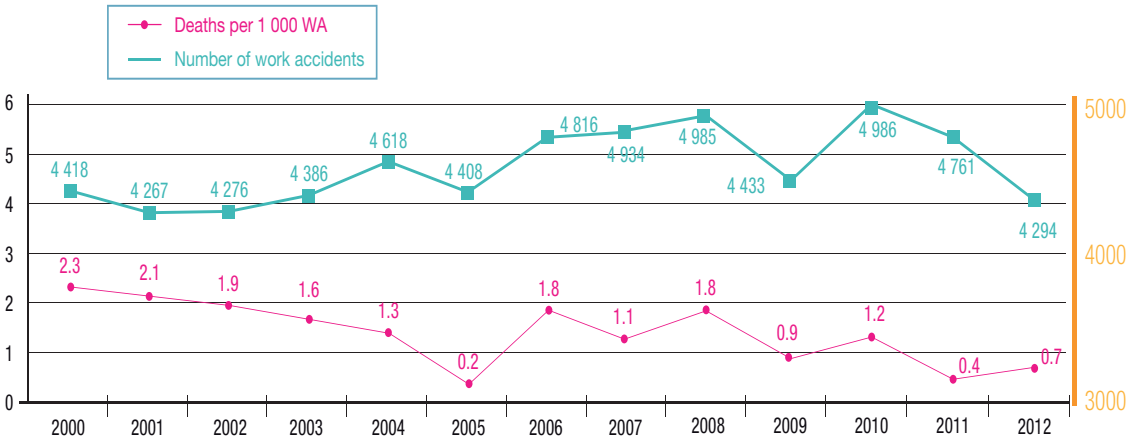
In 2012, it monitored some 2941 people altogether for the CHT (permanent public servants and contract staff), CHS and Pasteur Institute.

WORK ACCIDENTS

According to CAFAT data: In 2012, 4294 occupational accidents were recorded, a decrease of 9.8% over 2011. Some 157 commuting accidents leading to absence from work (+55.4% over 2011) and 103 occupational diseases (+9.6% in comparison with 2011) were recorded. The number of compensated sick leave days (73 361) was stable in relation to 2011 (+12.1%) and the average duration of a period of sick leave declined from 29.8 days in 2011 to 28.1 days in 2012.

Since 2004, the number of deaths has been relatively low and varies between 1 and 10 per year.
As the graph below shows, the death rate is between 0.2 and 2.3 deaths per 1 000 work accidents (WA).

Annual trends in number of WA and number of deaths following a WA



In 2012, a decrease in the number of occupational accidents and an increase in deaths, commuting accidents and occupational diseases were observed in comparison with 2011.

Addictions : alcohol, tobacco, narcotics

ALCOHOL

Consumption

In 2012, 1 926 387 litres of pure alcohol were consumed in New Caledonia, 2.5% more in than 2011.

In 2012, beer consumption accounted for 42.2 % of total alcohol consumption.

This figure is stable in comparison with 2011.

An increase can be observed (1.6%) in wine consumption over 2011. In 2012, it accounted for 33.0% of total consumption.

Spirits accounted for 24.8% of the total, an increase of 4.1% in comparison to 2011.

Consequences of alcoholism

In New Caledonia, the consequences of alcohol consumption and in particular excessive consumption are commonly social issues or, in the health area, traumatic injuries or chronic conditions.

Mortality

In New Caledonia, medical death certificates recorded 32 deaths totally or almost totally due to alcohol consumption in 2012, or 2.4% of the total number of deaths, a crude annual rate of **12.7 deaths** per 100 000 population.

Between 1991 and 2012, 725 alcohol-related deaths were recorded and account for **2.9 % of the total of 24 374 deaths** over the past 22 years, or a crude mean rate equal to **15.3** deaths per year per 100 000 inhabitants.
In addition to these 725 deaths, the figure can be extended to include deaths for which acute or chronic alcoholism was quoted as an item of further information, i.e. **577 extra deaths**. increasing to **1302** the number of deaths that can be attributed to alcohol.

Extended estimate: **2659 deaths**, 10.9% (number of deaths attributable to alcohol according to research by Catherine Hill and Jean-Pierre Pignon).

Since 2000, the French Observatory for Drugs and Drug Addictions (OFDT), in partnership with the French National Service Unit (DSN), has implemented the 'ESCAPAD' declarative survey using a questionnaire offered to all the young people present at a 'defense preparation day' (JAPD). It provides information on use levels and trends in preferred products and consumption methods.

NB: **The most recent ESCAPAD survey** was carried out in March 2011 in all French centres as well as at those in French Guiana, Martinique, Guadeloupe and Reunion Island.

TOBACCO

The tobacco trading monopoly in New Caledonia was initiated by a decree dated 17 October 1916.

The 'Regie Locale des Tabacs', a section in the miscellaneous contributions department within the tax department, is in charge of supplying tobacco monopoly products. In this chapter, 1 tobacco unit is: 1 cigarette = 1 cigar = 1 gram (Seita agreement).

For 2012, the total sale of tobacco products amounted to **400.7** tonnes or 9.8% more than in 2010.

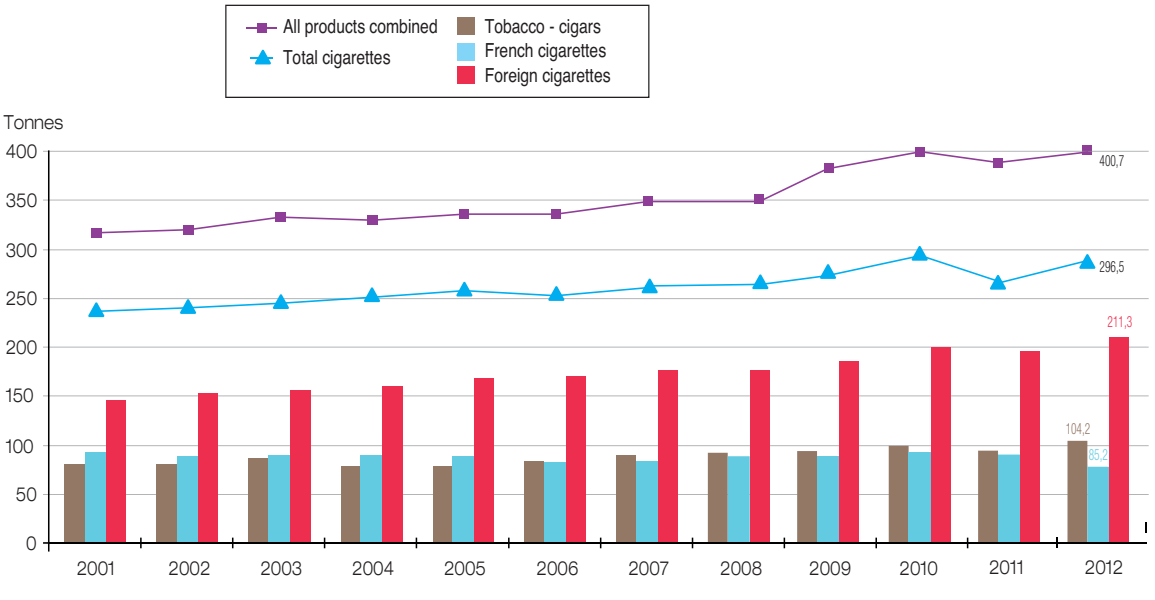
Despite a minor decrease in 2011, tobacco use pursues an upward trend.

