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Annual Report 2007

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## Foreword

### Joining Forces

In a society which is changing as rapidly as ours, knowledge is vital. Therefore, RIVM (the National Institute for Public Health and the Environment) increasingly gears its activities towards collecting and bundling knowledge, with the aim of disseminating it to others. Joining forces with partners, commissioning bodies and other parties is crucial in this process.

One such example of a product to which several partners have contributed over the years is the national vaccination programme, which celebrated its fiftieth anniversary in 2007. Organisations like the Netherlands Vaccine Institute, local health authorities, infant welfare centres and vaccination centres have been working together for fifty years to protect our country's children from serious infectious diseases.

Last year the kiesbeter.nl website ('Make a Well-Informed Choice') was expanded in various ways. Visitors to the site expect to receive honest and reliable information which will help them make the right choice in health care-related matters. In order to provide that information, RIVM depends on other parties to provide correct and reliable data. For their part, these data suppliers expect us to deal with the information they provide in a careful manner.

In 2007 RIVM, in association with SenterNovem, established the REACH help desk, designed to help companies

implement REACH, a European regulation on chemicals which affects manufacturers, importers, distributors and end-users of chemical substances. The help desk provides general information on the regulation and what it entails for companies. Companies which require more information on the subject can consult the [www.reach-helpdesk.nl](http://www.reach-helpdesk.nl) website or call the help desk.

Proper cooperation requires mutual trust and faith in each other's expertise. Such faith must be earned and validated, which is something we try to do every day. I believe the 2007 Annual Report provides a thorough survey of RIVM's many activities, many of which build upon the mutual trust referred to above.

Dr Marc J.W. Sprenger  
Director-General, RIVM

## Profile

The National Institute for Public Health and the Environment (RIVM) performs tasks to promote both public health, and a healthy and safe living environment. The principal task of RIVM is to conduct research and collect knowledge from all over the world. Results are used to support the Dutch government in formulating its policy.

### RIVM's tasks

- research
- policy support
- national coordination
- intervention programmes
- provision of information to professionals and the general public
- support for inspectorates

RIVM is responsible for providing impartial and reliable information to members of the public and professionals who work in the fields of health care, medication, the environment, and nutrition and safety. Our objective is to make optimum use of scientific knowledge and expertise, and then to make this knowledge and expertise accessible to others.

## Independent Research

Most of RIVM's research studies are commissioned by Dutch ministries (the Ministry of Housing, Spatial Planning and the Environment; the Ministry of Health, Welfare and Sport; and the Ministry of Agriculture, Nature and Food Quality). Other commissioning bodies include the Ministry of Social Affairs and Employment, the Ministry of Defence, and several other ministries and regulatory authorities, such as the various inspectorates. However, RIVM also works for international organisations, including the European Union and the United Nations. The Institute's independent status is laid down in the RIVM Act.

Although clients may commission RIVM to look into very specific research questions, they do not exercise any influence on the design of the Institute's studies, nor the results thereof. RIVM aims to serve as a reliable partner for the Dutch government. This means it will not make any policy recommendations unless they have been carefully thought through.

The fact that RIVM may report the results of its studies independently of the commissioning body ensures the Institute's impartiality. RIVM guarantees that there will be no conflict of interests in the studies it conducts. The quality of the Institute's scientific work is monitored by the RIVM Supervisory Board, which is composed of highly respected scientists. Please turn to page 30 for the Supervisory Board's annual review.

## Projects, Studies and Developments

## Q Fever in Herpen

Q fever is an infectious disease not often observed in the Netherlands. It is caused by infection with the *Coxiella Burnetii* bacterium, which is spread through the bodily fluids of infected animals, notably cattle, sheep and goats. Humans can be infected by inhalation of infected air-borne dust particles or by direct contact with animals or raw milk products. On average, fifteen to twenty cases of Q fever infection are reported in the Netherlands each year. However, in the spring of 2007 many cases were suddenly reported in the province of Brabant, particularly in the Herpen area. Blood tests showed that nearly a quarter of all adults living in Herpen had recently been infected with Q fever. RIVM conducted a follow-up study to investigate the factors which might have contributed to the outbreak. It was demonstrated that smokers, people who had been exposed to agricultural products such as manure or hay and people living in the near vicinity of an area encompassing eight cattle farms were at an increased risk for Q fever infection.

