informed about the characteristics of the disease, compliance with the therapy prescribed and how to react swiftly in the event of an exacerbation and the continuity of management.

One very recent cross-sectional epidemiological study on COPD and asthma, using data published by the Italian Society of General Medicine (SIMG), showed that at the end of 2009, the prevalence of asthma and COPD was equal to 6.10% and 2.83%, respectively, with an asthma/COPD ratio of 2.16. The prevalence of asthma appears to be higher amongst women in all age ranges, with the exception of that between 15 and 34 years. In COPD, the prevalence was higher in men of all ages, with a significant difference between the sexes after 64 years of age. The high percentage of obstructive respiratory diseases is a significant health problem, not least because, as age increases, COPD and asthma are frequently associated with concomitant conditions, which causes a deterioration in the patient's conditions, complicates therapy and requires a greater use of healthcare resources, including a greater need for hospitalisation and an increased risk of death.

As regards occupational lung diseases, there has been a numerical reduction in the number of reports in occupational lung diseases (4,583 in 2009 compared to 4,793 in 2005) and, above all, in the percentage (13.2% of all reports in 2009 compared to 17.9% in 2005). This trend also suggests an improvement in the conditions of workplaces in Italy, possibly connected to improvements in preventative measures, although it is also important to note that occupational or occupation-related diseases are extensively underestimated.

Interstitial lung disease, a heterogeneous group of over 150 different conditions with common clinical, radiological, physiological and pathological characteristics, but different aetiology and molecular pathophysiology, underwent a slight increase in their relative frequency, associated with a more accurate diagnostic approach and better implementation of guidelines.

The Global Alliance against Chronic Respiratory Diseases (GARD) was established in 2004 to provide an efficacious solution to the problems caused by chronic respiratory diseases. This voluntary national and international alliance including various institutional and non-institutional partners working towards the common aim of improving overall respiratory health, allows each participating country the change to create national alliances. This led to the founding of GARD-Italy (GARD-I), a national voluntary alliance, including Institutions, Scientific Societies, Patient Associations and tendentiously, any other player working in the pneumology field, that strives to meet the common goal of developing a strategy for the prevention and care of respiratory diseases suited to the Italian context and whose technical leadership lies with the Ministry of Health. The directions of the projects implemented concern: respiratory prevention in schools; smoking and the domestic environment; training for early diagnosis; predictive medicine and continuity of care.

2.5. Rheumatic and osteoarticular diseases

Rheumatic and osteoarticular diseases are still the most diffuse chronic condition affecting the Italian population and according to the findings of the 2010 Multi-Purpose Survey conducted by ISTAT, arthritis and osteoarthritis affect 17.3% of the population and 7.3% have osteoporosis. The ISTAT data confirms the increase in prevalence of the main rheumatic diseases (arthritis/osteoarthritis and osteoporosis) in relation to age, regardless of sex, whereas analysis by gender shows that the prevalence of these disorders is higher amongst women than men (22.1% of arthritis/osteoarthritis in women vs. 12.1% amongst men). This difference is even more marked when we consider osteoporosis (12.0% vs. 1.7%). Regional distribution shows a higher prevalence in Umbria, Basilicata, Sardinia and Abruzzo (>20%), with the lowest values recorded in the Autonomous Provinces of Trent and Bolzano. The geographical differences observed suggest that certain areas of the country require initiatives

based on the simple correction of lifestyles in the different ages.
Gout affects between 0.5 and 1% of the general population (at least 300,000 patients in Italy).
During 2009, in Italy there were over 159,000 joint replacement operations, of which: approximately 58% were hip replacement procedures, 39% were knee replacements, 2% were shoulder replacements and the remaining 1% were operations on the minor joints. During the period 2001-2009, there was an increase in the number of orthopaedic joint replacement procedures with a mean annual increase of approximately 4% for hip replacements and 11% for knee replacement surgery, although this growth rate slowed in 2009. The number of women undergoing all types of joint replacement surgery is still far higher than the number of men (67% women, 33% men) and they also have a higher mean age (73 years for females, 69 for males). In 2009, the economic impact of joint replacement surgery in Italy was estimated at approximately 1.5% of national health expenditure.
Musculoskeletal diseases are systemic conditions with a significant impact on the individual's working abilities and autonomy, as well as a reduction in life expectancy. To stem the spread of this type of disease, suitable primary prevention schemes are required involving the diffusion of projects aimed at reducing sedentariness and promoting active life styles. It is also necessary: to improve the instruments for early diagnosis, both by informing general practitioners better and by sensitising the population and patients, who must play an active role in treatment; guaranteeing access to therapy, by investing in reducing territorial differences in the availability of appropriate diagnostic and therapeutic pathways which, in the early phases of the disease, efficaciously reduces impairment, maintains function and improves the life expectancy of rheumatic patients. The therapy available for rheumatic diseases is largely pharmacological and is based, for certain conditions, on the use of "biologics", biotechnological products that selectively target pathogenic mechanisms. The high costs of therapy with these medicines and the need for long-term clinical monitoring, call for the keeping of fully-blown registers aimed at monitoring the long-term risk/benefit profile, thus responding to the need to build lasting surveillance systems.

2.6. Neurological diseases

Diseases affecting the nervous system requiring the attention of a neurology specialist have an annual incidence of 7.5% and a prevalence of 30%. To these figures we can add those nervous system diseases that are not referred, for various reasons, to a neurologist, such as headaches, dementia, lower back pain (which represents the leading cause of days off work in the western world) and others still.
Headaches are one of this type of illness, with a man:woman ratio of 1:3.
The percentage of the adult population that suffers from some kind of headache is 46%; 11% for migraine; 42% for tension-related headache and 3% for chronic daily headaches. In western countries, the prevalence of migraine in the general population is equal to 10-12% (6-12% amongst males and 15-18% amongst females). 25% of migraine sufferers have their first attack in the pre-school age.
In Italy, the prevalence of chronic pain, according to the latest estimates, is equal to 27%. There is a lack of accurate data on neuropathic pain in Italy. If we consider the same frequency ratio between chronic and neuropathic pain detected in Europe, the prevalence of neuropathic pain should be around 6% in the Italian population.
In Italy, there are approximately 200,000 new cases of stroke each year. Of these, approximately 80% is represented by new episodes. Acute stroke causes more deaths than myocardial infarction (7.28 vs. 4.95 per 10,000 inhabitants). Mortality at 30 days after ischaemic stroke is 20%; 50% after haemorrhagic stroke. The stroke prevalence rate amongst the elderly population (aged 65-84 years) in Italy is 6.5% and slightly higher in men (7.4%) than in wom-

en (5.9%). The raw incidence rates on the Italian population in various locations vary from 1.54 to 2.98 per 1,000, due partly to variations in the mean age of the populations considered. The occurrence of a cerebrovascular event must be tackled with a global approach, from the recognition of the first symptoms to activation of the emergency service, the identification of and referral to structures suited to treating stroke and transient ischaemic attack, intrahospital management, the rehabilitation project and treatment, secondary prevention, the preferable return home, management by the general practitioner, the community specialist or the integrated home support service.