The estimate for daily tobacco consumption, all products combined, per adult 15 years of age or older was 5.81 grams/adult/day.

Tax revenues collected by the local tobacco monopoly increased by 13.1% from 2011 to 2012.

It should be noted that the Government of New Caledonia, in its meeting on 24 December 2010, drew up a list of the new retail tobacco product prices in New Caledonia. The new price structure came into force on Saturday, 26 December 2010.

Trends in the consumption of various products



Consequences of smoking

Morbidity

The main diseases related to smoking for which we are able to collect data in terms of morbidity are respiratory cancers (lungs and bronchial tubes, larynx, etc.) as well as, in some instances, the respiratory diseases covered by home ventilation or oxygen therapy.
An assessment of recent New Caledonia cancer register figures shows that, in 2009, **151 new cases of respiratory cancers were recorded.**

Mortality

In the same way as with morbidity, it is possible to quantify the mortality due to smoking from an assessment of the death certificates issued in New Caledonia since 1991. The number of deaths due to smoking is obtained by multiplying the total number of deaths due to a given cause by the risks attributed to tobacco, as assessed in a cohort survey by the American Cancer Society.

When the risk factor is applied to each of the diseases linked to smoking, the result is 2 701 deaths in men and 334 deaths in women thought to be smoking-related, or 3 035 of the 24 374 deaths during the same period, i.e. **12.4 % of deaths**, representing a mean crude rate of smoking-related deaths of **66.9 per 100 000** (91-2012).

The data from metropolitan France showed, in 2000, that 20 % of the total number of male deaths was smoking-related, as was 2 % of female mortality.

ILLICIT DRUGS

Our information comes from seizures by the police, 'gendarmerie' or customs services, which are covered in their annual reports to the pharmacy inspectorate.
The main substance concerned in New Caledonia, by far, remains cannabis.
Small quantities of various other drugs are sometimes seized.
The efforts by the Gendarmerie to combat cannabis use are having visible results in terms of volumes of seizures. The majority of seizures concern plants. One plant is equivalent to 200 g of cannabis.
Expressed in terms of total population, these seizures suggest that an economy has sprung up around cannabis dealing.
An unusual confiscation of 1981 kg of cocaine originated in the interception of a boat bound for Australia.

Also to be noted the seizure of 20 977 cannabis field and pot plants in 2012, as well as 34 g of synthetic cannabinoids and 18 g of hallucinogenic mushrooms.

Seizures (in g)	2004	2005	2006	2007	2008	2009	2010	2011	2012
Cannabis	3 833 264	2 045 060	3 458 102	3 156 117	1 843 062	4 309 063	5 389 723	217 707	437 883
Cannabis resin	20	281	2	1	41	31	71	1 300	234
Cannabis oil	0	0	0	0	0	0	0	0	0
Cocaine	0	198	0	3	0	1	1	3	1981
Heroine	0	0	0		0	0	0	0	0
LSD	0	0	0	8 blotters	0	17 blotters	0.04 g	0	0
MDMA	4	0	0			0	0	0	9
Methamphetamine	20	0	0			0	0	1	0
Ecstasy					1	1	0	1	3

In 2012, Biak (or Kratom) plants were imported several times for sale in the nakamals. Biak (Mitragyna speciosa), of the Rubiaceae family, is an indigenous tropical tree in South-east Asia, now grown in many parts of the world. The main psychoactive components in the leaves are opiates: mitragynine and 7-Hydroxymitragynine, much more powerful than morphine.

Addiction to codeine exists in New Caledonia but has not been accurately assessed. It mostly involves the pharmacy drug Codoliprane® (association of 20 mg of codeine phosphate and 400mg of paracetamol).

Derivatives of N-Benzylpiperazine or BZP, whose effects are close to those of amphetamines, were classified as drugs in 2009. Their importation into New Caledonia is now banned.

POPULATION GROUP APPROACH

Women

As at 01 / 01 / 2011, the female population was estimated at **124 274**, with 53.3 % aged between 15 and 49 years old (who can considered to be of child-bearing age).

CONTRACEPTION

Contraception-related activity can be estimated from the number of prescriptions issued at provincial medical centres. However, because the data for 2012 are incomplete, these numbers will only be presented for the CCF (family advisory services) in Noumea where contraception activity has increased significantly, due probably to contraceptive promotion campaigns and the involvement of all medical professionals, whether in public or private practice, as well as those of the Mother and Child Health Protection Centre (PMI).

- In 2012, the CCF recorded an increase in consultations for contraceptive methods (22.2% over 2011) with increasing use of Implanon, supplied free of charge since 2008 (except for CAFAT and collective insurance schemes).

- Despite a reorganization of the doctor's work, with the preventive and screening gynecological activity being given up, the PMI continues to be a very active unit.

To more realistically assess the contraception use rate in women in New Caledonia, data from contraceptive product sales were used. If the relationship between the number of oral contraception packets sold in a year and the number necessary for a year of contraception is established, this gives an estimate of the number of women using oral contraception in a year.

This calculation is also done for other contraceptive methods such as IM (Intramuscular – 4 injections per year for the products used in New Caledonia) and for IUD (Intra-Uterine Device - it is considered that an IUD has an average life of 5 years).

In 2012, the number of women-years of contraception can be estimated as at least 35 472 (other methods of contraception such as condoms are not accounted for), which would represent a coverage of 53.5% of the female population concerned.