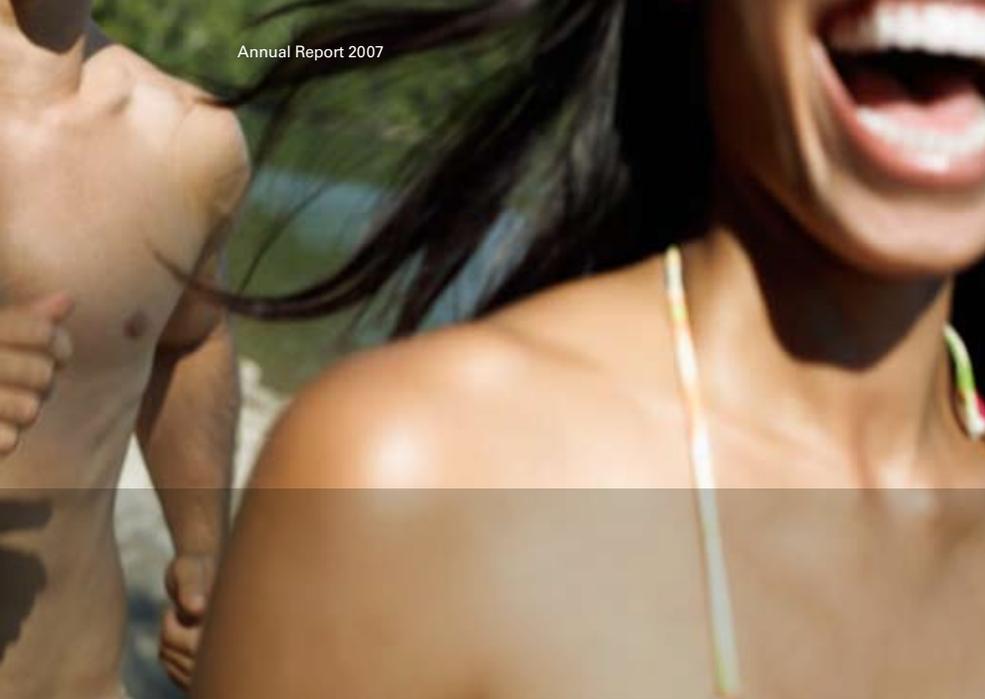
## Fifty years of government-supported vaccination

In 2007 RIVM celebrated the fiftieth anniversary of the national vaccination programme, which was introduced by the government in 1957 to protect all children in the Netherlands from a number of children's diseases and infectious diseases. The scheme covers 95 percent of all Dutch children and provides vaccination against eleven serious infectious diseases which used to pose a large threat to public health. Since the scheme was introduced in the late 1950s, many of those eleven diseases have been completely or largely eradicated. From 2008 onwards, the vaccination centres, which are in charge of coordinating and implementing the national vaccination programme, will be integrated into RIVM, meaning that nation-wide supervision and regional coordination of neonatal heel prick tests, prenatal and postnatal screening and the national vaccination programme will be united under one umbrella organisation.

## Raw beef causes illness

Despite the adoption of national and EU-wide legislation to promote food safety, many Dutch people still fall ill due to consumption of infected meat. In 2007 RIVM analysed precautions taken to prevent infection due to exposure to raw beef. Raw beef product safety can be promoted in various ways, e.g. by optimising hygienic conditions at slaughterhouses and during the processing of meat. However, since absolute safety can never be fully guaranteed, it is vital that we raise public awareness of the risks associated with raw beef products. By advising consumers on the right way to store raw beef and on the importance of maintaining hygiene in the kitchen, we can help minimise health hazards. Young children, elderly people and persons with reduced resistance to infections are advised not to eat raw meat, as they are at greater risk for complications if the meat turns out to be contaminated.