Approximately 500,000 Italians suffer from epilepsy, of which 125,000 have treatment-resistant forms. The age-adjusted incidence of the first non-provoked seizure is between 18.9 per 100,000 and 69.5 per 100,000. The annual incidence of epilepsy in Italy is 33.1 new cases per 100,000 inhabitants, for a total of 29,500-32,500 new cases per year. The main indicators for programming should be aimed at:

- an increase in the number of specialised centres/facilities for the diagnosis and treatment of epilepsy that meet the standards set forth by international guidelines and national scientific societies with multidisciplinary competence: clinical neurophysiology, pharmacology, genetics, neuroradiology, neuropsychology and counselling services;
- an increase in the centres for the neurosurgical treatment of epilepsy;
- the preparation of guidelines for the issuance of driving licences for epileptic patients.

Multiple sclerosis is one of the most frequent causes of disability in young people. The age of onset can vary from 15 to 50 years of age, however it frequently manifests between 20 and 30 years of age. Clinically, it is characterised by the acute ("poussée") onset of one or more neurological deficits that tend to regress in a few days or weeks. Relapses can involve the onset of new neurological deficits or a worsening in pre-existing symptoms.

The group of rare neurodegenerative and neurological diseases includes a vast number of slowly-evolving neurological illnesses, often of genetic origin and characterised by a progressive degeneration of the neuronal and axonal systems, with an increase in the cells killed by apoptosis, which involves all cell systems.

The epidemiological and social importance of these diseases has generated a number of healthcare policies, such as the Decree of 4 October 2010 for the Distribution of financial resources assigned to the Fund for Non-self-sufficient subjects whose beneficiaries also include patients with these symptoms and the creation of a Neuromuscular Diseases Advisory Centre (Ministerial Decree of 27 February 2009).

2.7. Dementia

The various types of dementia (Alzheimer's, vascular, fronto-temporal, Lewy body dementia, etc.), constitute an increasingly important public health issue, they represent one of the main causes of disability in the general population and have a significant social and health impact as regards the quantity and quality of the resources they require.

The main risk factor associated with the onset of dementia is age. The weight of this ageing contributes to confirming the estimates of numerous international epidemiological studies that estimate that by 2020, over 48 million people will have dementia, which could rise, in the following twenty years, to over 81 million people. The vast majority of whom concentrated in developing countries.

In European Union countries alone, the most reliable estimates suggest that by 2020 there will be over 15 million people with dementia, with almost twice as many female cases as male.

Furthermore, in terms of disability, based on Disability-Adjusted Life Years (DALY) scale assessments, in European Union countries, the weight of dementia is almost twice that generated by an illness such as diabetes. In the same countries, the esti-

mated dementia-related costs in 2008 came to over 160 billion Euros, with an estimated cost of informal care alone of around 56% of the total. The forecasts based on demographic evolution in Europe suggest that these costs will rise by approximately 43% by 2030. The complexity and structuring of dementia-related issues suggest the need for the concrete promotion of an integrated approach to this problem guaranteeing early identification, efficacious treatment, caregiving continuity as well as the information and support required to achieve higher levels of self-management.
For a correct diagnosis of dementia syndrome the "guidelines on the use of imaging techniques in dementia" belonging to the National Guidelines System (SNLG) analyses the validity and indications of imaging methods for the various clinical settings as well as the various forms of dementia in order to identify the most appropriate methods for diagnosis and formulating evidence-based recommendations.

2.8. Mental disorders

In recent years, all the various international bodies have promoted and supported mental health policies as part of their broader public health framework, of which it constitutes an essential part.
Istat data for 2009 and 2010 indicates a "reported" prevalence of mental disorders (classified as "nervous disorders") of approximately 4.3% for the total population, which rises to 9.8% for the over 65s. Generally speaking, women are at higher risk, almost double that of men.
The data published by the OSMED national monitoring centre shows that over the past decade (2000-2009), the consumption of antidepressants has undergone a mean annual increase of 15.6% with an increase from 16.2% DDD per thousand inhabitants to 34.7% in 2009.
The data provided in the "Annual report on hospital admissions – Hospital Discharge Sheet data for 2009" for ordinary hospital admissions for discipline 40 (Psychiatry) shows that considering the absolute number of admissions (120,880), the repeated admission rate in psychiatry (41,111) is one of the highest (34.0).
Lastly, according to the Istat survey on admissions for mental disorders, mandatory medical treatments (MMT) underwent a slight increase in the period 2005-2008, from 4.16% of all psychiatric patient discharges in 2005 to 4.55% in 2008. The same applies for sex-specific analysis, where the values are significantly higher for males. The age group most affected is the 25-44 years range, for both sexes.
The main priorities (see also the Protection of mental health paragraph) for the adult age are:

- the promotion of epidemiological research activities in the aetiology field;
- simplified access procedures favouring swift referral to allow early management of the more severe conditions, such as schizophrenia and bipolar disorder;
- the establishment within the Italian NHS of diagnostic, treatment and caregiving programmes based on evidence-based practices, particularly in the psychotherapy and rehabilitation sector;
- the inclusion in the essential levels of care of feasible caregiving programmes based on real needs.

For the developmental age:

- the implementation of programmes for the primary prevention of mental disorders and the promotion of mental health from infant and primary school age, involving the family;
- dealing with the topic of emergencies related to mental disorders during adolescence;
- favouring of interaction and coordination between infantile neuropsychiatry services, mental health departments and the general paediatric care network, supporting the development of continuity pathways between infantile neuropsychiatry and adult psychiatry services, thereby improving the skills of mental health departments and giving a greater value to their common areas of work;
- reviewing the essential levels of care in the mental health of the developmental age area.

2.9. Rare diseases

Rare diseases include a great many (~6,000-8,000) conditions with significant differences in their aetiology, pathogenic mechanisms and clinical symptoms, that share the fact that they have a low prevalence in the general population (affecting 5 in every 10,000 subjects, according to the European Union's definition).

