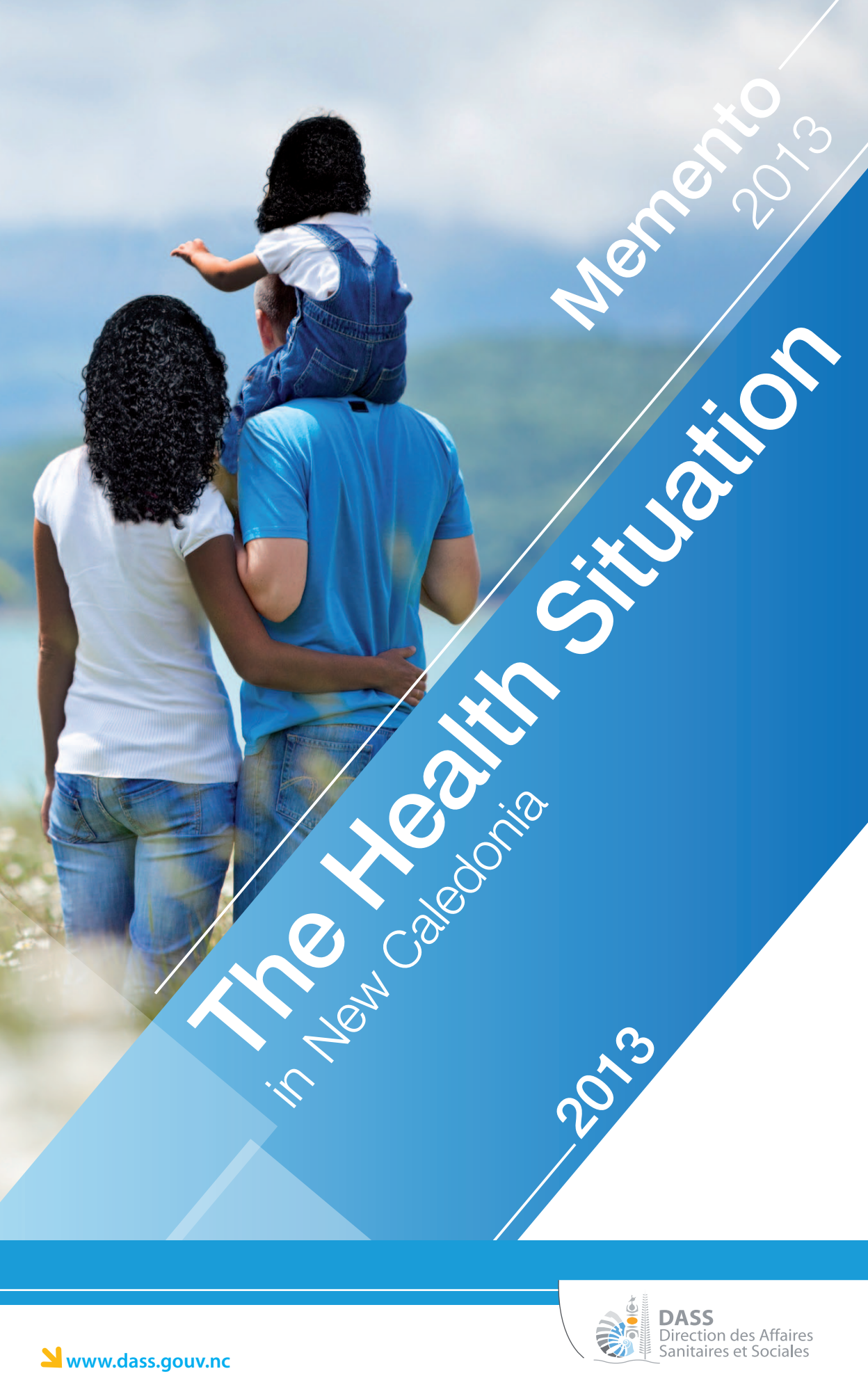


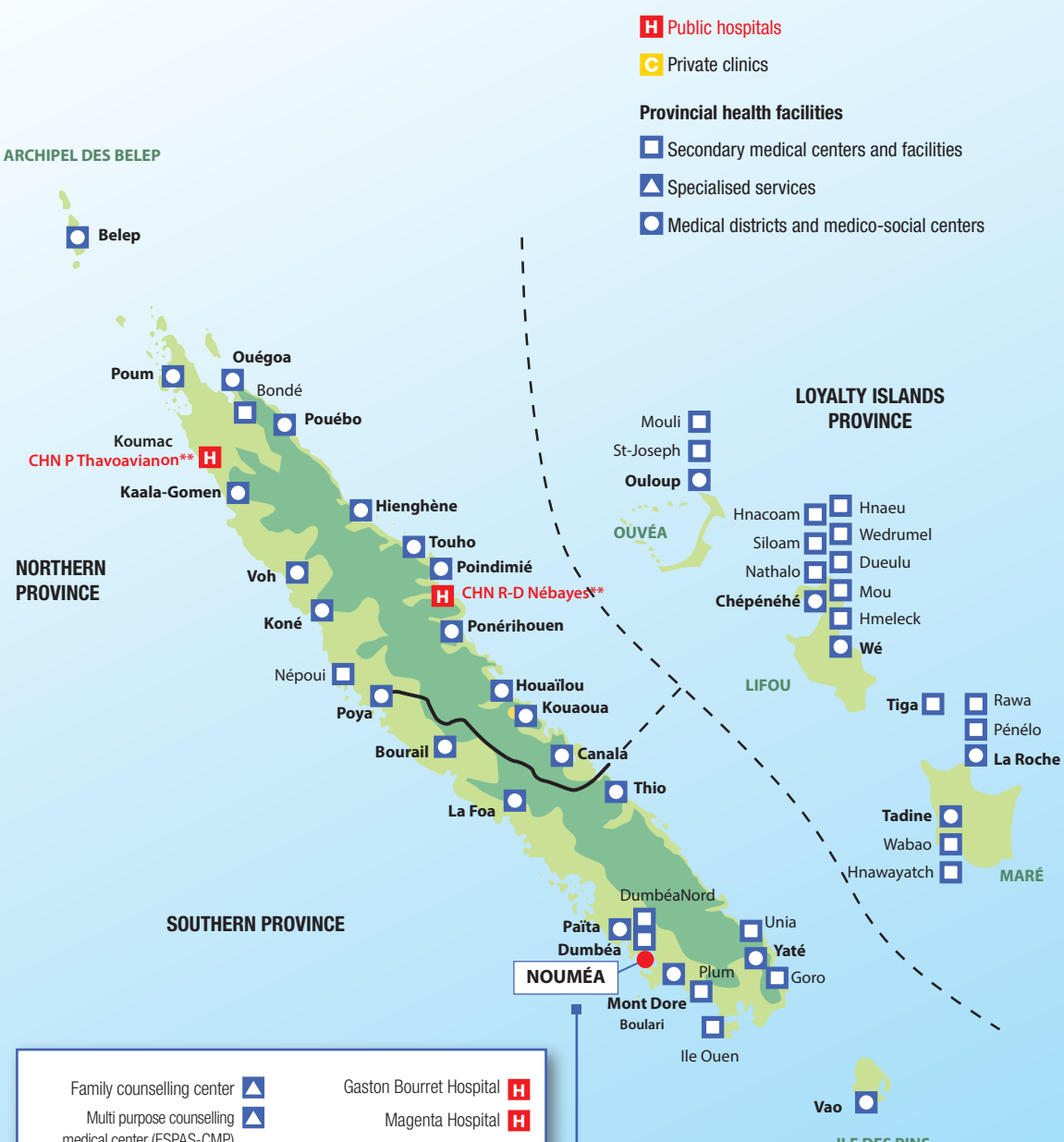
Memento 2013

The Health Situation in New Caledonia 2013

DASS
Direction des Affaires Sanitaires et Sociales

www.dass.gouv.nc

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 Albert Bousquet 'CSH' (Specialised Hospital Centre)*

+ Mother and Child Health Centres in Poindimié and Koumac

2013

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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. Civil status data for 2013 were not published due to the need to make arrangements for the 2014 census.

	Population as at 01/01/2012	Rate of increase [1]	Live births	Birth rate [2]	Fertility index [3]	Infant mortality [6]	Number of deaths according to place of residence	Crude mortality rate [4]	Crude perinatal mortality rate [7]	Life expectancy at birth [5]
New Caledonia	260 000	11.9	4 389	17	2.18	3.9	1 374 (2013)	5.1	13.5	74/80.4
Islands Prov. *	17 400	10.8	331	19	2.9	3	143	8.1		77.6/73.5
Northern Prov. *	47 000	11.7	829	17.7	2.3	3.6	274	6		79.7/75.4
Southern Prov. *	195 600	12	3 218	16.6	2.2	4	937	4.6		80.7/77.9
France (in 000) INSEE	65.585 857		792 000	12.5	2.01	3.3	560 000	8.8		81 together
Fr. Polynesia ISPF (2012 figures)	268 270	12.3 (2010)		16.6	2.01 (2012)	5.5 (2010)		4.6		76.2 together
Australia (mid 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

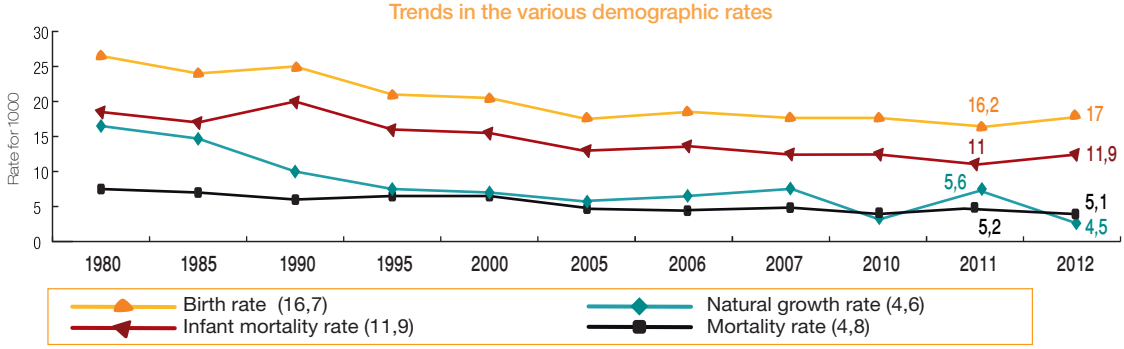
INSEE - ISEE - INED

*The 2013 data on provincial residents are unavailable.

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] 2.28 per 1 000 women of reproductive age.
A decrease in the fertility rate range by age between 1981 and 2005 can be observed, with a rising average age for motherhood (28.9 in 2012).

Crude mortality rate[4] : 5.1 per 1 000. After a distinct drop in the 1970s and 1980s, the crude death rate has been decreasing more slowly for the past 10 years. It remained below 5 deaths per 1000 between 2004 and 2010. For the past 2 years, it has again risen above 5 per 1 000.

In 2012, the crude death rate rose in the Islands Province (8.1 as against 6.8 in 2011) fell in the Northern Province (6 in 2012, 6.5 in 2011), while remaining stable in the Southern Province (4.6).

Life expectancy at birth[5] : 77.1 years in 2012 (men: 74; women: 80.4),
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] : 3.9‰. 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 steady but flatter decrease trend can be observed, with the rate moving increasingly closer to that of metropolitan France (3.9‰).
New Caledonia still has a young population (39.9% 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

1 374 medical death certificates were issued in 2013 (men: 810; women: 564).
The following classification by disease group varies only slightly from year to year.