## Illegal erectile dysfunction pills

RIVM regularly examines samples of illegal erectile dysfunction (ED) pills confiscated by the various inspectorates. A trend analysis covering the years 2005 and 2006 indicates that counterfeit ED pills are looking increasingly convincing. Not only do the counterfeit pills themselves increasingly look just like the three registered brands of erectile dysfunction pills (Viagra, Cialis and Levitra), but their packages, blister strips and patient information leaflets, too, increasingly resemble those that come with the registered products. New trends observed in this field include supposedly natural libido-enhancing herbal preparations, in which RIVM increasingly frequently finds active chemical substances which resemble the active ingredients in Viagra, Cialis or Levitra. Since the exact mechanism of action, side-effects and safety of these newly designed substances have never been investigated, their use may pose risks.

## Antibiotic resistance

Antibiotic resistance poses a serious and growing threat to public health, both in the Netherlands and elsewhere. Infections with antibiotic-resistant bacteria are hard to treat. To monitor developments in antibiotic resistance, the European Centre for Disease Prevention and Control, the Dutch Ministry of Health, Welfare and Sport and RIVM established the European Antimicrobial Resistance Surveillance System (EARSS), an international network of national surveillance systems in which over thirty countries are represented. The system enables scientists to monitor resistance in several European countries, as well as gauge the effect of resistance-lowering measures.

## Public campaign on infectious diseases

**Hoesten of niezen?  
Zakdoek kiezen!**

Informatie over  
grip en verkoudheid

Grip en verkoudheid zijn erg besmettelijk. Goede hygiëne kan verspreiding en besmetting voorkomen.

- Haal uw hand af een zakdoek voor uw neus als u hoest of niest.
- Gebruik bij voorkeur een papieren zakdoek of tissue en goet deze na één keer gebruik weg.
- Was vaak uw handen, ook na hoesten, niezen of smaken.

Neem voor meer informatie contact op met de GGD in uw regio. Het adres kunt u vinden via [www.ggd.nl](http://www.ggd.nl)

Kijk ook eens op [www.rivm.nl/infectieziekten](http://www.rivm.nl/infectieziekten)

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In 2007 RIVM established a download centre designed to provide the public with unambiguous information on infectious diseases. The centre provides access to so-called 'toolkits', which contain information which can be used as part of a campaign to educate the public on infectious diseases. The toolkits are primarily geared to health-care professionals working at local health authorities, but they may also be used by other organisations wishing to provide the public with topical and correct information on infectious diseases. In 2007 RIVM developed toolkits for three information campaigns, entitled 'Don't Be Sick, Get Rid of That Tick', 'Lice and Nits Are the Pits' and 'A Hanky When Sneezing Stops Other People Wheezing'.