They are frequently associated with early mortality (in approximately 30% of cases, life expectancy does not exceed 5 years), however they may have a chronic course with severe outcomes in terms of disability and quality of life.

At 31 March 2010, 94,185 cases and 485 rare conditions were recorded in the National Rare Diseases Register. The class of diseases most frequently reported nationwide is that of diseases involving the nervous system and sense organs, with a percentage of 21.05%. These are followed by blood disorders and those of the haematopoietic organs (20.6%), endocrine gland, eating, metabolism and immune system disorders (18.95%) and congenital malformations (15.04%) and subsequently, with very low percentage levels, conditions affecting the reproductive and urinary systems and infectious and parasitic diseases (0.6%), premorbid conditions of pre-natal origin (0.24%) and the category of conditions with poorly-defined symptoms, signs and clinical status (0.01%, i.e. just 9 cases).

Considering that the rare conditions currently monitored include both groups and individual illnesses, an analysis of the data shows that the groups of conditions most frequently reported are hereditary clotting defects (7,799 cases), undifferentiated connective tissue disorders (5,631 cases), and hereditary anaemia (5,128 cases). As far as the individual pathologies are concerned, the most frequently reported are keratoconus (3,837 cases) and amyotrophic lateral sclerosis (3,292 cases). However, it is important to stress that the data contained in the Register is still partial. Indeed, registers are not kept in all regions of Italy. Another factor that contributes to the underestimation of cases registered is the delay in diagnosis, implying late reporting of the case that consequently influences the estimation of its incidence and/or prevalence. The National Rare Diseases Register uses the same nomenclature and classification system adopted for the list of rare diseases appended to Ministerial Decree 279/2001 for administrative purposes: this makes it difficult to identify the diseases within the groups or when synonyms are used. To overcome these difficulties, it is therefore essential that the Register reaches a consensus in the classification system to be used for synonyms or the individual diseases inside the groups. The European Committee of Rare Disease Experts, of which Italy is a member, is currently devising an international classification of rare diseases, which may contribute to the review of the classification systems performed by the WHO.

In Italy, in 2010, the Orphanet database indicated that there were 1,715 professionals specialised in rare diseases, 649 diagnostic laboratories conducting a total of 3,400 types of test, 76 patient registers and 44 rare diseases networks. Research in the field is active, with over 750 dedicated projects, more than half of which involve basic genetic research, 20% are clinical studies, 9% preclinical studies on gene or cell therapy, 6% are studies dedicated to the development of diagnostic protocols and, to a lesser extent, studies aimed at the development of medicinal products, identification of biomarkers and epidemiological studies. Thirty Italian companies are currently conducting trials on 64 molecules of potential interest for rare diseases.

2.10. Congenital malformations

Congenital abnormalities are morphogenesis errors determined only partly by genetic factors (25% of cases). Exposure of the mother and foetus to known teratogenic factors (infectious, physical, chemical and illnesses of the mother) is responsible for approximately 9-10% of defects, whereas for 65% the aetiology is unknown, and may be due to complex interactions between the genes and the environment.

When considered individually, congenital

malformations are usually rare, however their overall prevalence at birth (diagnosed within the first week of life) is approximately 2% (1 case in 50). Their frequency varies from one case in every 150-200 births for congenital heart diseases considered together to one case every 11,000-12,000 births for gastroschisis. Taken together they are numerically significant, involving about 5-6% of children in their first year of life.

During the 2004-2007 period some 7,894 cases of congenital malformations were reported out of 512,867 births monitored (live births + still births), with a total prevalence of 153.62 (per 10,000).

The congenital defects observed refer to 5,628 live births, 2,217 abortions and 49 still births (still births include both babies born dead and foetal death subsequent to the 20th week of gestation.

Overall, chromosome abnormalities (1,327) represent approximately 17% of the whole caseload, with a total prevalence of 25.82 per 10,000 inhabitants. The most frequent chromosome disorder is Down's syndrome (total prevalence 16.31).

An aggregated analysis of the 14 subgroups of chromosome defects defined by EUROCAT indicates that cardiovascular malformations are the most frequent type (total prevalence 44.95), followed by chromosome abnormalities (total prevalence 25.82), limb defects (total prevalence 22.09), defects of the urinary system (total prevalence 18.35), nervous system (total prevalence 16.81) and genitalia (total prevalence 15.76). All the other groups have total prevalences lower than 10 per 10,000.

Despite the persistence of a lack of knowledge on the aetiopathogenesis of multifactorial congenital malformations, a strategy for primary prevention involves a number of evidence-based points:

- the promotion of appropriate folic acid supplementation in women starting/hoping to start a pregnancy;
- the promotion of anti-rubeola vaccination and prevention of toxoplasmosis during pregnancy;
- the correct use of medicinal products in fertile women, with particular regard to anti-epileptic, cancer and endocrine treatments and awareness amongst medical staff of the possible alternative therapies;
- the promotion of health, responsible eating and lifestyles, dedicating particular attention to the prevention of cigarette smoking, excessive drinking, diabetes and obesity;
- the protection of occupational conditions, in particularly in the presence of exposure to toxic substances (e.g. intensive farming).

2.11. Diseases that can be prevented with vaccines

Vaccination coverage for mandatory vaccination has always been more than satisfactory and has never been below 95% of the population, reaching peaks as high as 99%, albeit with inevitable differences between the Regions. Vaccination coverage for *Haemophilus influenzae b* (Hib) has gradually improved and since 2006, it has been stably above 95%.

Vaccination coverage for measles, mumps and rubella (MMR), however remains more critical, and is still below 95%, the level to be met in order to eliminate these diseases set for 2015 in the WHO's Europe Region. In 2009, mean national MMR coverage in children under 2 years of age was 89.9% (range per Region 70.8-95.5%) and only two regions met the 95% target. The ICONA 2008 survey showed that estimated MMR coverage within the first 15 months of life is 17% lower than that estimated for over 15 months. There is therefore a clear delay in the vaccine calendar, which means pointless exposure to the risk of disease.

As regards vaccination against human papilloma virus (HPV), the only definitive information available to date is for the 1997 birth cohort, in which coverage amongst females is 59%.

Lastly, as regards influenza vaccination, vaccine coverage amongst the over-65s is 66%, compared to 18-19% in the general population.

Wild-type *poliomyelitis* and *diphtheria* are absent in Italy.

Over the past ten years, an average of 70 cases of tetanus have been reported, equal to an incidence of 1.1 cases per 1,000,000 inhabitants, with a slight downward trend. Those most affected are the elderly, particularly women.