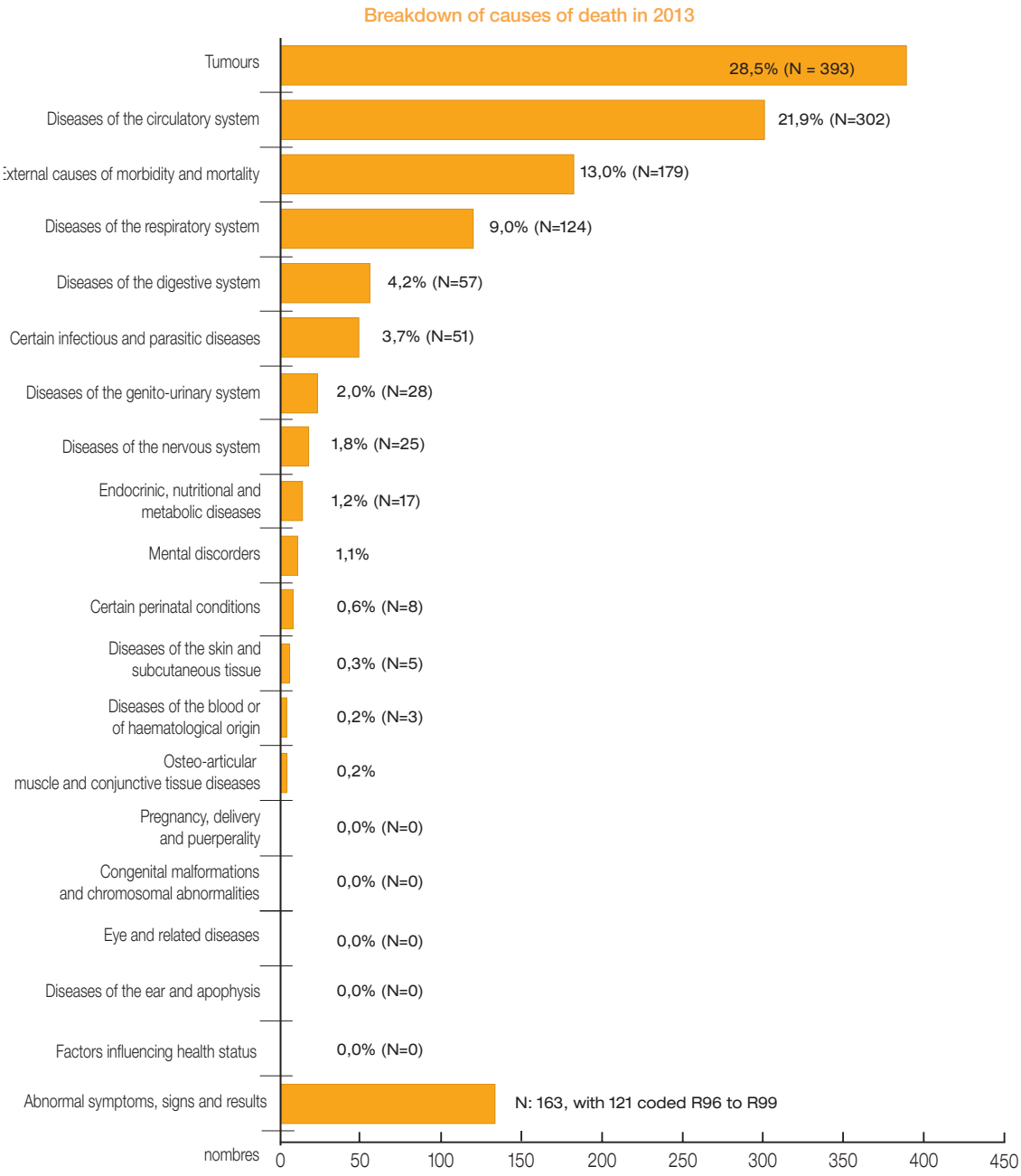
In 2013, gender-disaggregated, the 5 main causes of death were as follows:

	Men	Women
Tumours	27.6%	30%
Circulatory system	20.6%	23.9%
External causes of morbidity	15.7%	9.2%
Respiratory system	8.0%	10.4%
Abnormal symptoms, signs and results	12.9%	10.3%

It is noteworthy that the **external causes of morbidity** group remained the principal causes of death in the young population in 2013, accounting for 49.2 % of deaths in 15-24 year-olds. This group represents the leading cause of premature death in both sexes in New Caledonia, with 12 183 years of potential life lost (YPLL) between 2011 nad 2013. (YPLL is 3.6 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 aged less than one year per 1 000 live births in the year under consideration.
7 Crude perinatal mortality rate: number of stillborn children and deaths between 0 and 6 days for 1 000 total births.



MEDICAL CAUSES OF PERINATAL DEATH

In 2013, 74 child deaths were reported through specific perinatal death certificates, making a total of 1 420 deaths for the 1993-2013 period.
73.1% of these deaths concerned very premature births (<32 weeks).

For the 1993-2013 period, 231 certificates **involved medical terminations of pregnancy (MTP)**, the most frequent reasons for which were congenital disorders (nervous system: 26.9%, chromosomal defects: 17.3%, other congenital anomalies: 26.9%).

Of the 1 189 neonatal deaths not including MTP, 30% had no determining f**oetal or neonatal cause**. For the remaining 815 certificates, the cause was child-related in 90.9 % 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 33.8% of cases and **congenital defects** 15.1% of cases.

INFECTIOUS DISEASES

Notifiable diseases (not including cancers - see specific chapter)

In 2013, 11 610 notifiable disease cases were reported, not including cancers, making 9 966 more cases than in 2012. Following the establishment of the register of acute rheumatic fever (ARF) patients, the Health Agency was not in a position to provide the 2013 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 dedicated format.

Notification: : a procedure for individual data transmission by the notifying physician or biologist, 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	2013
Amoebiasis	13	20	11	6	0	1	1	1	0	0	1	0	0	0
Whooping cough	3	0	1	0	1	72	4	1	0	1	3	2	6	3
Dengue fever	12	34	105	5 673	792	46	48	47	1 179	8 410	122	15	718	10 522
Diphteria	0	0	0	0	0	1	0	0	0	0	1	0	6	0
Typhoid and paratyphoid fever	0	3	0	0	0	1	0	1	0	0	0	2	1	0
Viral Hepatitis B	40	49	31	39	29	11	9	31	102	33	5	6	5	16
Viral Hepatitis C	0	1	0	0	0	0	0	2	0	2	0	1	0	0
Leprosy	7	7	2	4	8	4	7	2	6	7	8	10	5	8
Leptospirosis	28	23	49	23	13	40	65	53	157	162	42	138	75	70
Meningococcal meningitis	4	9	10	11	3	5	7	13	9	8	10	10	5	8
Indigenous and imported malaria	3	1	1	5	6	0	0	0	2	0	10	1	2	2
ARF	55	56	66	34	287	305	80	296	136	190	122	86	ND	ND
Measles	0	0	0	0	0	0	1	0	0	0	0	0	0	0
HIV related syndromes	21	15	17	8	7	13	10	21	15	13	14	18	26	15
Tetanus	0	1	0	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	17
Tuberculosis (not inc.latent infection)	171	100	112	82	84	72	90	67	80	83	59	50	37	46
Vibrio vulnificus	-	-	-	-	-	-	-	-	3	1	0	1	2	0

In 2013, no cases of poliomyelitis, botulism or brucellosis were observed. 70 cases of leptospirosis and 10 522 cases of dengue were reported.

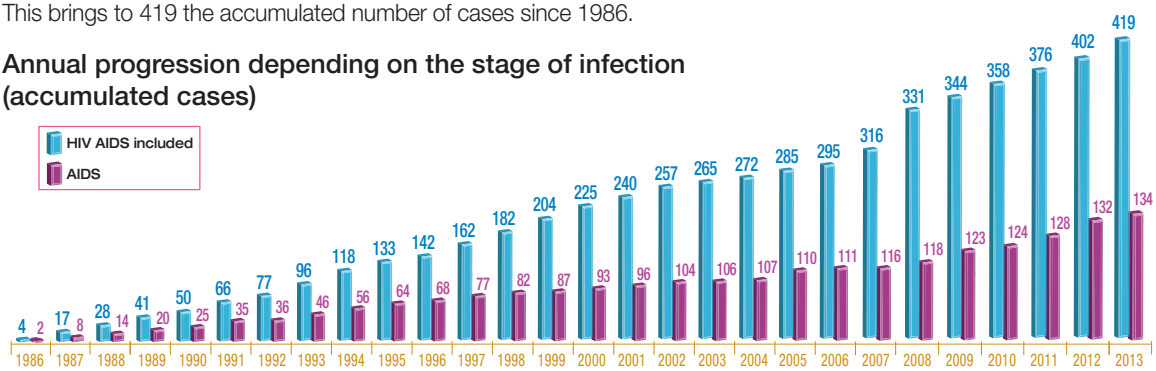
Sexually transmitted diseases:

Notifiable diseases of group C	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Condyloma acuminatum	26	27	28	26	17	3	12	22	28	25	30	1	6	0
Genital herpes	2	3	3	5	4	2	3	10	8	7	5	12	2	3
Mycoplama infections	115	119	107	90	93	108	134	219	184	160	104	3	3	0
Genital chlamydial infections	94	96	72	86	88	71	96	148	191	202	150	319	492	662
Gonococcal infections	52	55	49	31	33	35	58	82	90	77	68	141	152	175
Syphilis	24	16	11	10	20	15	21	38	36	46	38	49	66	62
Uro-genital trichomonasis	250	203	156	175	158	115	98	206	118	153	147	26	20	3
Other veneral diseases	198	121	77	75	55	40	50	60	72	86	13	3	2	0

The 2013 data relating to chlamydial genital infections and gonococcal infections 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.
17 new HIV-positive cases were recorded in 2013. These cases were confirmed by laboratories such as that of the New Caledonia Pasteur Institute or others outside New Caledonia.).
This brings to 419 the accumulated number of cases since 1986.

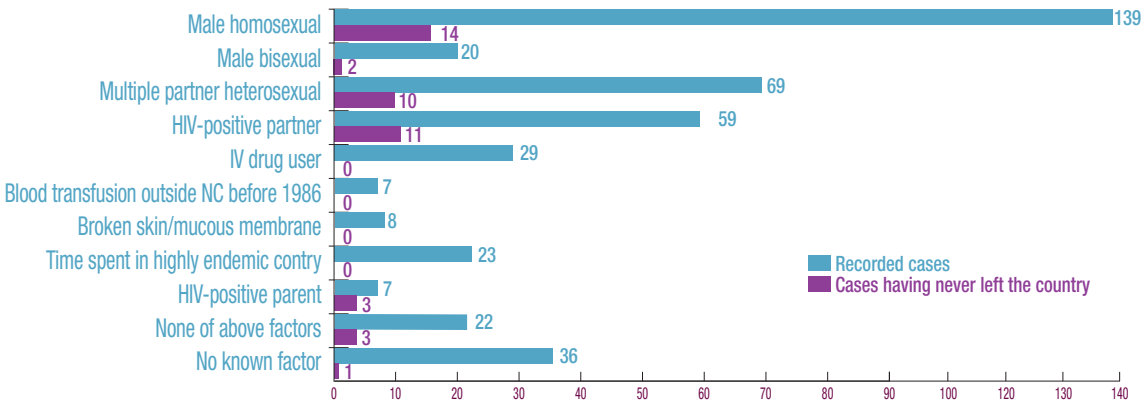
Annual progression depending on the stage of infection (accumulated cases)



As at 31st December 2013, 13 men (76.5%) and 4 women (23.5%) were under treatment.
The most affected age group, as in previous years, was the 20-39 year group. The average age for the group as a whole was 37.5 years (women: 33.3 years and men: 37.5 years).

HIV risk factors

Breakdown of the 419 HIV-positive cases by risk factor, including the 44 cases who have never left the country

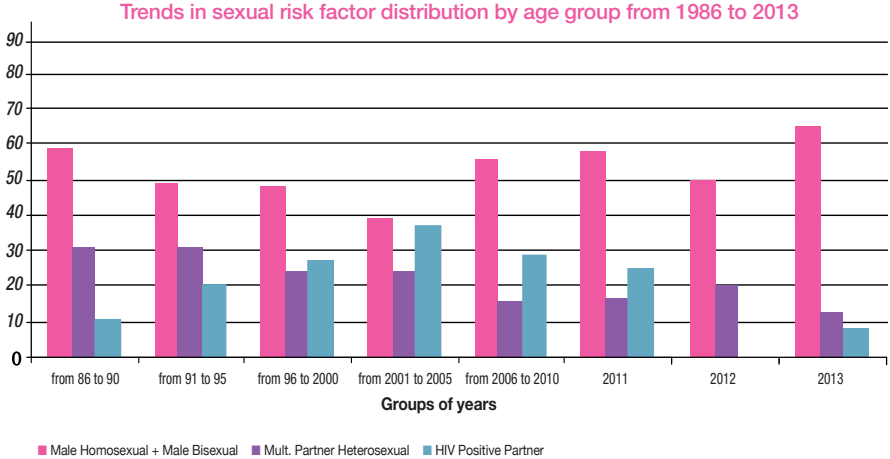


With regard to the cases whose risk factors are known, it can be noted that 78.9% are linked to a sexual mode of HIV transmission.

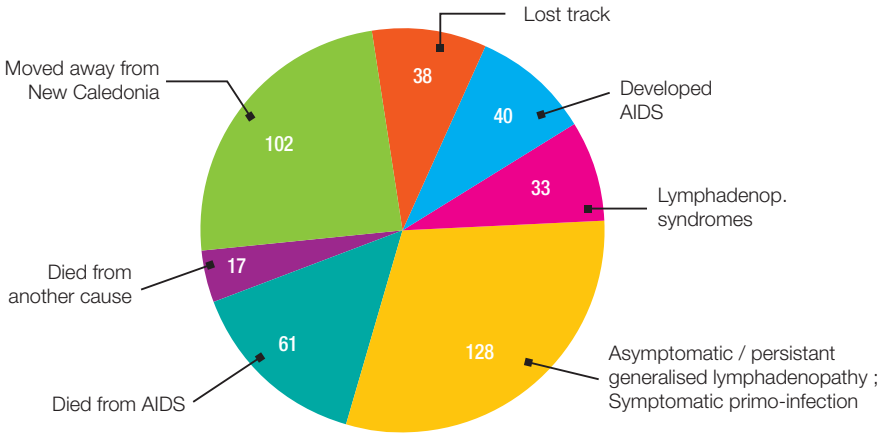
After a gradual downward trend over the 1990-2005 period (58% to 40%), the male homo/bisexual risk factor percentage has again tended to rise over the past 6 years and has for a second time exceeded that recorded at the beginning of the epidemic.