## Sharp increase in chronic disease

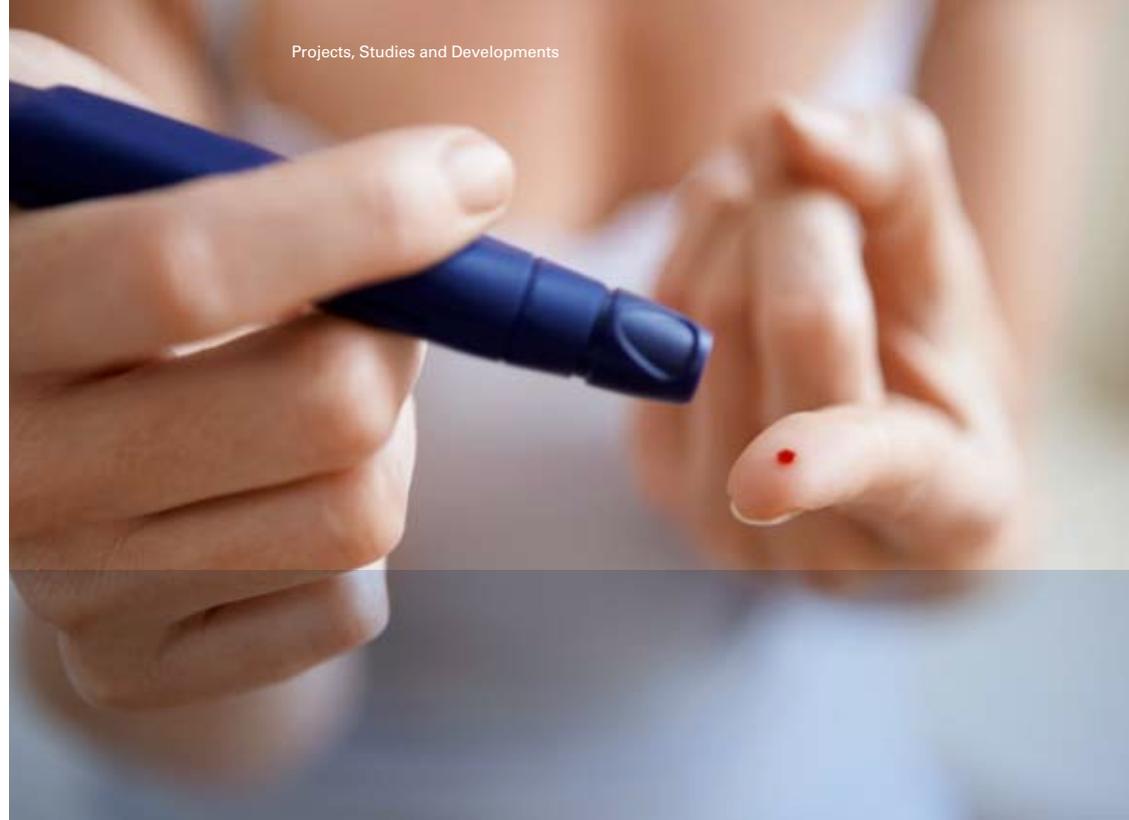
The number of people suffering from chronic diseases is expected to rise considerably over the next twenty years. This is largely due to the ageing population, but also due to unhealthy lifestyles. In 2007 RIVM calculated the number of people who are expected to suffer from chronic illness in 2025, so as to be able to anticipate future demand for health care. The results of the study underline the importance of prevention. The calculations were made using the RIVM Chronic Disease Model, which simulates the course of diseases in society. The model takes into account past trends in disease, lifestyle interventions and demographic developments. If the results are anything to go by, some 940,000 Dutch people will suffer from diabetes in 2025, with an expected 1,200,000 osteoporosis patients and 540,000 people suffering from Chronic Obstructive Pulmonary Disease.



## Dutch people consume too much salt

Dutch people consume too much salt. So RIVM reported in 2007, after conducting a study among 333 persons aged between 19 and 70 in the town of Doetinchem. As part of the study, participants collected all their urine for a 24-hour period. RIVM then tested the urine for its sodium levels. On average, salt intake proved to be almost 9 grams per day per person, far exceeding the recommended daily intake (6 grams per day). It seems likely that the results of the Doetinchem study reflect those of Dutch society at large, meaning that the entire Dutch population consumes too much salt.

Exceeding the recommended intake of salt puts one at greater risk for high blood pressure and cardiovascular disease. Therefore, convincing the Dutch to reduce their salt intake may result in improved public health.



## Diabetes and depression

Each year one in six Dutch diabetes patients (i.e. well over 100,000 people) comes to suffer from depression. An RIVM study indicates that diabetics are twice as likely to suffer from depression than non-diabetics. For their part, depressed people are twice as likely to develop diabetes. The combination of diabetes and depression has grave consequences. Depressed people have a lower quality of life and higher blood sugar levels, which leads to a worsening of their diabetes. This in turn puts them at a higher risk for severe complications, like cardiovascular disease, kidney disease and eye disease. In view of these facts, it is vital that medical professionals pay greater attention to depression in diabetics and to diabetes in people suffering from depression.

## Ginkgo biloba

Many herbal preparations contain Ginkgo biloba leaf extract, derived from a species of nut tree found in Japan and China. Manufacturers of Ginkgo biloba preparations claim that the extract stimulates blood circulation and memory function and reduces symptoms of ageing. In 2007 RIVM investigated the scientific foundations of those claims, examining them by EU criteria. Insufficient evidence was found to uphold the claims. In addition, analysis indicated that many of the preparations tested do not contain the ingredients listed on the label. Since few data are available on the toxicity of Ginkgo biloba, it is as yet impossible to state what quantity of the substance is safe for use.