The number of cases of *hepatitis B virus* is also constantly, gradually dropping. Considering all age ranges, the total number of reported cases has dropped from 2,922 in 1990 (incidence of 5.2 cases per 100,000 inhabitants) to 714 in 2009 (incidence of 1.2 cases per 100,000 inhabitants).

The same downward trend can be observed for whooping cough: for the period 1998-2009, the incidence dropped from 12.1 per 100,000 to 1 per 100,000.

The effect of the introduction of the vaccination has also been clear for *invasive Hib infections*.

In 2009, 252 cases of *measles* were reported to the special surveillance system, whereas the number rose to 2,726 in 2010. During the first seven months of 2009 there was a small epidemic that peaked in May 2009. A new epidemic started in December 2009 and reached a peak of 433 cases in June 2010.

The all-time minimum low as regards incidence (for the period 1985-2008) was recorded in 2006, with a mean of approximately 0.5 cases per 100,000. The peak for the ten-year period, on the other hand, was registered in 2002 (over 10 cases per 100,000 inhabitants). In 2008, there were 5,877 cases, equal to an incidence of 9.8 cases per 100,000 inhabitants. The same year 57 cases of rubeola virus in pregnancy were reported, of which 4 were asymptomatic. There were 17 voluntary interruptions of the pregnancy and reports of 15 confirmed cases congenital rubella syndrome (with an incidence of 2.7 cases per 100,000 new births) and 8 of infection alone. The lack of information available made it impossible to classify 14 cases.

The incidence rate for mumps remained unchanged until 2001. In 2007, it reached an all-time minimum of reported cases (987). The incidence, over the past 3 years, was on average 2 cases per 100,000 inhabitants.

During the 2008-2009 flu season, the country reported medium activity of the disease, with an overall rate of 72 cases per 1,000 persons. As always during the flu season, children were the most affected age group, whilst the elderly were the least affected; the elderly are the main target of flu immunization programmes together with individuals of all ages affected by some diseases that increase the risk of complications.

The computerisation of vaccination registers is necessary in order to guarantee a correct conduct of vaccine programmes and implement many of the measures of proven efficacy for increasing vaccine coverage.

2.12. HIV/AIDS and sexually-transmitted diseases (STDs)

From the start of the epidemic in 1982 to date, over 61,000 cases of AIDS have been reported, of which almost 40,000 have died. 77.3% cases of AIDS affects males, 1.2% the paediatric age (<13 years) i.e. mother-child transmission and 8.2% of cases affects foreigners. In 2009, the median age of diagnosis amongst adults was 35 years for males (range: 13-87 years) and 33 years (range: 13-84 years) for females. 1996 saw the start of a reduction in both the number of cases of AIDS and AIDS-related deaths, primarily due to the effect of combined antiretroviral therapy regimens.

In 2009, more than 60% of new cases of AIDS, in particular those who contracted the disease through sexual intercourse, discovered that they were HIV+ too late, when they were diagnosed as having AIDS: consequently, only one third of people with AIDS had the chance to benefit from antiretroviral treatment before they were diagnosed with AIDS. The percentage of female AIDS patients infected by sexual intercourse continues to increase: 10 years ago, half of the women with AIDS was infected through sexual contact, whereas in the past two years, more than two thirds were infected by sex.

HIV infection. Surveillance over new diagnoses of HIV infection only began in 2008 and does not yet have nationwide coverage. Reported data indicates that in 2008, 6.7 new cases of HIV positivity were reported per 100,000 inhabitants, making Italy a country with medium-high incidence of HIV amongst western European countries. Since the start of the epidemic, HIV infection has greatly changed: there has been an increase in the median age of those diagnosed with HIV infection today: in 2008 it was 38 years for men and 34 years for women; there has been an increase in the number of cases attributed to heterosexual and homosexual contacts, which in 2008 in total accounted for 75% of reported cases (specifically homosexual contacts accounted for 29% and heterosexual contacts for 46%). Lastly, there has been an increase in new diagnoses amongst the foreign population: in 2008, of every three people diagnosed with HIV for the first time, one was a foreign national.

As regards prevention, the priorities must be early diagnosis, access to tests, swift treatment, better HIV/AIDS prevention advertising and education programmes.

Sexually transmitted diseases. In 2008, the Italian Ministry of Health received 1,148 reports of syphilis and gonorrhoea. Most of these involved males (90% of cases of gonorrhoea and 77% of cases of syphilis were reported in males). The 25-64 years age range is that most affected (79% cases of gonorrhoea and 84% cases of syphilis). The data for 2009 is still provisional, however it would appear to confirm the figure for 2008: so far 1,133 reports have been received and 90% of the cases of gonorrhoea and 75% of cases of syphilis were reported in males. Again in 2009, the age range most affected by these diseases is the 25-64 years band (69% of cases of gonorrhoea and 81% of the cases of syphilis).

Of the other STDs, that are not subject to mandatory reporting, the most frequent are genital condylomas (35.7%), non-gonococcal non-chlamydial bacterial infections (NG-NC) [21.6%] and genital herpes infections (8.1%).

To improve the prevention of these diseases, it would appear essential:

- to inform the general public of the clinical presentations of STDs and the potential complications and sequelae of these conditions;
- to make the population aware of the need to contact their doctor if they present the signs or symptoms typical of an STD;
- to educate the population, particularly youngsters, on the importance of using a condom, not merely as a contraceptive measure but also in order to prevent STD infection;
- to promote the performance of an anti-HIV test for all subjects with an STD;
- to increase and facilitate the supply of diagnostic tests in order to identify even asymptomatic cases.

2.13. Occupational illnesses

The data contained in the most recent annual report by INAIL (Italian Occupational Insurance Institute) indicates that the Institute received some 34,646 reports of occupational illnesses for 2009, with a 15.7% increase on the previous year's figures.

Specifically, compared to 2008, the number of reports doubled for the agricultural field, from 1,834 to 3,914.

As regards distribution in the various sectors, most reports are concentrated in the Industry and Services sectors, which with 30,362 reports underwent a 30% increase in 2009 compared to the five previous years, with an absolute increase of 8,000 more reports than received in 2005.

Over this five-year period, reports in the Agricultural sector tripled, from 1,318 reports in 2005 to 3,914 in 2009. As regards civil servants and other State employees, in the same year there was a 6% increase in the number of reports compared to 2008.