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. One case was recorded for this risk factor in 2013.

Trends in sexual risk factor distribution by age group from 1986 to 2013



Breakdown of the 419 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 419 HIV-positive patients, 78 have died (including 17 of a cause other than AIDS) and 140 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 17 cases recorded in 2013, 15 (88.2%) were at the asymptomatic stage and 2 (11.8%) 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 N° 211/CP dated 30 October 1992).

This resolution was superseded by Resolution N° 154/CP dated 16 April 2004, specifying the standards of training required and the operating conditions for these CDAG.

The consultation 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, the counselling must protect the confidentiality and anonymity of the process and the staff must have received special training for counselling).

Each consultation 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 8 successive training sessions, 122 health professionals (82 doctors and 40 midwives) have been trained. As at 31 December 2013, under the influence of their movements and depending on whether or not their certification was renewed, 48 of them (23 doctors and 25 midwives) have valid certification and are active in New Caledonia. For 8 of them (5 doctors and 3 midwives), however, their certification has only been operational since the second half of 2013.

The CDAG 2013 records were therefore compiled with contributions from 34 professionals (of the 48 possible, i.e. 71%of them).

These figures show a sharp decline in comparison with 2012 (-24.4% of the number of contributing professionals).

An analysis of the 1 990 strictly anonymous questionnaires completed in 2013 and returned to the DASS-NC Health Action Department, showed a clear 17.4% decrease in the number of reports received in comparison with 2012.

- Under-35s accounted for over ¾ (78.6%) of patients (43% between 15 and 24 years and 35% between 25 and 34 years).
- European patients accounted for 50.5% of consultations. Melanesian patients represented one third (33%).
- 'Risky behaviour' was referred to in 40.3% of cases, far more than 'early stage of relationship' (20.9%).
- 'Pregnancy' was a reason for coming in 12.7% of cases (82.6% of visits by pregnant women and 17.4% of spouse or partner visits).

It should be noted that 48 patients (2.4% of patients) reported a split condom as the reason for coming in.

Conclusions

The 2013 analysis confirms conclusions from previous years:

The majority (59.8%) of the data analysed in 2013 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 8 successive training sessions to122 certified professionals has made it possible to gradually increase and diversify the CDAG's range of patients, mainly through increasing territorial coverage.

At the present time, with movements and/or non-renewal of certifications, 48 of these professionals (23 doctors and 25 midwives) are approved to conduct this activity in New Caledonia. It should however be noted that 8 of them (5 doctors and 3 midwives) their certification only became operational in the second half of 2013.

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 Islands and Northern Provinces in order to offer a better service 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

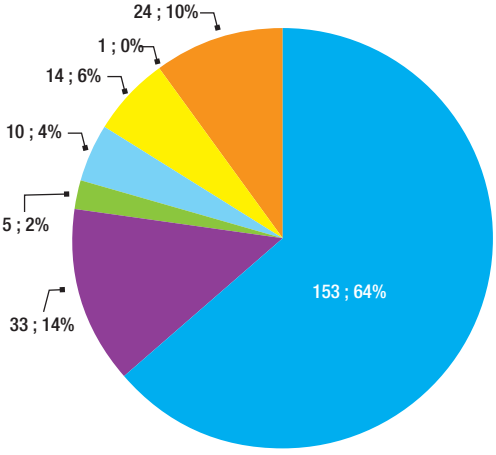
Apart from HIV, only certain ISTs are notifiable (syphilis, including neonatal syphilis, condylomata acuminate, Hepatitis B and Hepatitis C).

In 2013, 161 notifications were received by DASS-NC, 145 of which related to syphilis and 16 to cases 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 5.8/10 000 pop. in 2013.

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).

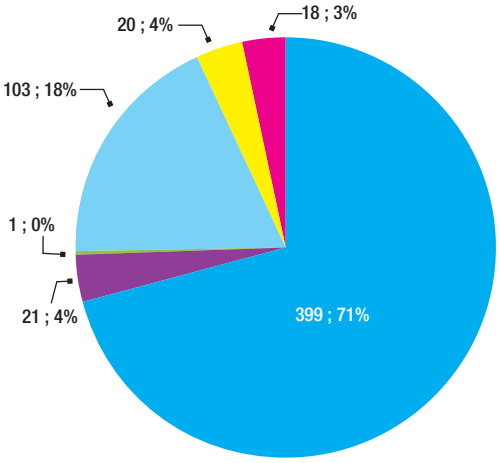
After an initial test phase, effective syndromic surveillance commenced in August 2010 in a limited number of centres. In 2013, 797 STIs were notified on a syndromic basis, 557 in women and 286 in men. The number of notified cases in 2013 was similar to the number reported in 2012

Syndromic surveillance of STIs in NC
Men: breakdown of syndromes in 2013



In men, three quarters of the notified syndromes concern urethral discharge. Genital ulcers are the second most common syndrome observed (9% of cases).

Syndromic surveillance of STIs in NC
Women: breakdown of syndromes in 2013



In women, four fifths of the notified syndromes concern vaginal discharge. The rest of the observed syndromes mainly concern pain in the lower abdomen (15% of cases).

Viral hepatitis

16 new cases of hepatitis B were recorded in 2013. 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, **46 new cases** of tuberculosis were notified in 2013 (41 in 2012), including 30 cases of **pulmonary tuberculosis** (24 in 2012). After a drastic fall of the incidence rate in 2003 (16.2 per 100 000 population), the incidence rate in 2013 was equal to 1**7.7 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 incidence.

8 cases were recorded from **direct positive** testing (12 in 2012), **all of 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 **3.1 per 100 000** (5.1 in 2012).

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	2013
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	20.0	24.4	24.2	19.0	16.0	17.7
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	5.1	3.1

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 sputum-positive patients tested in 2012, **a 91.7% cure rate was observed**.

Patient characteristics

A detailed study of the 480 tuberculosis cases notified over the last 10 years, all types combined (from 2003 to 2013) shows that **67% of the cases are 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. 6.5% of new cases were relapses.

In metropolitan France, this disease still occurs, with an incidence rate equal to 7.6 per 100 000 in 2012.

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 11th 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 register 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.

In 2011, 86 new cases were recorded, 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 world's regions the most affected by ARF, 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.

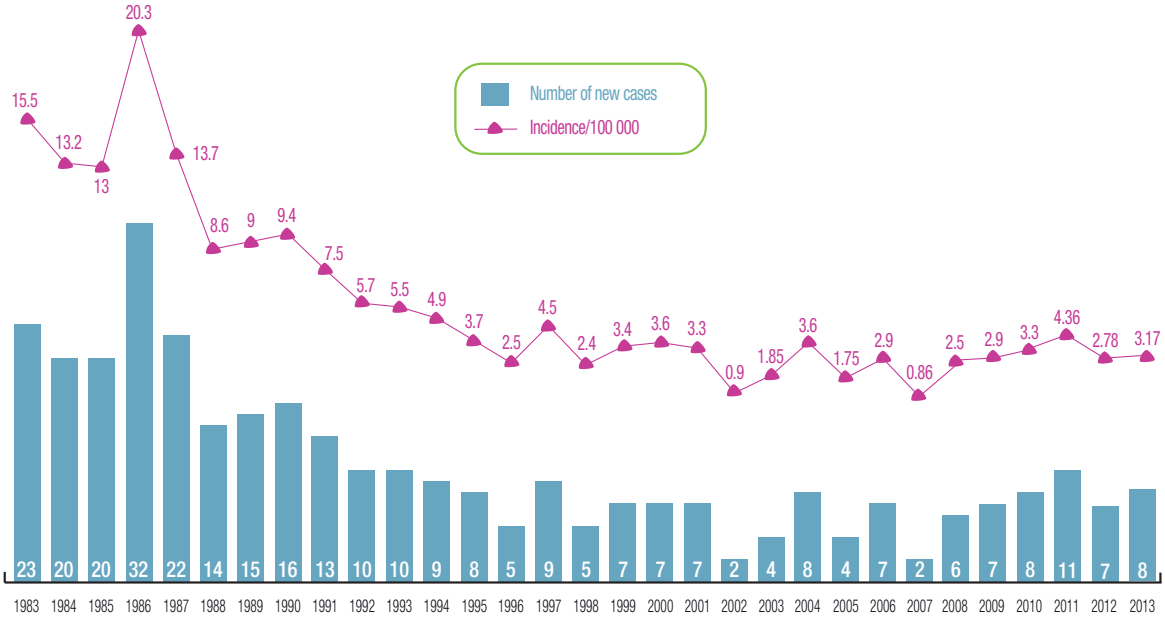
The Acute Rheumatic Fever (ARF) team in the New Caledonia Health and Social Services Agency (ASS-NC) organised a workshop on ARF and chronic rheumatic heart disease from 12 to 14 December 2011. Over the three days, participants expressed a strong wish to develop a close working partnership between the 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 31 years, from 1983 to 2013 and comprises 323 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 dispensary physician.

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 8 new cases in 2013, including 2 relapses, the incidence rate is 3.17 per 100 000.
In 2013, 3 new cases were multi-bacillus.



In the 321 cases recorded since 1983, the following was observed:
- A male predominance: 211 men and 110 women.
- An ethnic disparity, with higher representation of the Melanesian community (271 persons) than other ethnic groups (Europeans: 30 cases; others: 19 cases).

Prevalence:
In 2013, only 9 patients were treated with multidrug therapy, which represents a prevalence rate equal to 0.36 per 10 000 population.

International situation:

***Source :* WHO**

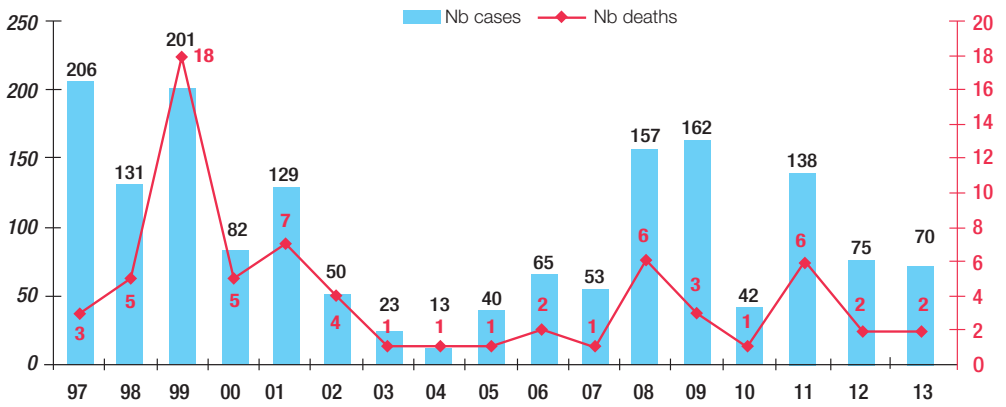
The number of new cases detected in the world in 2011 was 219 075.
This number has fallen by 4.1% over 2010. More generally, the reduction in the number of leprosy cases has been less sustained in recent years.
In 2011, the number of cases in India represented 58.1% of the total number of cases in the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

Leptospirosis

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

In 2013, 70 cases were reported, including 2 deaths.

Number of cases of leptospirosis and leptospirosis-induced deaths per year in New Caledonia from 1997 to 2013



In 2013, this disease mainly affected men (85.7%), and young adults: (the average age is 32 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 2013

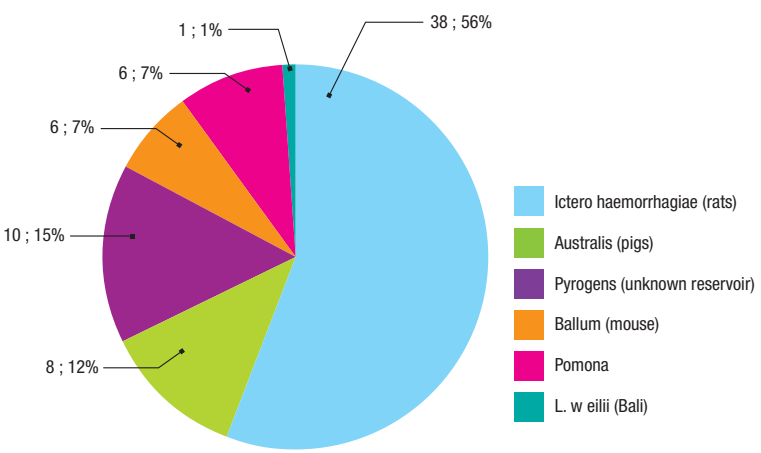
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Confirmed cases	11	8	10	13	12	1	7	2	0	1	2	2
Probable cases	0	0	0	0	0	0	0	0	1	0	0	0

In 2013, 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 2013 were:

- *Ictero-haemorrhagiae,*
- *Pyrogenes,*
- *Australis.*

Distribution of serogroups in 2013



Dengue

Dengue 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 5 673 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 2013, an unprecedented epidemic affected New Caledonia. 10 522 cases were recorded. Serotype 1 was dominant throughout the year.