## The quality of medical devices

More and more medical devices can be bought over the counter – no doctor's prescription required. However, some of the products thus procured do not meet the legal requirements. Before receiving marketing approval, manufacturers are required to list the risks associated with use of the product, and to describe how they hope to rule out or reduce those risks. Furthermore, manufacturers are required to include clear instructions geared to the intended users of the product. Judging from an RIVM study investigating wound care products and infrared thermometers, risk analyses provided by the manufacturers are often incomplete. In addition, some instructions for use are incomplete, difficult to read, and occasionally downright unintelligible to non-medical professionals.



## Alternatives to animal testing

In order to discover what risks new medicines may pose to pregnant women and their unborn children, pharmaceutical companies are required to test their products on animals. Many animals are used in this process, since both the mother animals and their offspring have to be tested for harmful effects. At a conference held on World Lab Animal Day, i.e. 24 April 2007, RIVM investigator Aldert Piersma presented two different methods which may reduce the number of test animals required to conduct experiments by several dozen percent. One of these methods involves the use of mouse embryo stem cells. When cultivated, these stem cells can develop into beating heart muscle cells. By using cultivated stem cells, scientists can determine what potentially harmful effect chemical substances have on embryos, without actually using test animals. Piersma's talk won the audience award for best presentation on alternatives to animal testing.

## Socio-economic factors affect how the health-care system is being used

A lot of money is spent on health care in the Netherlands every year – EUR 57.5 billion over 2003 alone. RIVM, in association with Rotterdam Erasmus Academic Medical Centre, has established that the way in which the Dutch health-care system is being used, and the extent to which it is being used, are largely determined by socio-economic status, mode of cohabitation and ethnic background. People from lower socio-economic strata are significantly more likely to require health care than people from other strata – mainly because they are more prone to health issues, but also because they tend to require longer-term help when ill. Therefore, preventing reduced health prospects in the lower socio-economic strata of society may help reduce the cost of Dutch health care.



## New Healthy Living Centre established

In 2007 RIVM, in association with several health-promoting organisations, established the Healthy Living Centre, designed to promote the use of effective lifestyle interventions. The Centre aims to support local health-care professionals by providing a clear survey of available interventions and assessing these for quality and coherence. In the course of 2008 an Internet help desk designed to provide more information on lifestyle interventions will become operational. The Healthy Living Centre employs ten permanent staff, with a similar number of people contributing from external health-promoting organisations. It has four local offices where local health authorities, homecare services and mental health centres are also represented.



## Improved health thanks to breast-feeding

Nursing one's baby improves both the infant's health and the mother's. RIVM research indicates that breast-fed babies may be better protected against obesity, high blood pressure and infections of the gastrointestinal tract and middle ear than their bottle-fed counterparts. Likewise, mothers who nurse their infants seem less likely to develop rheumatic arthritis. Stimulating mothers to nurse their babies as a matter of policy will not just reduce the number of health problems, but the overall cost of health care. Study results show that the health improvements and cost savings will be greatest if all infants are suckled for at least six months. In addition, the results show that measures aimed at making sure all infants are nursed will be more effective than measures aimed only at getting mothers to breast-feed their babies for a longer period of time than many do now.

## Learning a lesson or two from our neighbours

A comparative international study conducted by RIVM in 2007 shows that the Netherlands should step up its use of national strategies or action plans to tackle screening, youth health issues and issues such as smoking, alcohol abuse, obesity, depression, reduced health prospects in underprivileged areas. Judging from results obtained in other countries, a fully integrated approach can contribute to more systematic policies and more coherent measures being implemented. While market forces and other (international) influences may hamper efforts to implement effective policies, they also provide policy-makers with opportunities. For instance, effective and/or promising policy measures are available in the fields of alcohol intake, juvenile health and reduced health prospects in underprivileged areas. But it is not all about strategies which have proven successful elsewhere; Dutch policy-makers may also benefit from an awareness of policy measures which did not yield any results abroad.