Although hearing loss continues to occupy the first places, albeit with a constantly downward trend, the most diffuse conditions in all productive sectors with approximately 18,000 cases are osteoarticular and muscular and tendon disorders, particularly vertebral disk problems caused by biome-

chanical overload and due to osteoarthritis and tendinitis. Between 2003 and 2007, this latter group underwent a 131% increase.
The number of cases of respiratory diseases underwent a slight decline, to 2,353 in 2009 from 2,450 in the previous year.
As regards cancers, excluding asbestos-induced cancers, there were 1,132 cases in 2009, whereas the illnesses caused by asbestos, constituted by cancer, asbestosis and pleural plaques the same year resulted in 2,043 reports, with a slight reduction in the five-year period compared to the 2,133 cases in 2005.
It would appear to be of critical importance to facilitate the identification of "overlooked occupational diseases" through an improvement in the level of doctors' awareness of the issues related to the identification and management of occupational diseases and of those previously exposed to professional carcinogens in particular. Medical research in the "emerging occupational diseases" sector would appear to be equally important for both a return of knowledge in terms of prevention and to guarantee correct social security protection, which is currently not always adequately guaranteed.

2.14. Emerging or re-emerging infectious diseases

Various infectious diseases have come to the attention of public opinion during the 20th and 21st centuries, often causing fear and anxiety amongst the population.
Recent examples are the variant of Creutzfeldt-Jakob disease, a chronic, degenerative neuropathy caused by an "infectious agent" responsible for bovine spongiform encephalopathy, otherwise known as "mad cow" disease. Between 2000 and 2010 approximately 1,100 cases of Creutzfeldt-Jakob disease were reported in Italy, only one of which was related to the new "mad cow" disease.
Bird flu has been and continues to represent a significant emerging disease. Between 2003 and April 2011, the WHO reported 530 cases and 313 deaths in humans worldwide. On 24 April 2009, the WHO launched an alert concerning the potential risk related to the diffusion of a new A/H1N1 influenza virus in humans and a potential pandemic. Italy has activated and enhanced a number of measures in order to monitor the progression of the pandemic, its impact and the efficacy of containment measures. These are put into force through a close synergy between the Ministry of Health and the Regions in terms of epidemiological surveillance and joint actions. It is worth to mention that Italy was the first European country to start a vaccination campaign against the new A/H1N1 flu. Data collected through active surveillance systems show that the most affected age ranges were those of children aged 0 to 4 years (cumulative incidence: 232 per 1,000 patients) and between 5 and 14 years (271 cases per 1,000 patients). Overall, from 19 October 2009 to the end of April 2010, 9% of the Italian population caught this disease. There were 260 confirmed reports of death, particularly in the 15-64 years age group, in which fatality is not usually high.
The re-emerging infectious diseases include tuberculosis. Italy has a low prevalence (<10 cases per 100,000 inhabitants), albeit with significant differences between the north and south of the country and between those born in Italy and those born abroad. Over the past twenty-five years, the trend has been substantially stable (approximately 7 cases per 100,000 inhabitants). In 2008, the incidence rate was 7.66 cases per 100,000 inhabitants. Over the past decade, there has been a gradual reduction in the incidence amongst the over-65s (8 cases per 100,000) and a slight progressive increase amongst youngsters (15-24 age group: 9 cases per 100,000). Immigrants have a relative risk of contracting tuberculosis that is 10-15 times higher than the Italian population and they contract the disease in the first 3-5 years of living in Italy. In 2006, the raw mortality rate was 0.7 deaths per 100,000 inhabitants and approximately 55% of total deaths occurred in male subjects.
In recent years, there has also been a slow but gradual increase in resistance to anti-tuberculosis medications. The percentage of multi-resistant TBC in Italy in 2008 in-

creased slightly compared to 2007, accounting for 3.7% of all strains analysed.
The best-known of the emerging viruses is undoubtedly human immune deficiency virus (HIV), which has been detected, in a similar form, in certain monkeys, which was discussed in the HIV/AIDS and STDs paragraph.
In recent decades, climate change and globalisation-related phenomena have led, also in Italy, to an increase in the risk of introduction and autochthonous transmission of a number of illnesses transmitted by carriers such as West Nile disease, dengue and chikungunya and there has been an increase in the number of imported cases of Dengue, which from 10 cases in 2009 rose to 45 cases in 2010. The most valid instrument for monitoring the introduction of emerging and re-emerging diseases is epidemiological surveillance that, thanks to its flexibility, makes it possible to identify and deal with healthcare emergencies.

2.15. Stomatological and dental diseases

Compared to the 2007-2008 two-year period, there has been little change in the epidemiological situation of the main conditions affecting the oral cavity (tooth decay, gum disease, tooth loss and cancer of the mouth). The same cannot be said, however, for the situation of temporomandibular joint (TMJ) disorders, which represent the most common clinical presentation of musculoskeletal pain after backache and are the leading cause of non-dental pain in the orofacial area, for which there has been an increase in diagnoses.

2.16. The complex patient

The improvement in social and health conditions, the increase in survival of once-fatal clinical conditions and an ageing population have caused a progressive and profound change in treatment settings, with a gradual increase in chronic illnesses, which are often simultaneously present in the same individual. Today the main aim is chronic patient management and the definition of new care pathways, able to take care of the individual in the long-term and prevent disability, thereby guaranteeing both the continuity of hospital and community care and the integration of social and health intervention.
Patients with chronic comorbidities require care from multiple specialised professionals, with the risk of fragmentary services, concentrating more on the individual illness than on the holistic management of the patient or of conflicting diagnostic and therapeutic instructions, which makes it difficult for the patient to take part in the treatment process, an essential aspect when dealing with chronic conditions, and contribute to increasing health expenditure. These patients are at greater risk of negative outcomes, such as increased physical and psychological morbidity, more frequent and longer hospital stays, increased risk of disability and non-self-sufficiency, worse quality of life and increased risk of mortality. For the treatment and care of these patients, we must provide the know-how and instruments to make it possible to identify as part of a holistic approach to the person those determinants and their related issued that play a key role in influencing the individual's state of health, in order to identify priorities and plan a customised multidisciplinary treatment and care programme. In this way, by rethinking care-giving methods, chronic and complex patients could be given new treatment pathways that are increasingly tailored and able to meet treatment requirements. This would favour long-term management, guaranteeing the continuity of treatment between the hospital and the community, the integration of social and health schemes, thereby favouring the possibility for them to continue living in their own living environment for as long as possible, ultimately improving the patient's quality of life and allowing more humane treatment.

3. Mortality and disability due to external causes

3.1. Occupational accidents

Accidents in the workplace are not unavoidable fatal events, rather they can be

prevented and can and must be avoided by making workplaces and the equipment used safer, guaranteeing valid training on risks and adopting efficacious prevention measures.