The various dengue fever serotypes occurring during epidemics for the 1972-2013 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	2013
Type 1							1				12	64	563	177		3	27	199	62	14	1	134	107
Type 2						1	154	1390	225		1							1	2	2		3	1
Type 3					2212	1123	7	5							1	1	1	1			1		ND
Type 4						12		1							1			25	253				1
Total					2212	2121	251	2612	354	12	34	105	5673	792	46	48	48	1179	8410	122	15	718	10522

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.
2013 was characterized by the biggest epidemic ever seen in New Caledonia. The peak of the event was reached in March, like the 2003 epidemic (previous highest peak) and 1995. The worst-hit towns were Bourail, La Foa and Yaté, where incidence levels were the highest (94.2, 89.7 and 82.9 cases respectively per 1 000 population) The median age of cases was 29 years with a spread of 1 to 94 years.

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 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 some days, weeks or months.

The 2013 epidemic in New Caledonia

After the importation of 2 cases of Chikungunya by holidaymakers returning from 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. This viral disease reappeared in 2013 in New Caledonia, which had to cope with a minor chikungunya epidemic as the same time as it fought the dengue epidemic (see above). The chikungunya outbreak was triggered by a traveller returning from Bali. A total of 31 cases were reported to DASS-NC, 54.8% in April and May.

New Caledonia is at risk of a major chikungunya epidemic in future years because of the current context in the Pacific (American Samoa and Samoa), the presence of the vector (Aedes aegypti) in-country and the lack of immunity within the population of New Caledonia to the chikungunya virus.

Diseases under surveillance

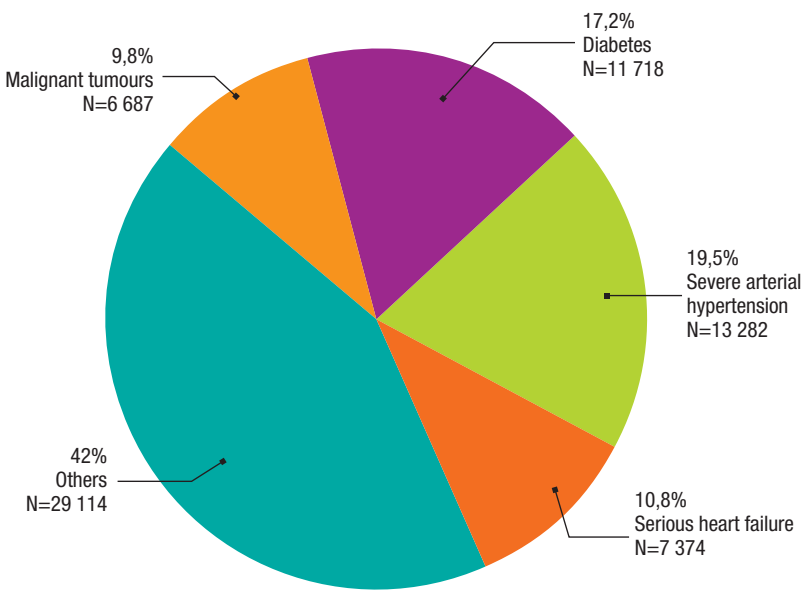
Weekly disease reporting using 'grouped data' was introduced in the provincial public health services. Theoretically, they come from the two hospitals in the Northern Province, 26 socio-medical districts in the Loyalty Islands, Northern and Southern Provinces, the mother and child protection centres and the multi-purpose medical centre in Nouméa.
The 2013 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	Nb of cases 2013
Acute conjunctivitis	224	438	304	109	79	103	128	64	65
Ear infection	628	1 547	949	245	145	242	236	153	182
Acute respiratory tract infection	3 261	7 503	3 372	1 089	183	885	757	671	802
Pneumonia	30	20	19	8	621	422	476	297	215
Influenza	254	975	571	144	1 055	316	144	148	86
Salmonella infection without typhoid	0	21	0	40	0	16	34	52	0
Shigellosis	0	5	0	14	19	18	38	13	0
Other Protozoal intestinal diseases	2	0	1	0	0	0	0	0	7
Diarrhoea	276	613	375	95	137	204	250	214	113
Acute viral hepatitis other than B or C	787	68	5	1	76	3	1	0	0
Meningitis other than meningococcal	0	8	4	2	1	0	2	5	0
Ciguatera	25	67	25	5	2	2	6	14	5

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 253 595 beneficiaries as at 31st December 2013.
In 2013, 42 938 persons were covered under the prolonged disease arrangement (55.9% of total RUAMM expenditure) for 68 185 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 – National Healthwatch Institute). Topography and morphology are coded as per the 3rd Edition of the International Classification of Diseases for Oncology (ICD-0-3).
Incidence assessments will therefore only include invasive tumours and no skin tumours apart from melanoma.
The results given below relate to the cancers detected in 2011 (register as at 31 December 2013).

In 2011, **844** new malignant invasive tumours were registered: 778 solid tumours, 66 malignant haemopathies and 14 non-melanoma skin tumours. Also recorded were 6 non-malignant tumours of the central nervous system and 90 in-situ tumours (breast: 18, cervix: 47, colon/rectum: 10, other: 15).

The following assessments only take into account the **844** invasive tumours and malignant haemopathies (not including non-melanoma skin tumours).

Cancer diagnosis results show gender-related differences (454 tumours in men as against 390 in women), with men over-represented in comparison with the general population (sex-ratio equal to 1.16 men for one woman, as against 1.02 in the general population (ISEE 2011).

The mean age is equal to 60.4 years (median age 50 years) with 70.1% of patients aged between 50 and 79 years as against 20.7% in the general population.
When distribution by province of residence for cases recorded in 2011 is compared with the reference population (ISEE), a significant difference is observed between these two populations ($p<0.01$), with an over-representation of new cases residing in the Loyalty Islands (9.6%: ISEE 6.8%) to the disadvantage of the Southern Province (73.8%, ISEE 75%).

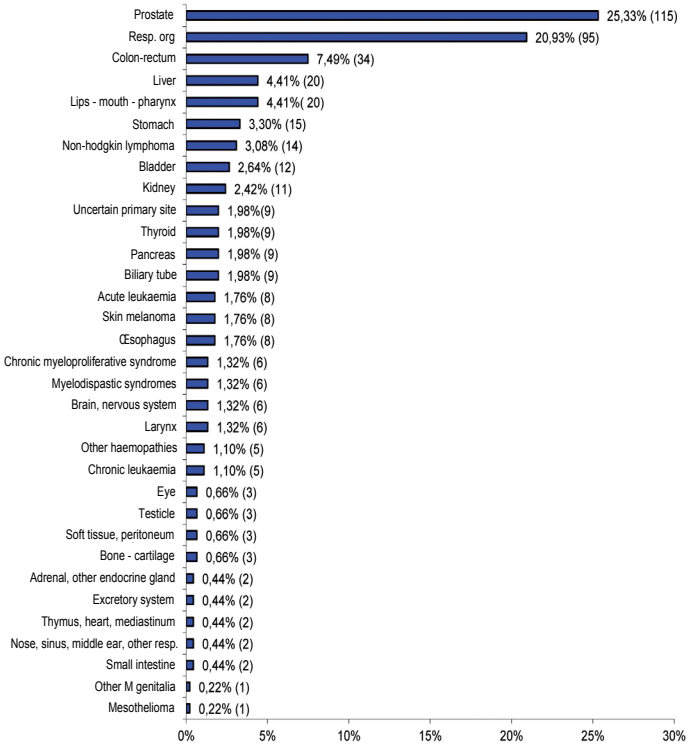
Taking all genders together, the 5 following sites alone account for more than half of all initial sites (58.3%):
- Breast: 139 cases (16.5%)
- Bronchial tubes/lungs: 135 cases (16%)
- Prostate: 115 cases (13.6%)
- Colon/rectum: 66 cases (7.8%)
- Thyroid: 37 cases (4.4%)

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

In men (N=454), the most frequent cancer sites were:
1. Prostate: 115 cases (25.3%)
2. Bronchial tubes/lungs: 95 cases (20.9%)
3. Colon/rectum: 34 cases (7.5%)
4. Liver: 20 (4.4%)
5. Lips/mouth/pharynx: 20 cases (4.4%)

The distribution also varies by community, with a much higher frequency of prostate cancer in Europeans (62.6%) and a higher proportion of respiratory cancers in Polynesians and Melanesians (57.9%).

Distribution of main cancer sites in men in 2011 (not including skin except melanomas)

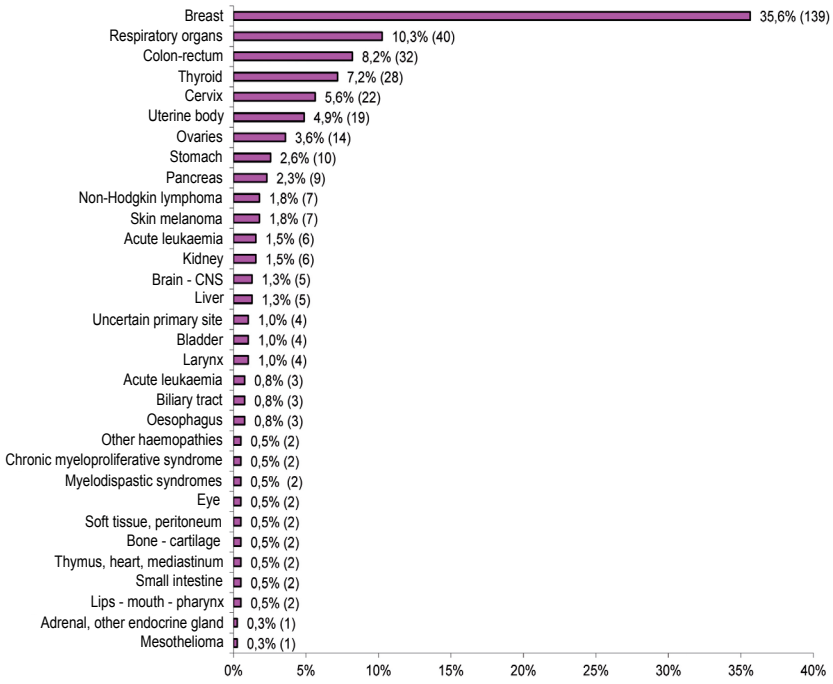


In women (N=390), the most frequent sites are:

1. Breast: 139 cases (35.6%)
2. Bronchial tubes/lungs: 40 cases (10.3%)
3. Colon/rectum: 32 cases (8.2%)
4. Thyroid: 28 cases (7.2%)
5. Uterus (cervix): 22 cases (5.6%)
6. Uterus (endometrium): 19 cases (4.9%)

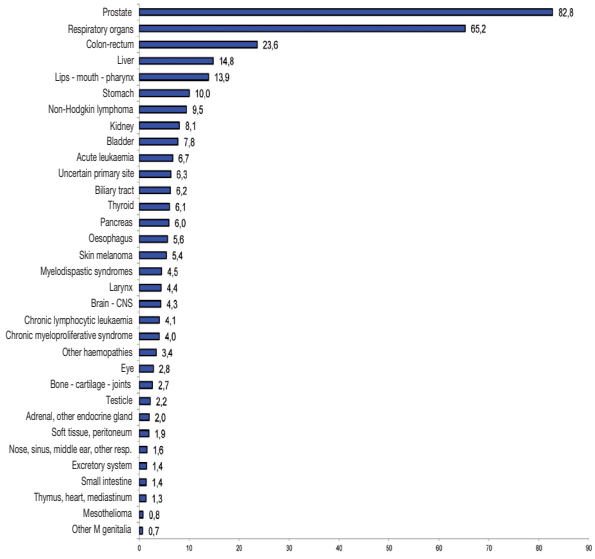
A much higher rate of breast cancer is observed in European women (44.6%) in comparison with the other communities (Melanesians: 35.3%, Polynesians: 8.6%) and a higher proportion of thyroid cancer in Melanesian women (42.9% as against 3.6% in Europeans).