VOLUNTARY TERMINATION OF PREGNANCY (VTP)

The methods of voluntary pregnancy termination in New Caledonia were defined by a Resolution dated 22 September 2000 and have been applied since 1 January 2001.
The results of the annual 'ROSA' (Care Availability and Activity) survey were used to calculate the VTP rate per 1000 women (2012 figures not available).

In 2011, for 1000 women between the ages of 15 to 49 years considered to be of childbearing age (average population), the voluntary termination rate in New Caledonia was at least equal to **25.7 per 1000**. This very high estimate should be relate to the as-yet insufficient contraception coverage in New Caledonia, apart from the rate of undesired pregnancies that lead to a birth.

In metropolitan France, the number of abortions per 1 000 women was 14.5 in 2009.

SCREENING FOR CERVICAL CANCER

Cervical cancer screening for is one of the nine priority areas of the prevention plan approved by the Territorial Congress in 1994 (Resolution no. 490 dated 11 August 1994 relating to a health promotion plan). A direct method of evaluating the effects of this screening is to regularly monitor the number of cervical smears done in New Caledonia through laboratory activities.

In 2012, 22 688 cervical smears were done in New Caledonia by two medical laboratories (4.7% more than in 2010), 3.3% of these cervical smears showed pathological lesions.

MATERNITY

The average age for mothers at their first childbirth has been rising regularly for 30 years. In 1980, the average age of the mother when her first child was born was 23.9 years, as against 26.9 in 2010 (12.6%) (ISEE figure).

PREGNANCIES AND DELIVERIES

In 2012, a high rate of caesarian section deliveries was recorded in both public and private facilities, exceeding the mainland French rate (20.2% in 2009).

2012	Public sector	Private sector	Total
Number of deliveries	2 595	1 846	**4 441**
Number of caesareans	478	476	**954**
% of caesareans / deliveries	18.4	25.8	**21.4**

(Source : Réseau Périnatal de Nouvelle-Calédonie

MATERNAL DEATHS

Maternal death, originally defined as the death of a woman in childbirth, has more recently been redefined as any death for obstetric reasons occurring during pregnancy, childbirth or within 42 days after delivery (WHO A definition). This definition matches that of the International Federation of Gynaecology and Obstetrics, leading to the inclusion of deaths linked to abortions or ectopic pregnancies and the exclusion of all accidental or chance deaths origin occurring during pregnancy (road accidents, suicide, homicide, tumours or various diseases) if unrelated to pregnancy, two maternal deaths were recorded in 2012 (1 in 2011) a total of 27 over the past 22 years. For the period from 1991 to 2012, the average rate was therefore **26.8 per 100 000** live births.

Because of the low number of cases recorded each year, this rate is influenced by the hazards of small numbers. Caution should therefore be exercised when interpreting it, which does not obviate the need to look closely at the causes of death.

PREMATURE BIRTHS

A total of 4441 births were recorded in 2012 (source: 'Réseau périnatal de Nouvelle-Calédonie).
These births can be broken down as follows:

PLACE	2011			2012		
	Age of gestat. < 37 weeks	Total births	% of gestat. < 37 weeks	Age of gestat. < 37 weeks	Total births	% of gestat. < 37 weeks
P.Thavoavianon Hospital	15	282	5.3	18	319	5.6
CHT	288	2 162	13.3	356	2 276	15.6
Anse Vata Polyclinic	18	698	2.6	20	800	2.5
Magnin Clinic	34	982	3.4	32	1 046	3.0
Total analysable date	**355**	**4 124**	**8.6**	**426**	**4 441**	**9.6**

From these data, the rate of premature births can be estimated as at least 9.6%. This figure remains lower than the French one (7.4% in 2010).

CAUSES OF INFANT MORTALITY

615 deaths of children under the age of one were recorded between 1991 and 2012.
Perinatal diseases (foetal disorders, neonatal infections, respiratory diseases specific to the neonatal period, etc.) represent the main cause of death with 35.1% of deaths, then congenital anomalies with 17.1% of deaths (mainly cardiovascular and nervous system conditions: 49.5%) and infectious diseases (40 cases).
A total of 61 cases of sudden infant death syndrome were observed during this period, representing 9.9% of these deaths.
These figures confirm the need to monitor pregnancies, so as to detect any congenital disease as early as possible, but to also inform mothers about the need to deliver in a medical facility in order to give better care at birth to any child with a perinatal disorder.

YOUNG CHILDREN

Preventive action related to child care in provincial facilities:

Preventive action related to child care in provincial facilities
One of the purposes of preventive medicine is to make sure that all children are up to date with their vaccinations and vaccinate those who are not.
New Caledonia's regulations provide for all children to have mandatory vaccinations for certain communicable diseases such as diphtheria, tetanus, poliomyelitis, tuberculosis, whooping cough, measles, rubella, mumps, viral Hepatitis B since 1989, haemophilus type b infections since 1994.
Since 2006, the recommendation has been to vaccination against pneumococcal infections from the age of 2 months.
All these vaccinations are covered 100% by the social security agencies.

REGULAR MEDICAL EXAMINATIONS IN SCHOOLS

The health of schoolchildren is not restricted to diagnosing and treating sick, handicapped or ill-treated children. Many physical, educational, social and psychological factors can be identified in the school-going community. They have an impact on the child's health and determine their future health capital. Identifying these factors is an important step in combating lack of success at school.

Medical examinations are mandatory in certain grades through children's schooling.

Children receive eyesight and hearing problem detection tests, urine tests, vaccination schedule checks and a clinical examination covering skin appearance, scalp appearance and dental health, plus a cardio-pulmonary examination, a genital organ examination, a spine examination, etc. and a TB test, if necessary, in the CP and CM2 grades, with parental agreement.

In 2012, the Nouméa school medical centre carried out 13 280 medical examinations in pre-school, primary and specialised classes, some 3541 children were examined in the Northern Province.

HEALTH SERVICE ORGANISATION

Demography of health professionals

PHYSICIANS

The results obtained come from the health professional records administered by the Health Inspectorate at DASS – NC, cross-checked from CAFAT records and data from the New Caledonia Medical Council.
For 2012, the figures were drawn up as at 1 November.
This group includes private practice physicians whether or not bound by contract to the public health scheme, public health physicians and salaried physicians in the private sector.