In line with greater safety-related awareness and the evolution of regulation frameworks, our country's accident profile continues its downward trend that, in 2009, underwent the greatest reduction in accidents and deaths in the workplace since 2002. The rationalisation of the regulation framework that started with the Treaty for the protection of occupational safety and health launched in May 2008 with Legislative Decree 81, and amended by Legislative Decree 106/2009 and followed by the issuance of important implementation decrees, continued during 2009 and 2010. Another positive element concerning the accident profile during this two-year period was the implementation of the actions identified in the previous National Prevention Plan (NPP) and the launch of a national prevention plan for the construction sector and the national prevention plan for agriculture and forestry 2009-2011, as part of the new NPP 2010-2012.

Employment during 2009 and 2010 was strongly conditioned by the extremely severe international recession. According to Istat estimates, in 2009, the increase in unemployment, reduction in total numbers of hours worked due to overtime cuts and the extensive use of unemployment benefits led to an average 3% reduction in exposure to occupational risks, albeit with a significant variability in the occupational sector, territorial area and company-size involved.

The number of accidents reported to INAIL for events occurring in 2009 underwent a 9.7% drop compared to the data for 2008. Fatal accidents, which dropped to 1,050 events in 2009, with an overall reduction of -6.3% compared to the previous year, were characterised by a significant reduction in the percentage of road accidents (-10.4%) compared to off-the-premises deaths which dropped by just 2.7%.

An analysis of the INAIL data, reported on a regional basis, shows that the greatest number of accidents involve the industrialised north of Italy, where they account for as much as 60% of all accidents. The same areas also underwent the largest reduction in the percentage of accidents reported in 2009 compared to the data for 2008. Specifically, in the north-east of Italy, the reduction in accidents was greater than -12% compared to the previous year, whereas the north-west achieved a -9.3% drop, percentages that are significantly higher than the more modest drops recorded in Central (-8.2%) and Southern (-6.8%) Italy compared to accident reports for 2008.

The overall drop in accidents recorded, divided by sector, in 2009 in particular affected industry with -18.8%, the Services with -3.4% and Agriculture with -1.4% compared to the previous year.

In terms of their nature, the most common type of fatal occupational accident, excluding road accidents, were those in which a worker fell from a height (32.1%), those in which a heavy object fell from a height on to a worker (17.5%) and accidents in which a worker was run over by a vehicle (11.2%); the latter class including events occurring both inside and outside routes dedicated to work vehicles.

Adequate risk and behaviour management, combined with better knowledge of the perception of risks can and must become an essential requisite for the responsibilisation of all the subjects involved, in order to increasingly reduce the number of occupational accidents. The target set by the European Commission is a 25% reduction in occupational accidents on both a national and an EU level.

The full implementation of the National Information System for the Prevention of Occupational Accidents will make it possible, based on the systematically collected data concerning the performance of specific vigilance campaigns in those workplaces most at risk, to verify the efficacy of preventative measures on reducing accidents and to identify the new occupational, sectorial and workplace categories most at risk in which priority action must be taken to reduce accidents.

3.2. Road accidents

Road accidents are a serious medical emergency in all European countries and represent the leading cause of death in the 15 to 35 year-old age range.

On average, every day in Italy there are 590 road accidents, causing the death of 12 people and injuring another 842.

Compared to 2008, there has been a reduction in the number of accidents (–1.6%) and injuries (–1.1%) and a more significant drop in the number of deaths (–10.3%). Overall, in 2009 there were 215,405 road accidents, which caused the death of 4,237 people, whereas 307,258 more suffered injuries of varying severity.

A long-term analysis of accidents reveals a constant reduction in the severity of accidents, as shown by the mortality index (number of deaths per 100 accidents), which was around 2.0% in 2009 compared to 2.8% in 2000.

The European Union's white paper of 13 September 2001 predicted that there would be a 50% in mortality caused by road accidents by 2010. In relation to the data for 2001, Italy has achieved a reduction of 40.3%, compared to a European average of 35.1%.

One aspect that deserves special consideration is the number of weak road users involved in road accidents, in particular, children and the elderly. Pedestrians account for 6.6% of those injured and 15.7% of deaths. Pedestrians are run over in 8.6% of accidents, with 18,472 cases that have cost the lives of 667 people and in which 20,887 have been injured.

An analysis of the number of deaths in road accidents involving the younger age brackets shows that the number of deaths in the 0-4 age range was 13; that there were 19 in the 5-9 years age bracket, 39 in the 10-14 years group and 268 in the group aged 15-19 years. Overall in the 0-19 years bracket there were 339 deaths.

Many of these deaths could be prevented. In particular, in the 0-4 and 5-9 years groups, most deaths were due to failure to use children's safety belts or incorrect use of car and/or booster seats.

The issue of road safety must be dealt with using a multidisciplinary approach:

- there must be greater cooperation between the Ministries of Transport, Health and Education and the Home Office, and the involvement of other institutional subjects must be encouraged;
- in order to be efficacious, prevention measures must be based on evidence-based practices;
- weak road users must be protected with road education initiatives concerning observance of speed limits, even in urban areas and observance of horizontal road markings;
- the population must be educated to judge risks correctly (alcohol and speed);
- parents must be educated concerning the use of restraining devices for themselves and their children of all ages, in order to minimise the consequences in the event of an accident.
- the road safety taught in schools should lead to a general improvement in the population's knowledge of safety, particularly amongst youngsters.

In addition to preventative, educational and informative initiatives, it is also necessary to improve infrastructures and for the police force to carry out frequent checks for preventative and dissuasive and not merely sanctionary purposes.

3.3. Domestic accidents

Istat's multipurpose 2008 survey showed that accidents in the home, in the three months previous to the interview, had involved 797,000 people, equal to 13.5% of the population, with an impact of the phenomenon that can be estimated, over a 12-month period, at 3 million people. More than 70% of these accidents involved women, with a percentage of accidents equal to 17.6‰, whereas amongst men it is 9‰. During the paediatric age (up to 14 years), accidents are more common amongst males, whereas females are involved more frequently in later years, due to both the greater time spent in the home and their more frequent contact with the objects, tools and electric appliances that may cause acci-

dents (cuts, burns, etc.). Housewives, who are involved in almost 4 out of every 10 accidents, are a particularly vulnerable group. In addition to women, the categories at highest risk are the elderly (>64 years, 19.5‰ had had an accident in the three months preceding the interview) and young children (<6 years, 13‰ had had an accident in the three months preceding the interview).

In 2008, it was estimated that 5,783 people died in domestic accidents, half of whom were women over eighty. Individuals over eighty account for 74% of all mortality caused by domestic accidents.