Distribution of main cancer sites in women in 2011
(not including skin except melanomas)

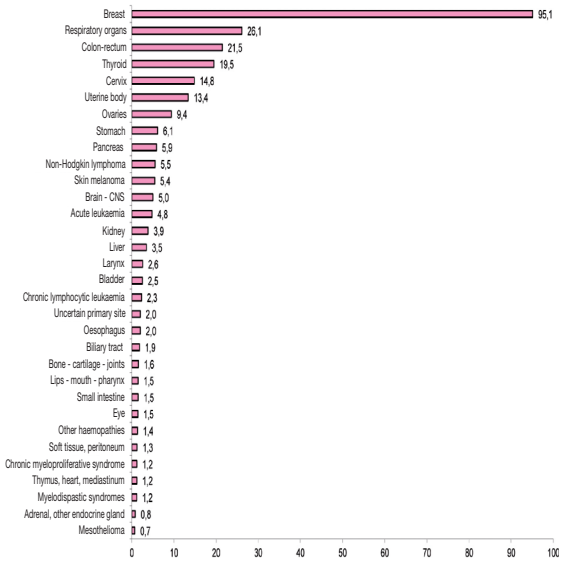


The standardised incidence rates (SIR), calculated from the reference world population, make it possible to carry out international comparisons by limiting the effect due to the differing age structures of the compared population groups.

2011 SIRs for cancers by site – Men
(not including skin except melanomas)



2011 SIRs for cancers by site – Women
(not including skin except melanomas)



When the New Caledonian standardized incidence rates (invasive cancers not including skin cancers except melanomas) are compared to France and neighbouring countries (Globoccan, 2012), the rates observed in men are lower than French and Australian rates and higher than those in New Zealand and French Overseas Departments.

In women, in 2011, incidence was slightly lower than in nearby countries and France.

New Caledonia is also a high-incidence country for some cancers such as breast: thyroid and bronchial tubes/lungs in women and bronchial tubes/lungs in men.

Overall, in 2011 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 respiratory organs.

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 2013, 580 person-years were under treatment for CRF, a prevalence rate equal to 2 126 per million population (PMP), a crude rate twiceas high as in Metropolitan France in 2011 (1091 PMP).

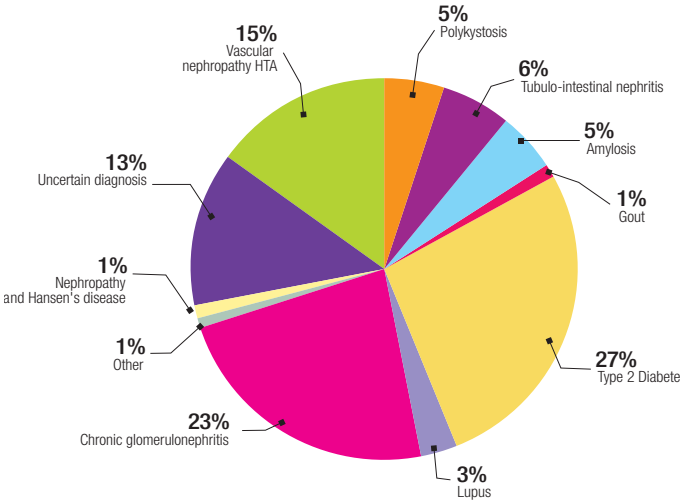
With 76 new patients in 2013, the incidence rate is equal to 279 per million, which is the rate in Taiwan, where the prevalence rate was higher than 2 400 PMP.

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

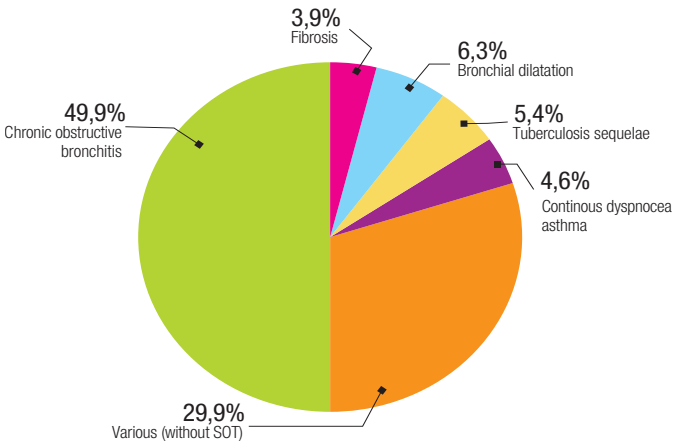
Six facilities offer home treatment for respiratory failure patients in New Caledonia.

- '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.

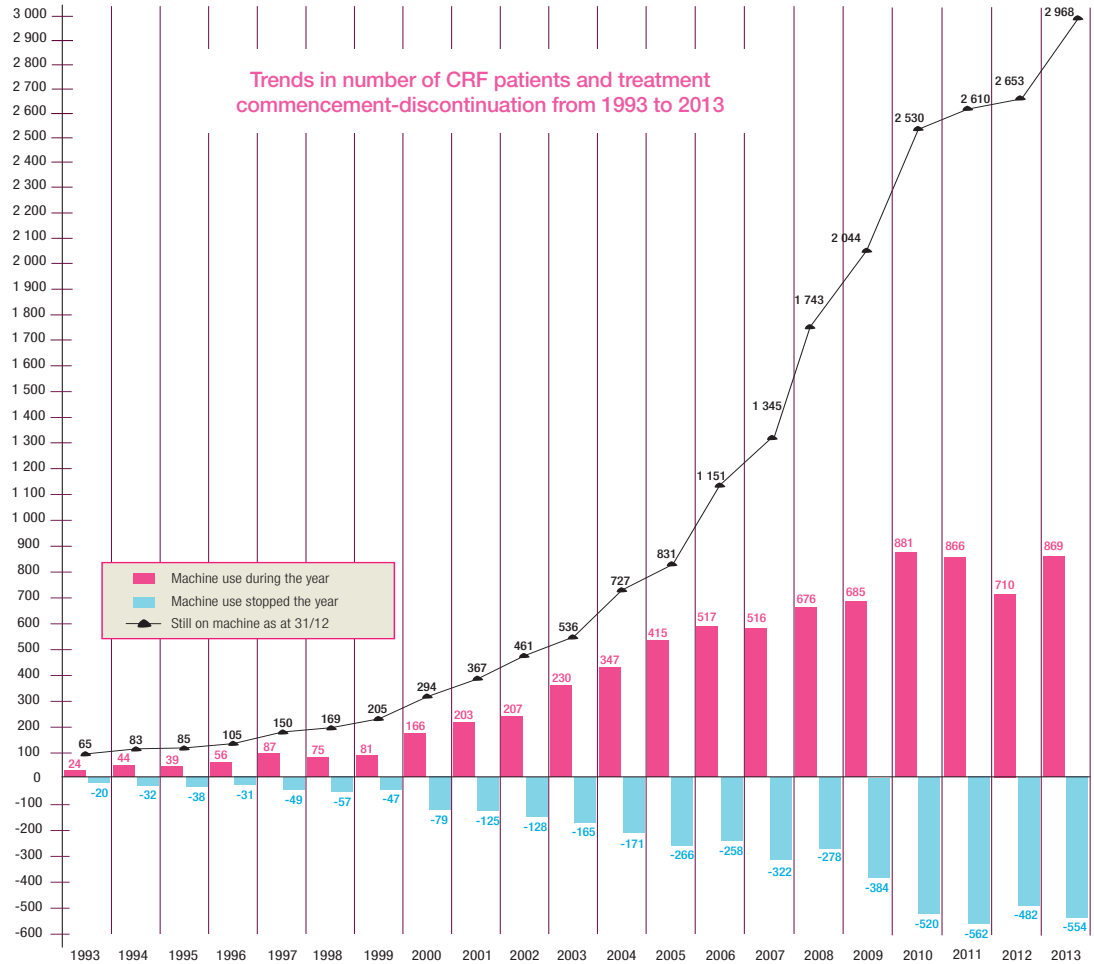
The diseases covered can be broken down into two major groups: chronic respiratory failure (CRF) and sleep apnea syndrome (SAS), which require two main kinds of treatment: oxygen therapy and positive-pressure ventilation.

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 alone 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 1993 to 2013



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 (20% of cases of treatment discontinuation on average in 2013).

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

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

The group concerned comprises 72.1% men and 27.9% 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 5 units:** Ward 2 - 3; Ward 4; Ward 5 and 5 b; Ward 6; Ward 7.
- **Out-patient hospital sector with 7 units:** 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 2013	Short stay				Long stay		Total
	Ward 5	Ward 5 bis	Ward 6	Ward 7	Ward 2-3	Ward 4	
Direct admissions	488	6	6	295	38	0	833
Days of hospitalisation	6 408	3 075	6 357	5 607	11 180	7 242	39 799
Average length of stay	13,4		159	15,2	77,2	249,7	32
Occupation rate	87,8	84,2	87	76,8	78,1	99,2	82

Out-patient hospital care 2013
UAOUP: 2 205 consultations;
Day hospital: 4 095 hospitalisation days;
CMP: 9 821 psychologist consultations; 4 169 home calls;
Penitentiary: psychological and psychiatric consultations: 2 901;
Medico-psychological centres: 6 044 consultations at Koumac and Poindimié.

2 - The general child psychiatry department

comprises 5 functional units on 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 2013, the active list, with 1 878 patients, was shorter than that for 2012, (-15%).

3 - The Geriatric Service

The number of consultations was 1 411 (+ 13.8% in comparison with 2012). 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 (20%).

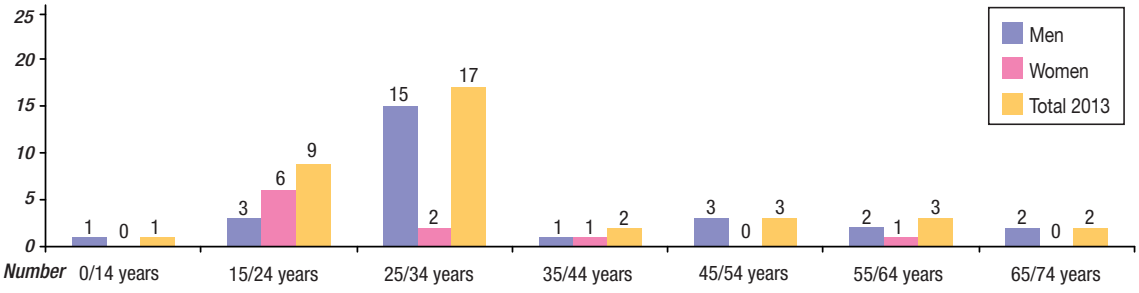
Suicide: one aspect of mental illness

Suicide is a major public health problem in the world and 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 2013, 43 deaths by suicide were recorded, or 3.1% of all deaths (N=1 374) and 24% of violent deaths, representing a crude mortality rate equal to 23.5 per 100 000 in the male population, 9.3 per 100 000 in the female population and a standardised rate equal to 22.5 per 100 000 inmen and 9.3 per 100 000 in women.
Male suicides account for more than 72.1% of all suicides, or 2.5 times more suicides in men than in women in 2013 (31 men and 12 women).

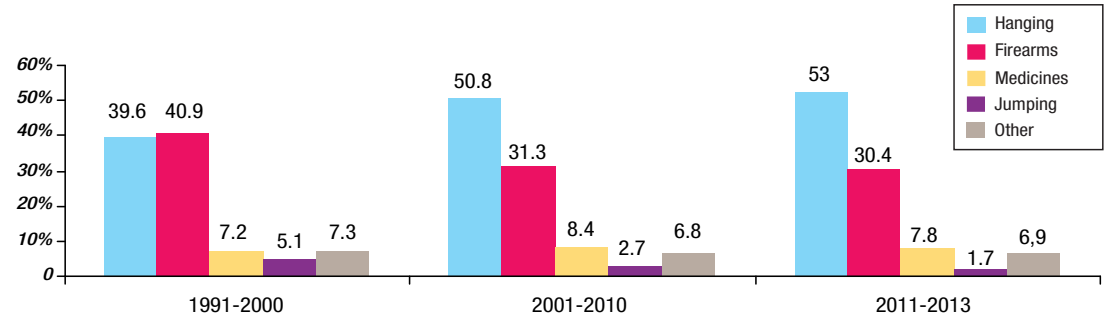
Age varies between 14 years for the youngest and 80 years for the oldest.
As regards the number of suicides by age group, the most affected group in men and also in women is the 15-34 year-olds

Distribution of deaths by suicide by gender and age group in 2013



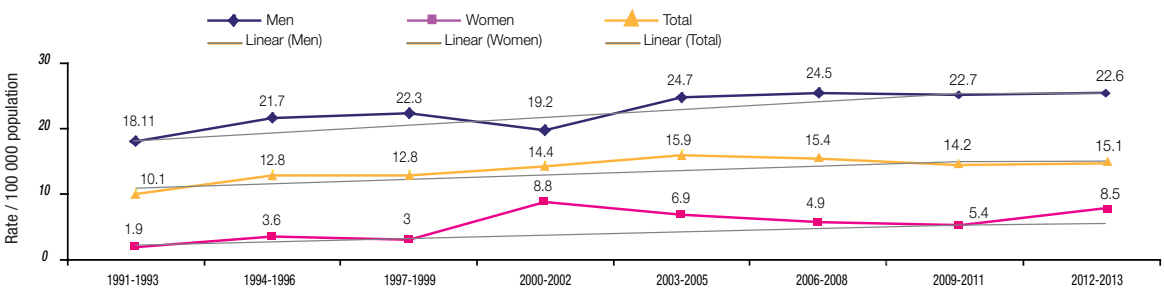
The main method of suicide in 2013 for all genders was hanging (53.5%).
For all gender groups, the proportion of suicides by hanging increased in comparison with suicides by firearm.