Not included are:

- physicians doing a replacement, post-holders or doctors for whom a locum is standing in are still accounted for
- interns
- physicians whose qualification has been registered, but who are not yet practicing or who are seeking employment.

In the ADELI ('automatic listing') file, a physician is considered as a specialist if he/she is practicing his/her specialty. The nomenclature used is therefore related to the year concerned.

A total of 626 physicians were practicing in 2012 (272 in private practice and 354 salaried), an increase of 1.8% in comparison to 2011. In 2012, salaried physician numbers remained constant, while an increase of 3.5% in the number of private practice physicians was observed.
In 2012, the density was 244.5 physicians per 100 000 population. Of the 626 physicians, 571 had a curative activity, while the others were in preventive medicine or had medico-administrative duties.

Density disparities are observed between provinces, with the lowest in the Islands Province and the highest in the Southern Province, in Nouméa in particular because of the presence of hospitals and clinics where most of the specialists and many GPs practice.
In the Northern Province, the figure falls between that of the Islands Province and that of the Southern Province.

These density disparities for curative physicians are therefore as follows:

- Southern Province: 276.9
- Northern Province: 144.1
- Loyalty Islands: 114.9

A total of 304 (54.0%) of active curative physicians are general practitioners, a density equal to 118.8 for New Caledonia as a whole, that is lower than for metropolitan France at 145.1 general practitioners for 100 000 population (estimate by ATLAS of medical demography in France – CNOM as at 1 January 2011). Some 91% of Southern Province general practitioners were working in the Nouméa or Greater Nouméa area, a density equal to 119.4 for this zone as against 137.3 for the other Southern Province municipalities taken together.

Some 267 specialist curative physicians were active in 2012, representing a density of 104.3 specialists per 100 000 population in New Caledonia (this figure is 171 in France: estimate by ATLAS of medical demography in France – CNOM as at 1 January 2011). The density is higher in the Southern Province (133.8) and in Nouméa in particular (237.5) because of the presence of the main hospitals and technical facilities.

In all, 44% of specialist curative physicians practice a medical specialization and 24.7% a surgical specialization.

Distribution of specialist (curative) physicians by major group

	Medical	Surgical	Psychiatry	Medical biology
Number	116	113	25	12
Percentage	**43.6%**	**42.5%**	**9.4%**	**4.5%**

OTHER HEALTH PROFESSIONALS

The numbers in each profession and distribution by area of activity come from the ADELI records, employer records and CAFAT data for 2012.

In New Caledonia, the density of dental surgeons is **43.8 per 100 000 population (N=112**).
The breakdown between the salaried sector and the private sector is respectively 33 % and 67 %.

The density of dental surgeons in private practice is **29.3 per 100 000 population**.
In metropolitan France, the average density was a little higher and equal to 63 per 100 000 as at 01/01/2012.

The total density of physiotherapists in New Caledonia is **50.0 per 100 000 population (n=128)**, with the private practice sector showing a density of **39.8 per 100 000 population (n=102)**. The figure in mainland France was 116 as at 01/01/2012.

The density of nurses – general, specialist and supervisors – was **520.3 per 100 000** in New Caledonia (n=1332). In metropolitan France, the density of nurses was 881 as at 01/01/2012.

The density of midwives in New Caledonia was **164.9 per 100 000** women aged between 15 and 49 years in 2012 (N=107). In metropolitan France, the density was 130 per 100 000 women aged 15 to 49 years (professional demography in 2012, source DREES as at 01/01/2012).

The density of pharmacists, all categories combined, was **74.6 per 100 000 (N = 191)** in New Caledonia in 2012. In metropolitan France. this density was higher and equal to 113 as at 01/01/2012.

HOSPITAL BEDS AND PLACES (AS AT 31 DECEMBER 2011)

Short-stay:

Medicine: New Caledonia has 314 in-patient beds and 25 day beds for the various medical specialities.

Surgery: The available accommodation capacity for the surgical specialities is 219 in-patient beds and 26 day beds.

Obstetrics: 88 in-patient beds and 2 day beds cater for gynecology and obstetrics patients' needs.

Critical care: there are 40 in-patient beds in the intensive care unit at Gaston Bourret hospital. In addition, there are 17 constant monitoring beds at other facilities, accounted for as part of the medical care bed capacity.

In total: short-stay wards account for 661 in-patient beds and 53 day beds.

Psychiatry

Adults: Adult psychiatry hospitalization capacity, under the responsibility of the Albert Bousquet specialized hospital centre (CHS), is 111 in-patient beds and 58 day beds.

Infants and juveniles: 25 day beds are available.

Geriatrics:

- Beds for elderly patient care are available at the Albert Bousquet CHS: 20 geriatric preparation beds and 57 long-stay beds.
- 18 beds at the Raoul Follereau Centre, managed by the CHT, also cater for the elderly with a medical and social objective on a long-term basis.

Post-operatory care and rehabilitation (Medium-term stay)

New Caledonia has 74 beds for post-op. patients and 14 beds for functional rehabilitation patients at the following locations:

- 40 post-op. care beds are managed by the CHT at two sites: (34 at the Col de la Pirogue Medical centre and 6 at the Raoul Follereau Centre
- 20 geriatric post-op. beds at the CHS
- 14 post-op. beds at the Poindimlié facility of the Northern Hospital
- 14 functional rehabilitation beds managed by the CHT but located within the CHS.

2012 distribution of hospital beds and day beds by location in New Caledonia
(IP + in-patient bed and DB = day bed)

	CHT		CHN Koumac		CHN Poindimié		Clinics		CHS		TOTAL	
	IP	DB	IP	DB	IP	DB	IP	DB	IP	DB	IP	DB
Medical	206	20	20		16		72	5			314	25
Surgical	133	6	13		0		73	20			219	26
Gynecology obstetrics	47	2	9		2		30	0			88	2
Intensive care	40				0						40	0
Post-op.	40				14				20		74	0
Functional rehab.	14										14	0
Adult psychiatry									111	58	111	58
Pedopsychiatry										25	0	25
Long-stay	18								57		75	0
TOTAL	498	28	42	0	32	0	175	25	188	83	935	136

Multi-purpose local hospitalisation facilities

Some medico-social centres have observation beds, referred to as medicine and obstetrics beds: New Caledonia's geographical characteristics have compelled the provincial institutions to equip their health facilities with multiple purpose beds: 66 medicine beds (19 in the Southern Province, 7 in the Northern Province and 40 in the Islands Province) and 25 obstetrics beds (6 in the Southern Province, 2 in the Northern Province and 17 in the Islands Province) were operating in 2004.