The Information System on Domestic Accidents (SINIACA) coordinated by the ISS established a surveillance network in hospital A&E departments in a sample of 35 centres. By applying the sample's incidence estimates on a national scale, it has been calculated that there are 1,700,000 A&E admissions due to domestic accidents in Italy per year, leading to 125,000 hospitalisations per year.

By considering events in terms of the severity of the injury, it can be observed that the cases with the highest intervention priority have the highest frequencies amongst children aged 1-4 years and the elderly over 79 years of age.

The type of accidents most frequently encountered in hospital A&E Departments are: falls 48.1%, cut and piercing injuries 18.1%, blows and crushing accidents 14.6%, foreign bodies 3.2%, burns and corrosions 2.6%. The household environments in which accidents are most frequent are: the kitchen 14.7%, the stairs 10.7%, other external areas 12.4%, the courtyard or garden 9.7%, the bedroom 9.5%.

As regards the promotion of a safety culture by citizen information schemes, according to the data for 2009 produced by the group of local health authorities participating in the PASSI vigilance system, one out of four respondents said they had received information on how to prevent this type of accident.

According to SINIACA's epidemiological forecasts, using an incidence-based approach, it can be estimated that the direct healthcare costs borne by the Italian NHS for domestic accidents come to 625 million Euros a year and the indirect costs of society's loss of production due to the death or severe invalidity secondary to domestic accidents come to 7 billion, 300 million Euros.

The most productive approaches in terms of a reduction in this phenomenon are those of an integrated type both those concerning health education and information activities and those involving environments and facilities, with actions tailored to suit the individual population groups. Lastly actions intended to maintain the autonomy and psychomotor abilities of elderly subjects, particularly motor coordination and balance abilities, have been indicated in international scientific literature to be of proven efficacy.

3.4. Suicides

Italy is has the lowest risk of suicide of all European countries, despite the significant differences between subgroups of population and on a regional and local level.

Male gender, old age, the presence of a mental disorder and substance abuse are the main risk factors for suicidal thoughts.

For the two-year period 2007-2008, in Italy there were 7,663 suicides (3,757 in 2007 and 3,906 in 2008).

The mean annual mortality rate for the resident population aged over 14 years was 7.3 per 100,000 inhabitants. 77% cases of suicide are committed by men. The raw mortality rate is 11.6 per men and 3.2 for women, with a male:female ratio of 3.6. The distribution of age-specific rates show that, for both genders, mortality for suicide increases with age, however, whereas for women this increase is more or less steady, for men there is an exponential increase after 65 years of age.

Amongst men aged over 65 the rate reaches 20.5, compared to 4.5 for women of the same age (with a gender ratio that rises to 4.5) and, if we consider the "very elderly" (85 and over), the rate reaches 32.6 amongst men and 4.4 amongst women (with a gender rate of 7.5).

Although in absolute terms the suicide phenomenon takes on more important dimensions in the elderly, it is amongst the young that it represents one of the most frequent causes of death. In the 15-24 years and 25-44 years groups, for the 2007-2008 period, suicide was the fourth most frequent cause of death (about 8% of all deaths). Amongst young men aged 15 to 24 years, the percentage of deaths by suicide (9%) out of total deaths is slightly lower than cancer deaths (11%) and for young women of the same age, it is of the same order of size as deaths for accidental causes or cardiovascular diseases (6%). For women aged 25 to 44 years, suicide is the third most frequent cause of death (5.6%), similar to the value for road accidents (5.4%).
As regards the method used to commit suicide, there are significant differences as regards both gender and age. The method most frequently used by men is hanging (50.1% of male suicides); whereas for women, the most frequently used method to take their own life is to throw themselves from a height (37.9%).
Suicide mortality rose from the mid-seventies to the mid-eighties before dropping in the following years, with an acceleration in the pace of this reduction for men from the 1990s on.
The WHO and European Commission have indicated a reduction in the use of the means used to commit suicide (such as fire arms and toxic substances), prevention of depression and alcohol and drug abuse and the monitoring and management of those who have attempted suicide as efficacious actions for the reduction of the suicide rate.

4. Health through the phases of life and in certain groups of the population

4.1. Maternal and neonatal health

On 1 January 2010, Italy had a resident female population of 31,052,925 (51.5% of the total population), of which 2,171,652 (7% of the total) were foreigners. About half (14,029,029 women) are of childbearing age (15-49 years).
Since the entry into force of Law 40 on medically-assisted procreation (MAP), there has been a constant increase in the number of couples resorting to the use of MAP, the cycles initiated, pregnancies achieved and babies born. In 2009, 8,043 babies were born as a result of MAP, compared to 7,492 in 2008.
The data reported in delivery assistance certificates (CeDAP) for 2008 showed that in 84.6% of pregnancies the mother attends more than 4 midwives' appointments, and in 73.2% of pregnancies more than 3 ultrasound scans are performed. 16.9% of deliveries involve non-Italian mothers. This phenomenon is more common in the central and northern parts of Italy, where 20% of deliveries involve non-Italian mothers. The mean age of the mother is 32.4 years for Italian women and drops to 28.9 years for foreign citizens.
67.0% of deliveries take place in facilities with at least 1,000 births a year. These structures, of which there are 210, represent 37.3% of total maternity facilities. 9.1% of deliveries, on the other hand, take place in facilities where there are fewer than 500 deliveries a year and still account for 30.2% of maternity facilities.
Data provided by delivery assistance certificates indicates that 37.8% of deliveries involves a caesarean birth (38.4% is the data provided by the SDOs), with significant regional differences, highlighting the excessive use of this technique in Italy, which is higher in NHS-accredited private clinics (60.5% of births, compared to 34.8% in public hospitals). Caesarean births are more frequent in women with Italian citizenship than amongst foreign women; the percentage is 39.8% in Italian mothers and 28.4% amongst foreign mothers. This issue was dealt with in the Central – Regional Authority Agreement of December 2010 "Guidance for the promotion and improvement of quality, safety and appropriateness of care initiatives in the birth programme and for the reduction of caesarean births", which puts forward a national programme, broken down into 10 points, for the promotion and improvement of quality, safety and appropriateness in care in the birth