Trends in the main suicide methods for all genders combined



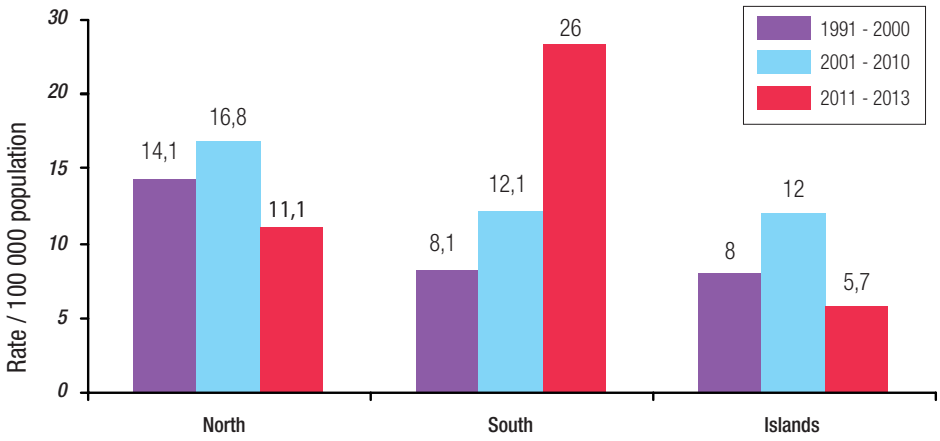
As the following figure shows, the crude annual mean rate of death by suicide has been tending to decrease in in men since 2003 and increase in women since 2011.

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 in the 2001-2010 period in the Northern and Islands Provinces. Few suicides were howeverrecorded in the Northern Province between 2011 and 2013 (7 cases altogether) in comparison with previous years. The average was 7 deaths by suicide per year in the Northern Province in the 1993-2013 period.

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



Comparison with Europe

The standardised mean rate observed in New Caledonia was 15.6 per 100 000 in men, lower than for metropolitan France (14.7 deaths per 100 000 in 2010).
France is in 3rd 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 in Europe.

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, Aceprometazine) indicated for the treatment of occasional or temporary insomnia, for which the risk/benefit ratio is now considered unfavourable.

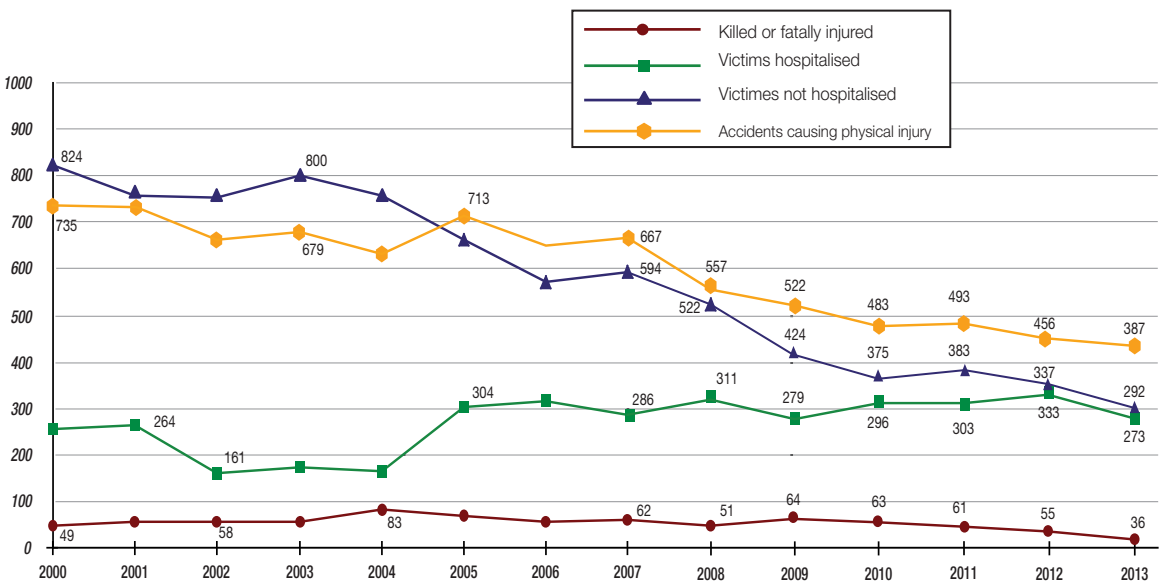
Road accidents

Number of vehicles on the road: a fall in the number of annual vehicle registrations has been recorded over the past 2 years: **11 210 new vehicles** were registered in New Caledonia in 2013 as against 12 784 in 2012, or _-12.3% (source: ISEE website).

Accidents causing physical injury: In 2013, **387 accidents causing physical injury** were recorded for the whole of New Caledonia, producing **36 deaths or fatal injuries**, or 6% of the 601 victims (273 injured and hospitalised and 292 injured but not hospitalised).

The number of fatalities in 2013 is well below the mean figure for the 9 previous years (2004-2012) of 63 road deaths per year

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



In New Caledonia as a whole, in 2013, the two main factors involved in fatal accidents were:

- inappropriate or excessive speed in 17 out of 34 accidents: 50%;
- drink-driving and/or driving under the effect of drugs in 18 accidents out of 27: 66.7%, broken down as follows: 10% alcohol alone, 7% joint alcohol and cannabis use and 1 accident due to cannabis use alone.

In comparative terms, New Caledonia has a crude rate of **138.5 deaths** per 1 million population (pop. at 01 January 2014- 260 000: ISEE)), a figure 2.7 times higher than in metropolitan France (51 deaths per million population) (Population as at 1 January 2014 = 63 928 608 – INSEE).

A study on the health impact of road traffic accidents in New Caledonia (focusing on the 2011 outcomes) yielded the following conclusions on 385 people hospitalized for at least 24 hours or deceased. Direct costs, comprising first aid, ambulance transport, medical care, medicines and prostheses, rehabilitation and home care, and subsequent indirect costs amounted to 2.6 billion CFP francs. Other indirect costs such as the value of production unachieved because of incapacity or premature death ampounted to 13 billion CFP. Intangible costs, comprising a range of types of non-material loss or damage represented 1.8 billion francs. Lastly, material damage amounted to 0.2 billion francs. In total in 2011, road traffic accidents cost society 17.1 billion CFP francs.

INDUSTRIAL MEDICINE

3 agencies offer industrial medicine services in New Caledonia.

1 - 'Service Médical Interentreprises du Travail' (SMIT, the Business Industrial Medicine Service), is responsible for occupational medicine for workers under CAFAT coverage for companies that do not have their own service. In 2013, SMIT catered for 79 300 staff in 12 805 companies. In 2013, 31 851 examinations were conducted in comparison with 32 859 in 2012.
The number of regular examinations was 14 023 and the number of non-regular examinations was 17 828.
Counted in the non-regular examinations were hiring examinations, work resumption examinations and occasional examinations.

A total of 31 850 decisions was taken during 2013. Of the persons examined, 27 221 were found to be fit for work. The others were declared to be fit with restrictions or unfit. 11 occupational diseases were detected. 5 musculo-skeletal disorders and 2 cases of asthma and 2 cases of eczema were reported by the SMIT doctors and accepted by the CAFAT 'AT' (Industrial Accident) Service.

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 N° 4775-T dated 10th 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-enterology, ENT, ophthalmologic, toxicology, dermatology and special screening tests like nickeluria, functional respiratory tests, large-format chest x-rays and screen work.

2013 figures: 6 worksites, employing 2 181 workers altogether, were monitored by the industrial medicine physician.
A total of 3 430 medical examinations were carried out, including 1 947 regular examinations and 1 483 hiring examinations, work accidents and resumption examinations. 10 487 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.

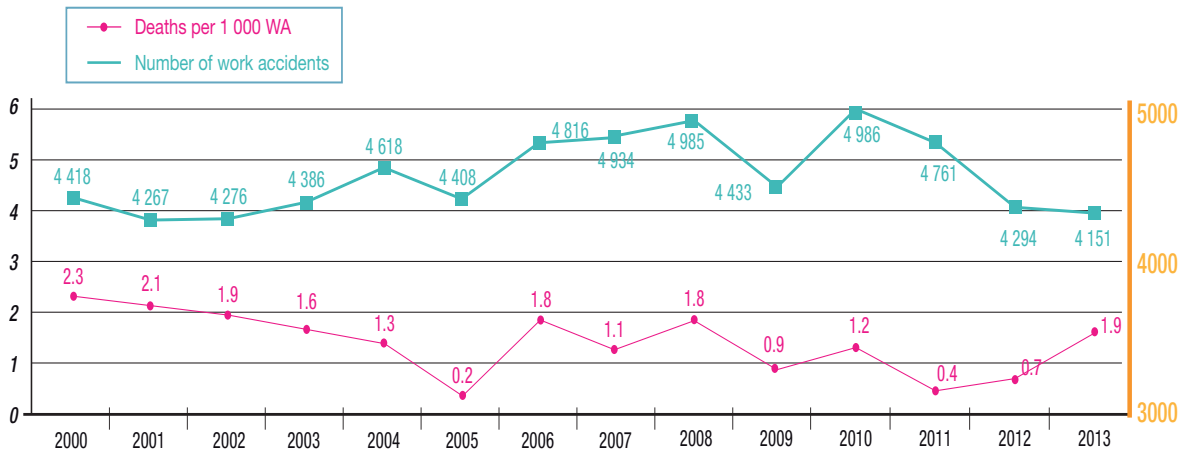
In 2013, it monitored some 2 988 people altogether for the CHT (permanent public servants and contract staff), CHS and Pasteur Institute.

WORK ACCIDENTS

According to CAFAT data: In 2013, 4 151 occupational accidents were recorded, a decrease of 3.3% over 2012. 197 commuting accidents leading to absence from work (615% over 2012) and 81 occupational diseases (-21.3% in comparison with 2012) were recorded. The number of compensated sick leave days (170 371) increased over the 2012 figure1 (+10.9%).

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 2013, a decrease in the number of occupational accidents and an increase in commuting accidents and occupational diseases were observed in comparison with 2012.

Addictions : alcohol, tobacco, narcotics

ALCOHOL

Consumption
In 2013, **1 920 611 litres of pure alcohol** were consumed in New Caledonia, 0.3% less than in 2012.
In 2013, beer consumption accounted for **42.4 %** of total alcohol consumption.
This figure is stable in comparison with 2012.
An increase can be observed (0.7%) in wine consumption over 2012. In 2013, it accounted for **33.3%** of total consumption.
Spirits accounted for **24.2%** of the total, a decrease of 2.3% in comparison to 2012.

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 48 deaths totally or almost totally due to alcohol consumption in 2013, or 3.4% of the total number of deaths, a crude annual rate of 18.4 deaths per 100 000 population.

Between 1991 and 2013, 774 alcohol-related deaths were recorded and account for **3% of the total of 25 752 deaths over the past 23 years,** or a crude mean rate equal to 13.7 deaths per year per 100 000 inhabitants.
In addition to these 774 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 **1 302** the number of deaths that can be attributed to alcohol.

Extended estimate: **2 793 deaths or 10%** (number of deaths attributable to alcohol according to research by Catherine Hill and Jean-Pierre Pignon).

Youth behavioural trends

Since 2000, the French Observatory for Drugs and Drug Addictions (OFDT), in partnership with the 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 continental 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 17th 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 2013, the total sale of tobacco products amounted to: 402.3 tonnes, or 0.4% more than in 2012.