None of these beds have been covered by an authorization request under the amended Resolutions no. 429 dated 3 November 1993 relating to the organisation of the health and social services in New Caledonia and no. 171 dated 25 January 2001realting to health mapping and the health service organizational structure of New Caledonia.

The number of beds available at the CMS (medico-social centres) has changed with only 78 beds (63 for medicine and 15 for obstetrics) being actually available at the present time.

	Beds designated as 'medical'	Beds designated as 'obstetrics'
South Province	16	6
North Province	1	1
Islands Province	46	8
TOTAL	63	15

PARA-PUBLIC FACILITIES (2010-2012)

The 'Mutuelle du Nickel' est composée :

- The Doniambo Medical Centre, in Nouméa with 2 ophthalmologists 3 dental surgeons (2 full-time and 1 part-time) 1 general practitioner
- 2 optical centres : one in Quartier Latin and one in Doniambo, where 3 optician/ spectacle-makers practice
- 2 dental surgeries, in Thio and Kouaoua; one dental surgeon covers these two locations

In 2012, 12 038 ophthalmological consultations and 10 945 dental consultations were performed.

'Mutuelle des Fonctionnaires' (public servants' mutual insurance scheme)***:***

It offers:

- in Nouméa: 1 physician, 6 dental surgeons, 2 physiotherapists, 1 pharmacist
- in Boulari (Mont-Dore): 1 general practitioner, 2 dental surgeons
- in Bourail: 1 dentist
- in Pouembout: 1 dental surgeon, 1 pharmacist

In 2011, 3058 dental consultations and 7665 medical consultations were performed.

CAFAT (New Caledonia social security system)***:***

In Noumea, there are 2 socio-medical centres, one at Receiving and one at Rivière Salée, where the following doctors practice:

- 10 general practitioners.
- 4 dental surgeons.
- 2 radiologists (part-time).
- Cardiologists, paediatricians and ENT specialists working as consultants.

In 2012, 28 558 general practitioner consultations were recorded, along with 1391 specialist consultations and 2699 dental consultations.

ARMED FORCES HEALTH SERVICE

Armed forces health service resources and activities as at 31 December 2012:

Infirmaries	Beds	Staff Physicians	Staff Nurses	Number of days	Number of consultations
Joint Armed Forces Medical Center, Noumea	12	3	5[1]	234	5 335
Marine infantry regiment for the Pacific (RIMAP) in Plum	7	3	4[1]	25	1 447
RIMAP Detachment in Nandaï - Bourail [2]	4	1	3	0	759
Tontouta naval air base	0	1	1	0	1 795
Special military service group in Koumac	**23**	**8**	**13[1]**	**259**	**9 336**

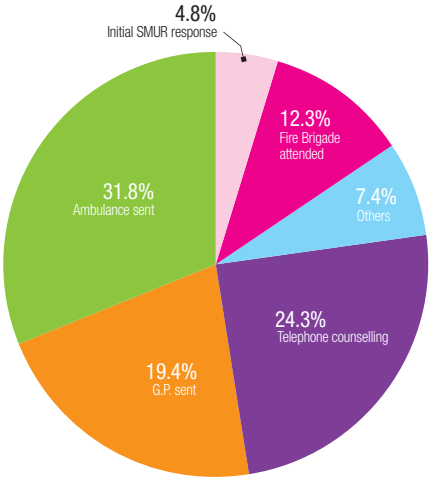
[1] *including one nurse on a short-term assignment*

For outpatient consultations army families can go to the 'Centre de consultations interarmées' (Armed Services Health Centre) in Nouméa.

EMERGENCY UNITS

The SAMU's essential mission is to provide or obtain appropriate emergency health care to sick persons, persons with injuries and parturients, wherever they are located in New Caledonia, on a constant basis. The emergency unit's mission is to cater at any time for all patients coming to Gaston Bourret Hospital for immediate care and for whom care was not scheduled. whether in the event of an emergency or a perceived emergency.

In 2011, the 2 emergency units at Gaston Bourret and Magenta recorded:
A total of 45 850 patients as against 44 380 in 2011, an increase of 3.1% (+9.3% at Magenta and -0.6% at G. Bourret). Some 22.4 % of these cases required hospitalisation: 29.4% at Gaston Bourret and 12.5% at Magenta.



SAMU - SMUR results: The 15 emergency call centre received 41 200 calls producing a medical response in 2012, which is 1.9% more than in 2011. These calls were processed as follows:

Medico-technical services

Blood transfusions

Activity	2011	2012	Evolution 2010/2011
Persons seen	**7 605**	**6 895**	**-9.4%**
Donors	**6 117**	**6 117**	**-9.7%**
Therapeutic apheresis	**490**	**490**	**-14.4%**
Distribution	**13 604**	**13 081**	**-4%**
Labile blood products	**7 134**	**6 380**	**-10.6%**
Costly blood-derived products	**6 470**	**6 701**	**+3.6%**

Blood donations

2012 was characterised by a decrease (-9.7%) in blood donations and by a decrease in the number of cases of therapeutic apheresis (-14.4%).

Blood distribution

The total number of products distributed fell (-4%) over 2011.

Medical biology

In the public sector, there are biochemical and haemostasis laboratories at 'Centre Hospitalier Territorial Gaston Bourret' and there is a laboratory at the Thavoavianon Hospital in Koumac.
The Pasteur Institute which mainly performs serology, haematology, and microbiology, as well as having an anatamo-cytopathological function, is a private foundation recognised as being of public benefit with the task of contributing to disease prevention and treatment through public health activities, research and training.
The medical testing laboratory of the CAFAT Medico-social Centre is located in the Receiving area of Nouméa and performs chemical, haematological and microbiological testing.
In all, 14 medical testing laboratories are registered in the private sector: 8 in Noumea, 1 in Dumbea, 2 in Mont-Dore, 1 in Koné, 1 in Paita and 1 in Bourail.

Medical imaging

At the Noumea CHT, radiology is split into 2 units: one in-house in rue Paul Doumer that includes the Scanner and RMI Unit since November 2005 and one at the Magenta Annex which basically performs woman and child radiology and echography. It should be noted that an agreement between the public and private sectors gives private practice patients access to the CHT Scanner and MRI unit.
The P. Thavoavianon and D. Nebayes hospitals as well as the Cafat Medico-social Centre at Receiving all have radiology units.
In the private sector, there are 7 private radiology practices.