programme and for a reduction in caesarean births.
Between 1998 and 2002, in Italy, the maternal mortality ratio (MMR) was 3 per 100,000, compared to a mean MMR in the Europe Region of 21 per 100,000 according to data published by the WHO in 2008.
In 2007, the number of miscarriages underwent an important increase compared to 2006: the number of cases rose from 74,117 in 2006 to 77,129 in 2007 (+4.1%); consequently, the miscarriage ratio increased from 131.4 miscarriages per 1,000 live births to 135.7 per 1,000 live births.
In 2009, there were 116,933 abortions, a 3.6% decrease on the figure for 2008 (121,301 cases). The abortion rate (number of abortions per 1,000 women of childbearing age between 15-49 years) in 2009 was 8.3 per 1,000, with a 3.9% drop compared to 2008 (8.7 per 1,000) and a drop of 51.7% compared to 1982 (17.2 per 1,000). The guidelines for the voluntary interruption of pregnancy using mifepristone and prostaglandin (RU486), based on the three opinions issued by the CSS, were approved on 24th June 2010.
In 2008, 576,659 births were registered in municipal birth registers, approximately 13,000 more than the previous year (563,933), equal to an average of 1.42 children per woman. This data is in line with the positive trend that started in the second half of the 1990s, after 30 years of reduction and the all-time minimum number of births (526,064 births) and fertility rate (1.19 children per woman) registered in 1995.
Mothers continue to age: 5.7% of babies are born to mother aged 40 or over, and the number of mothers under 25 continues to drop. The decrease in the number of underage mother continues to decrease and was 2,514 in 2008, a value about one quarter lower than that recorded in 1995 (3,142 units). The nativity rate varies from 7.7 births per 1,000 in Liguria to 11.0 in the autonomous Provincial Authority of Bolzano, compared to a national average of 9.6 per 1,000.
The last CeDAP report, published in 2008, indicates that 1% of births weigh less than 1,500 grams and 6% between 1,500 and 2,500 grams. In new-born vitality assessments using the Apgar scale, 99.3% of births had a score at five minutes of between 7 and 10.
The infantile mortality rate, which measures mortality in the first year of life, was, in 2008 3.34 babies every 1,000 live births. This data confirms the reduction recorded in Italy over the past 15 years, although significant regional differences persist.
The decrease in infantile mortality can be attributed, above all, to the drop in post-neonatal mortality due to exogenous factors connected to the hygienic, social and economic conditions in which the mother and child live. There were 1,543 still births, corresponding to a birth mortality rate of 2.79 still births every 1,000 births and 4.517 births with malformations.

4.2. Infantile and adolescent health

The data contained in Istat's Multipurpose Survey conducted in 2008 indicates that 91.8% of babies and children in the 0-14 years age range is in good health, 9.6% suffers from one or more chronic conditions and just 1.6% suffers from two or more chronic illnesses.
The most common disorders encountered in the 0-14 years range are allergic conditions, which are more common in males (8.3%) than in females (7.6), chronic bronchitis, including bronchial asthma (2.2%) and nervous disorders, equal to 0.6% in males and 0.3% in females.
Asthma affects 10% of the infantile population, compared to 2.3% in the 1970s.
The infantile mortality data confirms the significant reduction in the leading causes of death: perinatal complications, trauma and poisoning, congenital malformations and tumours. The most considerable decrease in mortality involved babies up to one year of age and significantly also the 1-4 years age range. However, there was an increase in mortality in the 5-14 years bracket for both sexes. There was a decrease in deaths during the first year of life, in both absolute terms (from 2,432 cases in 2001 to 1,959 in 2007), and infantile mor-

tality rate (from 4.6 per 1,000 live births in 2001 to 4 per 1,000 in 2007).

The mortality rate for the 1-14 years age bracket dropped between 2003 and 2006, for both males and females, with values that decreased from 1.50 to 1.30 for boys and from 1.18 to 1.08 for girls, respectively. In this age range, the leading cause of death is cancer, with a rate of 0.39, followed by the external causes of trauma and poisoning. Leukaemia and tumours, after the first year of life, represent the leading cause of mortality in all age brackets. In Italy, the 2008 Italian Association of Cancer Registers (AIRTUM) report on infantile tumours confirmed an upward trend in the incidence rates for all paediatric tumours of 2% a year: from 147 cases per million children a year between 1988 and 1992 to 176 between 1998 and 2002. The incidence rates for all cancers was, overall, higher than the European average values (140 per million children a year) and American values (158) in the 1990s.

The data collected from Hospital Discharge Reports in 2009 show a reduction in ordinary and day hospital admissions. Compared to the data for 2006-2008, hospitalisation rates for the various age brackets confirm the downward trend in ordinary admissions for acute patients (more than 10 admissions per 1,000 inhabitants fewer than in 2006). The higher discharge frequency can be attributed to neonatal illnesses and disorders (18.7%). The active promotion of health, development and care for children and adolescents is dedicated special attention in the National Health Plans and in the mother and child plan (Ministerial Decree of 24 April 2000). Furthermore, as regards the approach for the care provided to adolescents, the primary care paediatrician or general practitioner should have special training for the issues characterising this particular age bracket, be familiar with the pathways and initiatives that can be implemented on both an individual and a collective level and identify services able to deal with the most common psycho-social-behavioural disorders, mental problems and neuropsychiatric conditions of adolescents.

4.3. Health of the elderly population

Demographic data confirms the constant increase in the mean life expectancy of the Italian population and its progressive ageing, thereby highlighting the central importance of strategies and policies tailored to meet the needs of the elderly and aimed at promoting healthy ageing.

On 1 January 2009, there were approximately 12 million Italian residents aged over 65, of whom about 3.4 million aged over 80. The prevalence of over-65 year-olds has increased over time, from 6.2% in 1901 to 20.1% in 2009. Given the increase in the over-80s, which has risen from 0.7% in 1901 to 5.6% in 2009, it is estimated that by 2030 they will account for 9% of the total population.

The multipurpose survey conducted by ISTAT in 2008 indicates that the conditions that most frequently affected the over-65 population are osteoarthritis and arthritis, followed by arterial hypertension and, for the female sex alone, osteoporosis. The percentage weight increases with age and is significantly higher than the corresponding values for the general population. The same survey provides information on the perception that the elderly have of their own state of health: on average about 70% of people over 65 declare that they are in good health, data that shows a positive trend compared to the figure for 2005, when just over 50% made similar comments. These positive changes in the perception of health quality can be partly attributed to a generally different approach to ageing that has gradually taken root in recent years.

There has been a generalised reduction in the behavioural risk factors smoking and drinking with an increase in age, with differences between men and women that continue to be significant for smoking (with an average difference of 7 percentage points) or very important for alcohol consumption at risk (25-30 percentage points difference). Due to poor fruit and vegetable intake or lack of exercise, despite there being any significant gender differences, there is an overall worsening with age.