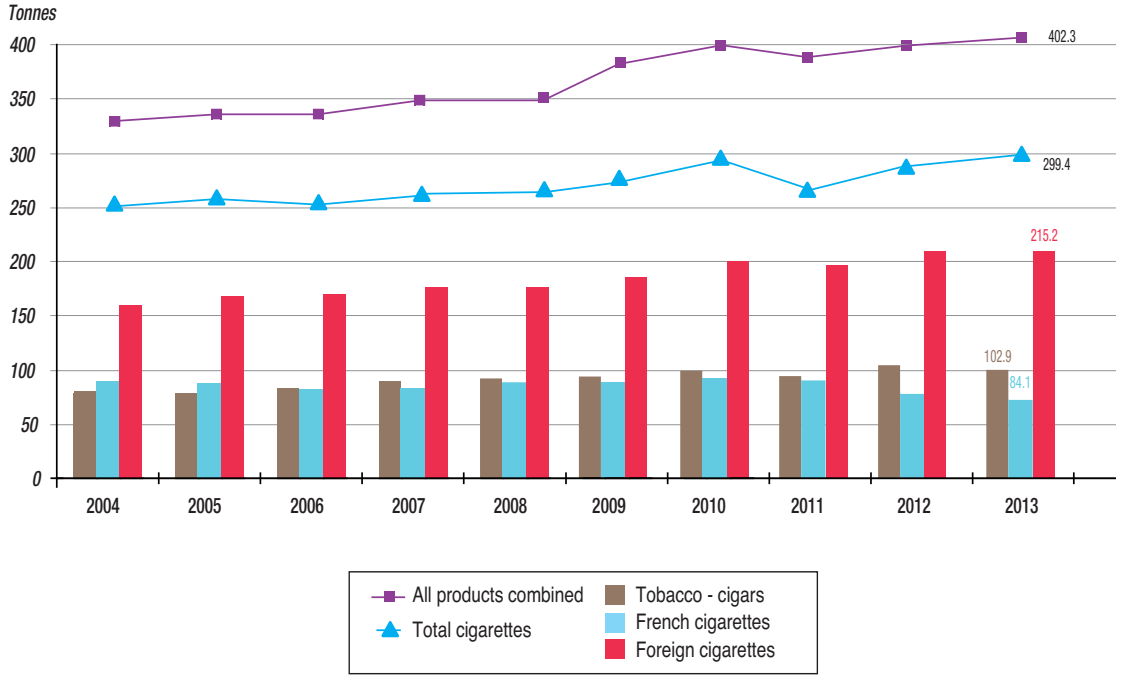
Despite a minor decrease in 2011, tobacco use pursues an upward trend and a record rise was recorded over the 10-year period with an increase of 21% over 2004.

The estimate for daily tobacco consumption, all products combined, per adult 15 years of age or older, was 5.6 grams/adult/day.

Tax revenues collected by the local tobacco monopoly nevertheless increased by 0.9% from 2012 to 2013

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.

The most recent assessment of New Caledonia cancer register figures shows that, in 2011, **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 2 856 deaths in men and 356 deaths in women thought to be smoking-related, or 3 212 of the 25 752 deaths during the same period, i.e. **12.5 % of deaths**, representing a mean crude rate of smoking-related deaths of **56.9 per 100 000** (1991-2013).

In metropolitan France, in 2006, the number of deaths due to smoking-related cancers was 36 990, of which 22 645 involved lung cancer. Four times more men than women were concerned.

ILLICIT DRUGS

Our information comes from seizures by the police, 'gendarmerie' or customs services, which are covered by 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 1 981 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)	2005	2006	2007	2008	2009	2010	2011	2012	2013
Cannabis	2 045 060	3 458 102	3 156 117	1 843 062	4 309 063	5 389 723	217 707	437 883	315 864
Cannabis resin	281	2	1	41	31	71	1 300	234	137
Cannabis oil	0	0	0	0	0	0	0	0	0
Cocaine	198	0	3	0	1	1	3	1 981	34
Heroine	0	0		0	0	0	0	0	0
LSD	0	0	8 blotters	0	17 blotters	0,04 g	0	0	15
« Ecstasy » - MDMA	0	0		1	1	0	1	12	0
Methamphetamine	0	0		0	0	0	1	0	534
Synthetic cannabinoids								34	0
New synthetic products			0	0	0	0	0	0	534 (4MEC)
Methadone					450				

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 / 2013, the female population was estimated at **128 519**, with 49.4% aged between 15 and 49 years old and considered to be of child-bearing age.

CONTRACEPTION

Contraception-related activity can be estimated from the number of prescriptions issued at provincial medical centres, 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 2013, the CCF recorded a reduction in consultations for contraceptive methods (-12.6% over 2012) 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 unit continues to be in great demand.

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 2013, the number of women-years of contraception can be estimated as at least 36 382 (other methods of contraception such as condoms and others, are not accounted for), which would represent a coverage of 53.4% 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 22nd September 2000 and have been applied since 1st January 2001.

The results of the annual 'ROSA' (Care Availability and Activity) survey were used to calculate the VTP rate per 1000 women.

In 2013, 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 **21.9 per 1 000.** This high estimate should be related 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 15 in 2011.

SCREENING FOR CERVICAL CANCER

Cervical cancer screening for is one of the 9 priority areas of the prevention plan approved by the Territorial Congress in 1994 (Resolution N° 490 dated 11th 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 2013, 26 140 cervical smears were done in New Caledonia by two medical laboratories (15.2% more than in 2012), with the increase mostly due to the cervical cancer screeing programme initiated by ASSNC in November 2011. 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 27 in 2012 (13%) (ISEE figure).

PREGNANCIES AND DELIVERIES

In 2013, a high rate of caesarian section deliveries was recorded in both public and private facilities, exceeding the mainland French rate (20.2% in 2009).

2013	Public sector	Private sector	Total
Number of deliveries	2 666	1 715	**4 381**
Number of caesareans	520	397	**914**
% of caesareans / deliveries	19.5	23.1	**20.8**

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. No maternal deaths were recorded in 2013 (2 in 2012) a total of 27 over the past 23 years. For the period from 1991 to 2013, the average rate was therefore **27 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 4 447 births were recorded in 2013 (source: 'Réseau périnatal de Nouvelle-Calédonie).

These births can be broken down as follows:

PLACE	2011			2012			2013		
	Age of gestat. < 37 weeks	Total births	% of gestat. < 37 weeks	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**	**15**	322	**4.6**
CHT	**288**	2 162	**13.3**	**356**	2 276	**15.6**	**358**	2 397	**14.9**
Anse Vata Polyclinic	**18**	698	**2.6**	**20**	800	**2.5**	**18**	768	**2.3**
Magnin Clinic	**34**	982	**3.4**	**32**	1 046	**3.0**	**19**	960	**2**
Total analysable date	**355**	**4 124**	**8.6**	**426**	**4 441**	**9.6**	**410**	**4 447**	**9.2**

From these data, the rate of premature births can be estimated as at least 9.2% This figure remains higher than the French one (7.4% in 2010).

CAUSES OF INFANT MORTALITY

631 deaths of children under 1 year of age were recorded between 1991 and 2013.

Perinatal diseases (foetal disorders, neonatal infections, respiratory diseases specific to the neonatal period, etc.) represent the main cause of death with 35.3% of deaths, then congenital anomalies, with 16.6% of deaths (mainly cardiovascular and nervous system conditions: 49.5%) and infectious diseases (44 cases).

67 cases of sudden infant death syndrome were observed during this period, representing 10.6% 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

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. In the year under consideration, DPASS-SUD supplied and applied 5 385 vaccine doses (25.4% more than in 2012).

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 2013, the Nouméa school medical centre carried out 14 375 medical examinations in pre-school, primary and specialised classes. 3 541 children were examined in the Northern Province (2012).

HEALTH SERVICE ORGANISATION

Health professional demographics

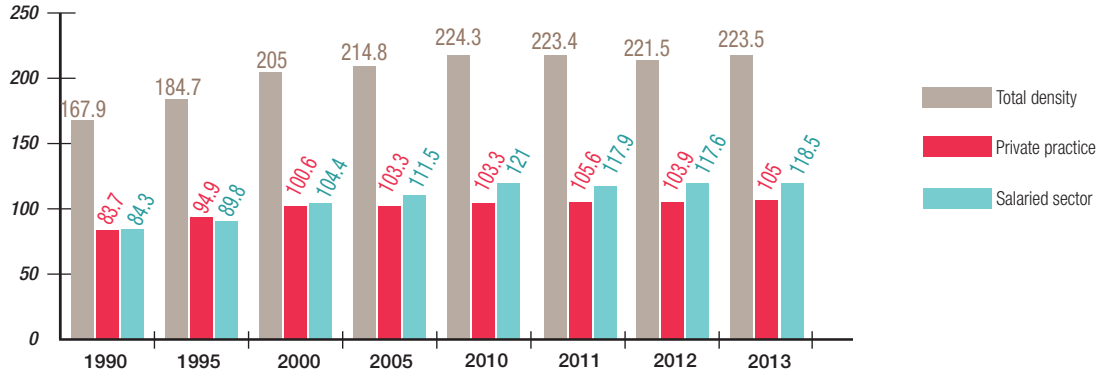
PHYSICIANS

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 2013, the figures were drawn up as at 1st 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.**

650 physicians were practicing in 2013 (279 in private practice and 371 salaried), an increase of 1.6% in comparison to 2012. In 2013, salaried physician numbers remained constant, while an increase of 3.5% in the number of private practice physicians was observed.
In 2013, the density was 250 physicians per 100 000 population.
Of the 650 physicians, 581 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: 252.4
- Northern Province: 146.8
- Loyalty Islands: 104

297 (51.1%) of active curative physicians are general practitioners, a density equal to **114.2 for New Caledonia as a whole, which is lower than for metropolitan France which was equal to 138.5 general practitioners for 100 000 population** (estimate by ATLAS of medical demography in France – CNOM as at 1st January 2013). **90.5%** of Southern Province general practitioners were working in the Nouméa or Greater Nouméa area, a density equal to **113.2** for this zone as against **105.9** for the other Southern Province municipalities taken together.

290 specialist curative physicians were active in 2013, representing a density of **111.5** 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 1st January 2014). The density is higher in the Southern Province **(140)** and in Nouméa in particular **(251.3)**, because of the presence of the main hospitals and technical facilities.

60% of specialist curative physicians practice a medical specialization and **27%** a surgical specialization.

Distribution of specialist (curative) physicians by major group

	Medical speciality	Surgigal speciality	Psychiatry	Medical biology
Number	172	79	25	12
Percentage	**60%**	**29%**	**9%**	**4%**

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 2013.

In New Caledonia, the density of dental surgeons is **48 per 100 000 population (N=124).**

The breakdown between the salaried sector and the private sector is respectively 35 % and 65 %.

The density of dental surgeons in private practice is 1**6.9 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 **50.8 per 100 000 population (n=132)**, with the private practice sector showing a density of **41.2 per 100 000 population (n=107)**. The figure in mainland France was 123 as at 01/01/2013.

The density of nurses – general, specialist and supervisors – was **526.5 per 100 000 in New Caledonia (n=1 369**). In metropolitan France, the density of nurses was 943 as at 01/01/2013.

The density of midwives in New Caledonia was **177.2 per 100 000** women aged between 15 and 49 years in 2013 (N=115). In metropolitan France, the density was 139 per 100 000 women aged 15 to 49 years (professional demography in 2012, source CNAM as at 01/01/2013).

The density of pharmacists, all categories combined, was **73.1 per 100 000** (N = 190) in New Caledonia in 2013. In metropolitan France, this density was higher and equal to 113 as at 01/01/2013.

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 220 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 52 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:

- 47 post-op. care beds are managed by the CHT at two sites: (34 at the Col de la Pirogue Medical centre and 13at the Raoul Follereau Centre, with a dual medical and social function..
- 20 geriatric post-op. beds at the CHS.
- 14 post-op. beds at the Poindimié facility of the Northern Province Hospital.
- 14 functional rehabilitation beds managed by the CHT but located within the CHS.

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

2013 breakdown of hospital beds and locations by site in New Caledonia
(CH = complete hospitalisation, OP = out-patient treatment)

	CHT		Koumac Hospital		Poindimié Hospital		Clinics		CHS		TOTAL	
	CH	OP	CH	OP	CH	OP	CH	OP	CH	OP	CH	OP
Medical treatment	214	18	16		16		68	5			314	23
Surgery	133	8	13		0		74	18			220	26
Gynaecology-obstetrics	47	2	9		2		30	0			88	2
Resuscitation, intensive care	39				0						39	0
Secondary care	34				14				20		68	0
Functional rehabilitation	15										15	0
Adult psychiatry									111	58	111	58
Child psychiatry										25	0	25
Long stay	13								57		70	0
TOTAL	495	28	38	0	32	0	175	25	188	83	925	134

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 2001 relating 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.

PARA-PUBLIC FACILITIES (2011-2013)

	Medical beds	Obstetrics beds
South Province	16	6
North Province	1	1
Islands Province	46	8
TOTAL	63	15

The 'Mutuelle du Nickel' comprises:

- 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.

On average, **12 500** ophthalmological consultations and **12 000** dental consultations are performed annually.

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

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

More than **3 000** dental consultationsw ere carried out over the 4 centres and 8 000 medical consultations were recorded in Nouméa and Boulari.

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:

- 17 physicians, including 10 general practitioners,
- 4 dental surgeons,
- 2 radiologists (part-time),
- 2 specialists working as consultants,
- 1 biological pharmacist,
- 3 nurses.