PHARMACIES

A total of 65 pharmacies are registered and open to the public: 62 in the private sector and 3 mutual insurance pharmacies.
These 65 pharmacies are located as follows:

- Nouméa: 24 pharmacies + 2 mutual insurance pharmacies
- The other communes of the Greater Noumea area account for 16 pharmacies
- Outside Greater Nouméa there are 21 pharmacies, including 1 mutual insurance pharmacy
- Islands Province: 4 pharmacies.

Two dispensing physicians practice in the Isle of Pines.

Pharmacies within a healthcare facility

A total of 14 pharmacies within healthcare facilities have been authorized in the following facilities:
Azur santé, ATIR-NC, Gaston Bourret Hospital, Albert Bousquet Hospital, P. Thavoaviannon Hospital, D. Nebayes Hospital, Magnin Clinic, Anse-Vata Clinic, Baie des Citrons Clinic; Islands Province, Northern Province, Southern Province and Vavouto Medical Centre (KNS).

Pharmaceutical wholesalers

There are 5 pharmaceutical companies in New Caledonia, with the two main wholesaler/distributors being 'Office Calédonien de Distribution Pharmaceutique' (OCDP) and 'Groupement de Pharmaciens de Nouvelle-Calédonie' (GPNC).

Medicine depots

The number of businesses run by non-pharmacists actually conducting this activity in practice is not accurately known and the situation needs to be reassessed.
Most of the licences issued have lapsed.

GENERAL

Resolution no. 490 dated 11 August 1994 as amended relating to a health promotion and health expenditure control plan on the Territory of New Caledonia provides for annual 'health accounts' to be prepared. Health accounts make it possible to assess the cost of health care and assess trends.

DEFINITION

The cost of health care can be approached through two standardised combined concepts:
- Total medical consumption
- Recurrent health costs

TOTAL MEDICAL CONSUMPTION

Total medical consumption is equivalent to the value of the medical goods and services used in New Caledonia in direct response to individual health needs. It is expressed in terms of overall financial volumes arising from curative care and individual preventive medicine services offered over the year.

Health care consumption comprises inpatient and outpatient healthcare benefits delivered by hospitals, private practices, district medical facilities, provincial health centres and social welfare agencies. To health care proper should be added the consumption of medicines and other medical goods (optical items, prostheses, minor equipment and dressings).

Medical care and goods are grouped into the following categories: hospitalisations, out-patient care, medical evacuations, physicians' fees and the costs stemming from their prescriptions: medical auxiliaries, drugs, tests, prostheses medical transport, etc., plus dental care.

The expenditure relating to individual preventive medicine comprises the cost of vaccinations, testing and medical surveillance, as well as the expenditure incurred in industrial medicine services.

RECURRENT HEALTH EXPENDITURE

Recurrent health expenditure is equivalent to the overall effort expended on health in the course of a year by the population and institutions in New Caledonia. It amounts to the total expenditure committed by the funders of the health system: CAFAT, the provinces and New Caledonia under medical aid, the supplementary cover organisations (mutual insurance companies, insurance companies, provident institutions) and households themselves.

To the total medical consumption defined above, should be added the daily allowances, research, health professionals' training, health system management costs and collective prevention outlay (public awareness and health education campaigns).

COST OF HEALTH CARE IN NEW CALEDONIA

Trends from 2009 to 2012

Between 2009 and 2012, total medical consumption increased overall by 18.6% and recurrent health expenditure by 19.7%.

Year	Total medical consumption in millions of CFP francs	% N-1	Recurrent health expenditure	% N-1
2009	69 661 506	+11.7%	76 755 152	+11.5%
2010	75 362 897	+8.2%	82 186 032	+7.1%
2011	78 752 236	+4.5%	86 991 024	+5.8%
2012	82 612 943	+4.9%	91 914 063	+5.7%

Comparison

The use of standardised aggregates makes comparisons possible, with mainland France in particular, by expressing:

- Total medical consumption and recurrent health expenditure per inhabitant;
- Total medical consumption and recurrent health expenditure in relation to GDP.

A - Trends in total medical consumption per inhabitant and recurrent health expenditure per inhabitant

Exercice	2009	2010	2011	2012
Population of NC (ISEE data)	*245 580*	*248 000**	*252 216**	*256 000**
Total medical consumption per inhabitant in NC	283 661 FCFP	303 882 FCFP	312 367 FCFP	322 707 FCFP
in France	*335 604 FCFP*	*321 956 FCFP*	*329 594 FCFP*	*341 099 FCFP*
Health expenditure per inhabitant in NC	312 546 FCFP	331 395 FCFP	345 033 FCFP	345 033 FCFP
in France	*426 143 FCFP*	*432 117 FCFP*	*438 249 FCFP*	*444 197 FCFP*

** Population as estimated*

B - Trends in recurrent health expenditure in relation to GDP

In %	2009	2010	2010	2010
GDP in NC *(in '000 CFP francs)*	748 165 *	823 397 *	847 947 *	863 108 *
Recurrent health expenditure in relation to GDP in NC	10.2%	10.1%	10.3%	10.8%
In France	11.7%	12.1%	12%	12%

** Updated ISEE data*

In 2012, 91.9 billion CFP francs were spent in total on health care in New Caledonia, most of which (82.6 billion CFP francs) was spent on the consumption of medical care and goods.

Health expenditure per inhabitant was 359 039 francs.
With recurrent health costs standing at 10.8% of GDP, New Caledonia's health expenditure lies in the midrange of health expenditure of developed countries.

THE ENVIRONMENT

Health is the result of a group of determining factors, in particular, the physical and social environment, lifestyles and health care systems. Health protection and promotion policies should be designed to encompass all of these determinants.

CLIMATOLOGY

Climatological review of the year

In the early part of 2012, the climate of the South-west Pacific was influenced by a mild-to-moderate La Nina event that warmed ocean surface temperatures around New Caledonia.
La Nina did not have any clear impact on rainfall patterns in the first half of the year. The South Pacific Convergence Zone, the main rainfall vector at the scale of the South-west Pacific, stayed away from New Caledonia most of the time, sheltering us from heavy rainfall. Although there may not have been unpredictable weather in addition to the normal rainy season, less regular patterns did bring welcome rainfall during the dry season.
Minimum and maximum temperatures were higher than average overall in 2012.
Overall solar radiation was lower than the annual means.
Average wind speed was constant but lower than usual.
On either side of the main island of New Caledonia potential evapotranspiration (EVP) in 2012 was less pronounced than usual. The EVP in May was however notably critical for the country's flora, especially in the VKP (Voh-Koné-Pouembout) area.

WATER

The Government of New Caledonia exercises jurisdiction over water mainly through health and hygiene regulations. The Provinces have jurisdiction over environmental matters, particularly regulations on classified facilities (water treatment plants, for example).

According to the 'Commune Code' (the 'commune' or municipality is the smallest administrative subdivision in France), communes have jurisdiction over hygiene matters and are responsible for preventing disease outbreaks. In this regard, they must implement quality control measures for their water supply systems and ensure that quality standards apply to bathing and recreational water and sanitation facilities.

In New Caledonia, the mean volume of water billed per year and per consumer is 460 cu. m.
In Noumea, the public water supply service has been contracted to 'Calédonienne des Eaux'.
Noumea's water supply comes from the water reservoir formed by the Dumbéa River dam, the 'Aqueduct' pumping facilities at Tontouta and several pumping stations spread out along the Dumbéa River.

WATER QUALITY AT SWIMMING SITES

Only the City of Noumea carries out quality control inspections of water at swimming beaches.
The SIPRES (Environmental and Health Risk Inspection and Prevention Service) water monitoring laboratory takes and tests water samples on a regular basis.

SANITATION

Poor maintenance or lack (in most cases) of sanitation systems lead to a noticeable decrease in the bacteriological quality of water.
For that reason, water in New Caledonia is, on the whole, of inadequate bacteriological quality.
It is characterised by excessive amounts of faecal germs from both humans and cattle. This adversely affects drinking water if it is not treated but also impinges on contact uses such as swimming, washing, etc.
The most alarming situation is the contamination of the water lens in the Loyalty Islands because it is the community's sole source of drinking water.

AIR

The 'Association de Surveillance Calédonienne de la Qualité de l'Air' **(Scal-Air:** http://www.scalair.nc) is responsible for the surveillance of air quality in New Caledonia and raising public awareness on this issue. Scal-Air takes samples and analyses the pollutants present in the ambient air **in real time**.

Four pollutants are kept under surveillance: fine particles, sulphur dioxide, nitrogen dioxide and ozone. Concentrations of each of these pollutants are classified on a scale from 1: 'very good' to 10: 'very bad'. The highest of these four sub-indices gives the **'ATMO' index** for the day.
Real-time mapping data can be used to accompany the index figure.

FIRES

The first responsibility for **fire protection** lies with the communes and their Fire and Rescue Centres, but all levels of government (French Government, New Caledonia, Provinces) are also involved. As part of the civil defence area, the French Government takes part in the organisation and coordination of fire prevention resources and can send in its own services in the event of a large-scale fire exceeding the communes' own capacity, in particular by deploying the Armed Forces and the Gendarmerie. Through the Department of Animal Health, Food and Rural Affairs (DAVAR) and the Agency for the Prevention and Compensation of Agricultural and Natural Calamities (APICAN), New Caledonia and the Northern and Southern Provinces fund prevention and fire-fighting activities, in particular the overflights by water-bombing helicopters.

The 2011/2012 season was relatively short, being brought to halt by the rain in early December which considerably reduced the fire hazard, which did however remain particularly intense because from 1 September to 8 December 2011, **245** fires destroyed **8870 hectares**, an increase of 60% of fire-damaged surface area in comparison with the previous season. In contrast, the 2012-2013 season did not feature many fires in areas of natural vegetation, with a total of 1 000 ha burnt, almost half of which was accounted for by the fire in the 'Creek Pernod' area alone in January 2013.

FOOD

The DAVAR animal health service is responsible for monitoring the safety of food products of animal origin. This office also monitors collective catering facilities in collaboration with provincial or municipal hygiene services.

This department has a laboratory capable of carrying out microbiological testing of food items. It also has data on the in-house inspections carried out by facilities that prepare ready-to-eat cooked dishes.

The Economic Affairs Department conducts quality control of food in retailing networks as part of its fraud control work.

WASTE

Household refuse generation is steadily increasing due to the growing population and increased use of manufactured and factory-packaged goods.

Certain **specific types of waste**, e.g. purged substances or liquids, used oil, tyres, toxic waste (pyralene, lead batteries) undergo specific processing. Up to now, **potentially infectious health system waste material** has been destroyed by incineration.
A new process will soon be put into place that uses a disinfection process.

A wide ranges of actions designed to heighten **public awareness about cleanliness** have been carried out and are still extremely vital for New Caledonia.

ECONOMIC AND SOCIAL DATA (ISEE[1])

The global economy continued to decline in 2012, after the 2011 slowdown. The European recession held back the global economy, especially in emerging countries. This fall in demand weakened commodity prices and slowed inflation.

NEW CALEDONIAN ECONOMY

In 2012, the economy of New Caledonia showed little progress, in a depressed international setting. Domestic demand dropped and this trend persisted into the beginning of 2013. Nickel and tourism were no longer the two powerful drivers of the economy that they had been in recent years. Hiccups in the intensifying activity at the Southern Province ore-processing plant and the completion of construction of the Northern Province ore-processing plant stimulated direct and indirect activity, especially in construction. This performance was recorded to a general background of falling raw material prices, especially nickel, widening New Caledonia's trade deficit. Household demand plateaued, despite a fresh rise in the guaranteed minimum salary and in salaries determined under collective agreements.

MINING AND ORE-PROCESSING

In the course 2012, the average per-pound price of nickel at the London Metal Exchange (LME) declined, falling to 7.95 USD per pound as against 10.39 in 2011 (-23%). This fall was however offset by the contemporaneous rise in the value of the US dollar. In local currency terms, the fall was therefore 17% in 2012.

FISHERIES AND AQUACULTURE

Tuna fishing (three-quarters of which targeted white-flesh tuna) accounted for 90% of local oceanic fishing activity. In 2012, as in 2011, 2300 tonnes of tuna were caught in New Caledonia waters. Some 780 tonnes of tuna were sold outside the countr as against 840 tonnes in 2011. After the difficulties encountered in 2011 and the resumption in activity in 2011, prawn aquaculture expanded by 6% in 2012. A total of 1630 tonnes of prawns were produced in 2012 as compared to 1540 in 2011. New Caledonia exported a total of 1834 tonnes of seafood in 2012, after exporting 1749 tonnes last year.