The medical activities of these centres can be broken down by specialization as follows:

Section	Total consultations in 2012 after conversion	Total consultations in 2013 after conversion	2012/2013 trend
General medical care	27 659 C	35 888 C	+ 29.7%
Specialised medical attention (cardiology, ENT, ophthalmology)	6 667 Cs	6 343 Cs	- 4.8%
Radiology	246 003 Z	244 621 Z	- 0.5%
Dental	168 139 Sc	142 914 Sc	- 15.0%
Laboratory	1 771 239 B	1 732 739 B	- 2.2%
Infirmary	26 263 AMI	n.a	n.a

ARMED FORCES HEALTH SERVICE

Armed forces health service resources and activities as at 31 December 2013

Infirmeries	Beds	Staff Physicians	Staff Nurses	Number of days	Number of consultations
Joint Armed Forces Medical Center, Noumea	12	3	4[1]	137	5 016
Marine infantry regiment for the Pacific (RIMAP) in Plum	7	2	4[1]	30	2 559
Tontouta naval air base	4	1	2	0	428
Special military service group in Koumac	0	1	2	0	2 531
TOTAL	**23**	**7**	**12[1]**	**167**	**10 534**

[1] *Including one nurse on a short-term attachment*

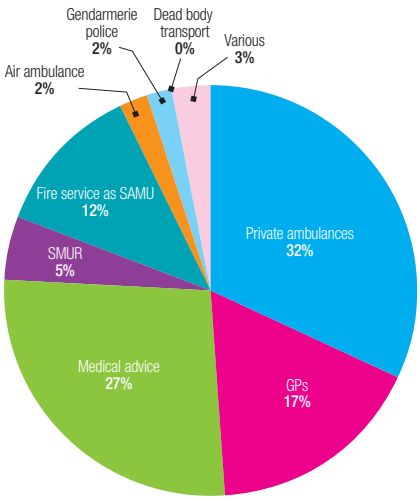
For outpatient consultations, army families can go to the 'Centre de consultations interarmées' (Armed Services Health Centre) in Nouméa.

EMERGENCY UNITS

The SAMU's first priority is to provide or obtain appropriate emergency health care for sick persons, persons with injuries and parturients, wherever they are located in New Caledonia, on a constant basis. The hospital 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, in the event of an emergency or a perceived emergency.

In 2013, **the 2 emergency units at Gaston Bourret and Magenta recorded:**
46 750 patients as against 43 850 in 2012, an increase of 2.2% (+12% at Magenta and +0.1% at G. Bourret). 22.7 % of these cases required hospitalisation: 29.6% at Gaston Bourret and 13.4% at Magenta.

SAMU - SMUR results:
The 'Dial 15' emergency call centre received 36 630 calls producing a medical response in 2013, which is 4% more than in 2012. These calls were processed as follows see graph facing):



Medico-technical services

Blood donations

SUMMARY	2011	2012	Trend 2011/2012
Persons seen	7 605	6 895	-9.4%
Donors	6 117	6 117	-9.7%
Therapeutic apheresis	490	490	-14.4%
BLOOD TRANSFUSION DISTRIBUTION SERVICE	13 604	13 081	-4%
Labile blood products	7 134	6 380	-10.6%
Costly blood-derived medicines	6 470	6 701	+3.6%

Blood donations

2013 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.

Institut Pasteur, mostly performing 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.

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

65 pharmacies are registered and open to the public: 62 in the private sector and 3 mutual insurance pharmacies. 1 new registered pharmacy opened at Farino in 2013.

These 66 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 22 pharmacies, including 1 mutual insurance pharmacy;
- Islands Province: 4 pharmacies.

Two dispensing physicians practice in the Isle of Pines.

Pharmacies within a healthcare facility

Fourteen 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 6 pharmaceutical companies in New Caledonia, with the two main ones being wholesaler/distributors: UNIPHARMA and 'Groupement de Pharmaciens de Nouvelle-Calédonie' (GPNC).

Medicine depots

There are 3 medicine depots in shops, 1 in Ouaco and 2 in Pouébo.

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	2011	2012
GDP in NC *('000 XPF)*	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 mid-range 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.

ENVIRONMENTAL HEALTH

The impact on health of negative environmental factors is a growing concern for both the community and leaders. In the public health sphere, the environment is today considered to be all 'external' pathogenic factors impacting on health. Environmental health refers therefore to the effects on human health of:

- Living conditions (exposure at home or at work, noise pollution, insect and pest intrusions, pollution by chemicals, etc.);
- Environmental contamination (drinking water, swimming water, air, soil, waste, etc.);
- Environmental change (climate, ultra-violet rays, etc.).

An environmental health policy is being implemented in New Caledonia. The Public Health Service of DASS-NC is responsible for designing and implementing preventive and curative action for the purpose of protecting the community's health from environment-related and lifestyle-related risks.
The areas concerned are:

- Drinking water (public water supply and bottled water)
- Swimming water (swimming pools and beaches)
- Air and soil quality (asbestos in buildings and the environment), urban air
- Potentially infectious waste: surveillance of the waste collection and disposal activity, medical waste (DASRI)
- Prevention of diseases originating in the environment (legionellosis, vector control (dengue, chikungunya, leptospirosis).

DRINKING WATER

In New Caledonia, responsibility over water is shared between the central government, the provinces and the municipal councils.
New Caledonia is responsible for public health and hygiene, the provinces for the environment as a whole (classified facilities) and thethe 'communes' or municipalities oversee certain environmental health matters such as flooding and pollution through the Municipal Police, as well as handling the public drinking water supply,
Under the 'Commune Code', these bodies are responsible for preventing disease outbreaks and must implement quality control measures for their water supply systems. In this setting, DASS-NC offers communes an opportunity to introduce water safety plans, the purpose of which is to identift risks associated with water supply in each commune and manage them with a view to eliminating them through water quality improvement schemes. The DASS-NC health and environment office has been supporting communes in the implementation of drinking water safety planning since 2008.
Up to now, 20 communes have adopted such plans: La Foa,Ssarraméa, Moindou, Farino, Poum, Hienghène, Poindimié, Touho, Thio, Bourail, Boulouparis, Ouvéa, Ouégoa, Lifou, Voh, Koné, Pouembout, Dumbéa, Ponérohouen and Mont-Dore.

WATER AT SWIMMING SITES

Resolution No 23/CP dated 1 june 2010 sets out the general health and hygiene principles applicable to swimming water in the coastal zone, as well as those applicable to swimming pools and spas. Its main goal is to protect bathers in the event of a real or potential pollution incident.
Under this resolution, DASS-NC aims to:

- Verify the quality of swimming water as defined in the instrument,
- Inform the communes as to the safety of swimming water and the risks involved in swimming in conjunction with the municipal authorities,
- Make proposals about water quality grading,
- Help the communes when a pollution incident occurs.

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 given itself a responsibility formonitoring air quality in New Caledonia and raising public awareness on this issue.
The system comprises 4 stations in Nouméa and a mobile unit.

Four pollutants are kept under surveillance in real time: SO^2, NO^2, PM^{10} and 0^3.
The relevant European quality and annual maximum limits are within target for all the measured pollutants at all measurement sites. Ceiling values and thresholds can however be exceeded for short (hourly or daily) periods in some neighbourhoods.
Most pollution recorded in Nouméa is of industrial origin. It tends to take the form of occasional peak pollution events, in other words it is short-lived and geographically restricted. It occurs as medium to high concentrations of sulfur dioxide and fine PM10 particles.
Since 2011, a public alert system when maximum limits are exceeded has been operational.

ENVIRONMENTAL ASBESTOS

The presence of environmental asbestos in New Caledonia and its effects on health are today known and beyond doubt. Environmental asbestos has been an environmental health issue for many years and the relevant institutions have got together to assess the risk and find solutions to mitigate that risk.
The main activities conducted so far by the working group concerned are geological studies and mapping exercises to identify priority zones, air sampling work, and epidemiological and health mapping research.
Local surveys in areas of human inhabitation to identify, characterize and classify by degree of health risk potentially asbestos-containing areas have also been undertaken.
Lastly, a 3-year government programme (2012-2015) of remediation work in the various municipal areas has been launched in the highest risk zones. The purpose is to neutralize fibre emissions near residential and recreational areas in publicly managed spaces only.

FOODSTUFFS

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.

The veterinary services have 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 CARRYING AN INFECTIOUS RISK

In New Caledonia, risk-containing medical waste and related matter and body parts are governed by Resolution No 105/CP dated 14 November 2012. The 3 types of waste: risky medical waste (pointed, sharp, etc), body parts and toxic and chemical hazard wastes.
All producers are RESPONSIBLE for their own waste disposal. Some figures (2013):

- 423.5 tonnes of this waste collected and processed inn relevant streams
- 70% is from hospitals and clinics (49.5% from the main hospital (CHT)
- The 10 biggest producers account forn 92% of all waste of this nature.

ECONOMIC AND SOCIAL DATA (ISEE)

The global economy continued to decline in 2013, after the 2011/2012 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

The economy of New Caledonia continued to lose momentum in 2013. A growing lack of confidence on the part of economic operators hindered private investment and household consumption. New Caledonian enterprises referred to a continuous slowdown in business activity. The loss of momentum affected the employment context for the first time in years, with the number of job-seekers rising. Activity declined in most economic sectors.

The nickel sector in particular experienced a difficult year despite the intensifying activity of the two new nickel plants in a world market showing a surfeit of supply and penalizing the miners' operating accounts (IEOM 2013).

MINING AND ORE-PROCESSING

In the course of 2013 , the average per-pound price of nickel at the London Metal Exchange (LME) declined, falling to 6.81 USD per pound as against 7.95 USD per pound in 2012 (-14%). 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 2013. Ore extraction, up 24% (12 million tonnes as against 9.7 million in 2012) was counterbalanced by the 3% fall in nickel ore exports.

FISHERIES AND AQUACULTURE

Tuna fishing, 65% of which targeted white-flesh tuna, accounts for 86.5% of local oceanic fishing activity. In 2013, as in 2012, 2 314 tonnes of tuna were caught in New Caledonian waters. 775 tonnes of tuna were sold outside the country, as against 780 tonnes in 2012. After the difficulties encountered in 2010 and the resumption in activity in 2011/2012, prawn aquaculture declined by 4.6% in 2013.

1 555 tonnes of prawns were produced in 2013 as compared to 1 630 in 2012. The 15% drop in hatchery output nevertheless was still adequate to supply all the farms with broodstock. New Caledonia exported a total of 866 tonnes of seafood in 2013 (55.8% of output), a 16% increase over 2012. The value of these exports grew, as a result of an increase in the price on the international market (+7.1%).

CONSTRUCTION

On average in 2013, the construction sector employed 9% of the salary-earning population in New Caledonia, a figure that remained stable as compared to the previous year. The BT 21 'all trades' index rose by 3% year-on-year after increasing by 5% in 2012. As in previous years, the limited 3% increase stems from a rise in raw material prices, but was reduced by the fall in fuel prices.

ENERGY

In 2013, electricity production increased slightly by 1.5% over 2012 Power production is increasing with rising hydro-electric electricity supply (+14%) despite the drop of 1% in conventional power generation. The proportion of renewable energy sources in total supply rose in 2013.

TOURISM

In 2013, the number of visitors to New Caledonia (tourists and cruise ship passengers) amounted to 490 000 people, 10 000 more than in 2012 (+25.6%). This increase was mostly due to the surge in cruise ship passenger arrivals (+ 100 000), an increase of 39%%, with the number of tourists falling by 4%. In 2013, more than one tourist in three came from the French mainland (+1.1% 2012) with a peak period from July to October. 'Other Oceanians' were the second biggest group (16 092, down 2.9%) followed by Australians (15 722, down 11.3%), closely followed by Japanese (15 674, down 10.1%).

TRAVEL BY NEW CALEDONIANS

In 2013, 120 600 New Caledonians came home from overseas travel, a 0.4% drop year-on-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 2013, annual inflation was +0.7%. It was much lower than in 2012 (+1.6%). Inflation in 2013 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 (62%%). Food orices rose by at 1.7% in 2013. Energy fell by 2% and manufactured goods by 0.3%. Services showed a rise of 1.7%.

SALARIED EMPLOYMENT

In 2013, 89 656 salaried staff were declared to CAFAT. Over the year, salaried employment increased by 1.9%, much less than in 2012 and 2011.

In 2013 on average, 64 401 salaried staff worked in the private sector, accounting for 71.8% of total salaried employment. In 2013, an average of 25 255 salaried staff were employed in the public sector, 736 more than in 2012 (+3%). The number of territorial public servants remained stable in 2012, while the number of French Government-employed public servants expanded by 5.3%.

PUBLIC FINANCES

French Government expenditure: In 2013, the French Government spent 155.8 billion CFP francs in New Caledonia, slightly less (-0.4%) than in 2012.

The budget situation in New Caledonia in 2013 shows an increase in revenue (+13%) and a more substantial increase in expenditure (+19.1%).

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.

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