CONSTRUCTION

On average in 2012, the construction sector employed 2.7% fewer people than in 2011. The BT 21 'all trades' index rose by 14% year-on-year after increasing by 4.1% in 2011. In the same way as last year, the 14% increase stems from the rise in raw material prices, fuel in particular and the hike in lower salaries in the construction sector.

ENERGY

In 2012, electricity production remained constant in comparison with last year. It increased very slightly by 0.4% over 2011. Power production is increasing with rising hydro-electric electricity supply and, to a lesser extent, thermal energy output. The proportion of renewable energy sources in total supply rose in 2012.

TOURISM

In 2012, the number of visitors to New Caledonia (tourists and cruise ship passengers) amounted to 390 000 people. 42 600 more than in 2011 (+12.3%). This increase was mostly due to the surge in cruise ship passenger arrivals (+ 42 300). an increase of 12.3%, with the number of tourists remaining stable. In 2012, more than one tourist in three came from the French mainland (+11.8% over 2011) with a peak period from July to October. Australian tourists were the second biggest group (17 729, up 4%) closely followed by the Japanese (17 430, down 5.6%).

TRAVEL BY NEW CALEDONIANS

In 2012, 121 100 New Caledonians came home from overseas travel, 2 460 less than the previous year (and for the second consecutive year). This 2% drop is smaller than in 2011 (-6%). The economic slowdown and the restrictions on 'territorial continuity' travel subsidies may have kept some residents at home.

CONSUMER PRICES

In December 2012, annual inflation was +1.6%. It was much lower than in 2011 (+2.6%). Inflation in 2012 is nevertheless much higher than in 2009 (+0.2%), when it fell to its lowest level in a decade, but much lower than in 2008 (+3.7%). Apart from tobacco products, annual price increases stood at 1.7% in 2012. Energy rose by 32.4%, followed by services with 2.4%, food at 1.5% and manufactured goods (0.3%).

**ISEE : Institut de la Statistique et des Etudes Economiques.*

SALARIED EMPLOYMENT

In 2012, on average, 89 200 salaried staff were declared to CAFAT. Over the year, salaried employment increased by 1.6%, much less than in 2011 and 2010.

In 2012 on average, 64 438 salaried staff worked in the private sector, accounting for 72.2% of total salaried employment. In 2012, an average of 24 764 salaried staff were employed in the public sector, 525 more than in 2011 (+2.2%). The number of territorial public servants rose by 1.5% in 2011, while the number of French Government-employed public servants expanded by 1.8%.

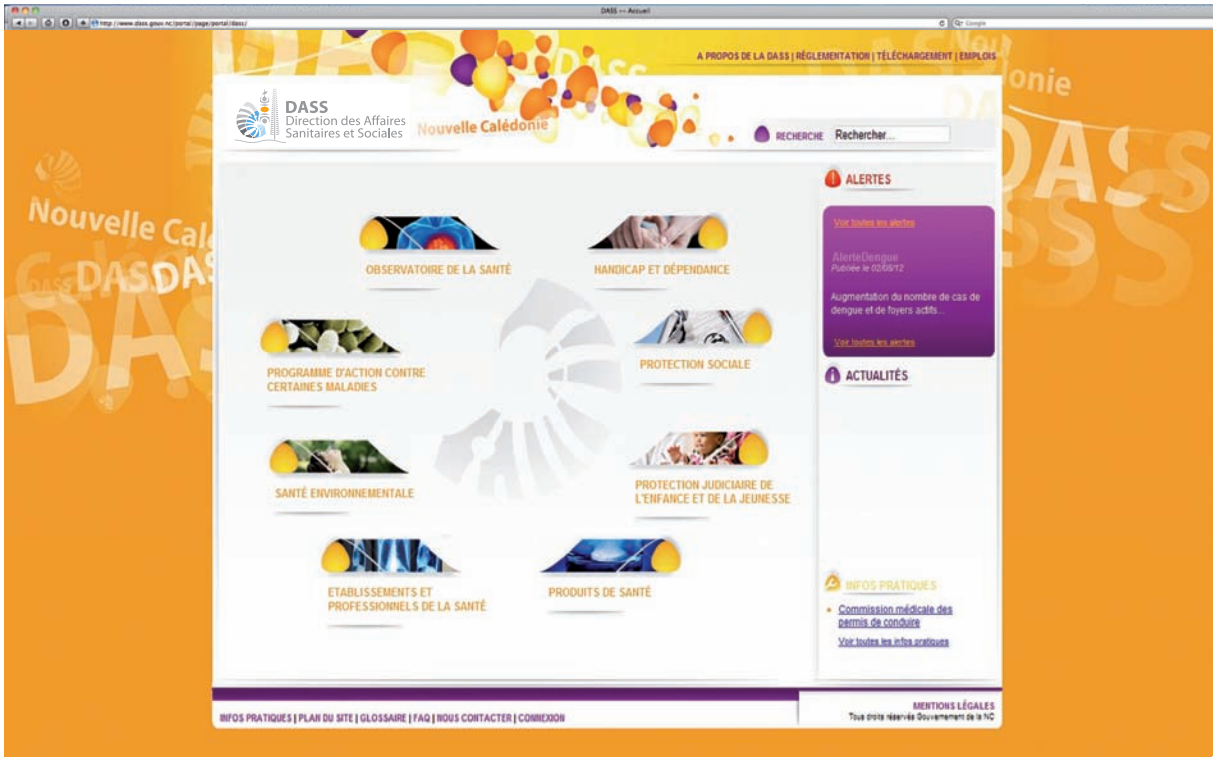
PUBLIC FINANCES

In 2012, the French Government spent 156.4 billion XPF in New Caledonia, slightly more (+0.4%) than in 2011.

The budget situation in New Caledonia shows an increase in revenue (+5.7%) and in expenditure (+6.4%) for 2011.

This report on the health situation in New Caledonia is available on the DASS-NC website at the following address: *www.dass.gouv.nc*

To help you navigate through the site:
On the home page, click on 'Observatoire de la santé (Health Observatory), then on 'situation sanitaire (health situation) in the menu on the left. Choose the document you are interested in and enjoy it.



Direction des affaires sanitaires et sociales
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DASS
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