## KiesBeter website further expanded

The website [www.kiesbeter.nl](http://www.kiesbeter.nl) ('Make a Well-Informed Choice') is an RIVM product which is being developed in association with various health-care organisations. The website provides independent information enabling consumers to make a well-informed choice on health and health-care issues. In 2007 the KiesBeter website was expanded considerably to include a guide on consumers' right of complaint, information on prenatal tests, and a tool to compare the performance of various hospitals in terms of particular afflictions. The site offers comparisons of health insurance policies, hospitals and other health-care institutions, and answers questions like, What does my affliction entail? What treatment options are available to me? Where can I go to receive this particular therapy? Is it fully covered by my insurance or will I have to pay part of the fee myself? What are my rights in the event of a medical error?

## REACH help desk becomes operational

In 2007 RIVM and SenterNovem (an organisation affiliated with the Ministry of Economic Affairs) established the REACH help desk. At the request of the government, RIVM uses the help desk to make specific expertise available to companies, so as to enable them to implement the highly complex new EU regulation on chemicals, known as REACH. The desk is part of a European network of REACH help desks, in which RIVM represents the Netherlands. REACH (short for 'Registration, Evaluation, Authorisation and Restriction of Chemicals') has two objectives: to promote safer use of chemicals to protect both society and the environment, and to maintain and increase the competitiveness of the European chemical industry. Nearly all manufacturers, importers, distributors and end-users of chemical substances will be affected by the regulation. The new help desk provides information on the regulation and helps companies interpret its wording. Companies which require more information on the subject can consult the website ([www.reach-helpdesk.nl](http://www.reach-helpdesk.nl)) or call the help desk.



## Visit to animal wholesaler in Hoogeveen ends in complaints

On 5 November 2007 several people became unwell after visiting an animal wholesaler's in the town of Hoogeveen. RIVM's agency for accidents involving chemical and biological substances was called in to assess the situation. After carrying out measurements and investigating the possible causes of the complaints, the Agency found that there were no signs of any poisonous substances which might have caused the symptoms, nor of any viral or bacterial infections.



## Health risks associated with retrofit particulate filters

2007 saw a heated debate on the potential health hazards of the retrofit particulate filters with which diesel vehicles can be fitted. These filters significantly reduce soot and particulate matter emissions. However, research shows that they may release ultra-fine harmful particles which are normally bound to soot – particles which may have the same impact on public health as the emissions from diesel engines which have not been fitted with a particulate filter. Thus, the use of retrofit filters might result in new health hazards. A study conducted by RIVM and TNO showed that despite this problem, retrofit particulate filters will have a positive impact on public health and the environment.



## New knowledge platform on electromagnetic fields and public health

In 2007 Minister Cramer of the Dutch Ministry of Housing, Spatial Planning and the Environment established the Knowledge Platform on Electromagnetic Fields and Public Health, an umbrella organisation featuring RIVM, the Netherlands Organisation for Applied Scientific Research (TNO), the energy research agency KEMA, local health authorities, the Radiocommunications Agency and ZonMw. The Knowledge Platform's aim is to provide honest and well-researched answers to questions raised about the health risks associated with electromagnetic fields, mainly by supporting organisations which communicate on electromagnetic fields and public-health issues with the general public, employees and administrators. This support includes (but is not limited to) actively and passively making information on the health-related aspects of electromagnetic fields accessible to such organisations for them to use it as they wish, thus helping them provide members of the public, the press, government officials and the business community with up-to-date information. The Platform's office is situated in the RIVM office.



## More traces of medication found in drinking water

Very low concentrations of medicines are found in drinking water with increasing frequency, as many commonly used medications, in addition to being used by many people, hardly break down in water. However, the levels found in drinking water are so low that their effect on public health can be considered negligible. RIVM examined drinking water and sources of drinking water for traces of 22 medications. In order to reduce the amount of medication which finds its way into water, several steps were taken in early 2007, including promoting reduced medicine intake, collection and disposal of unused medication, separate collection and disposal of urine passed in hospitals, and the development of medicines which can be more fully absorbed into the body and break down more easily in water.

# Organisation and Financial Data

## Collaborative efforts

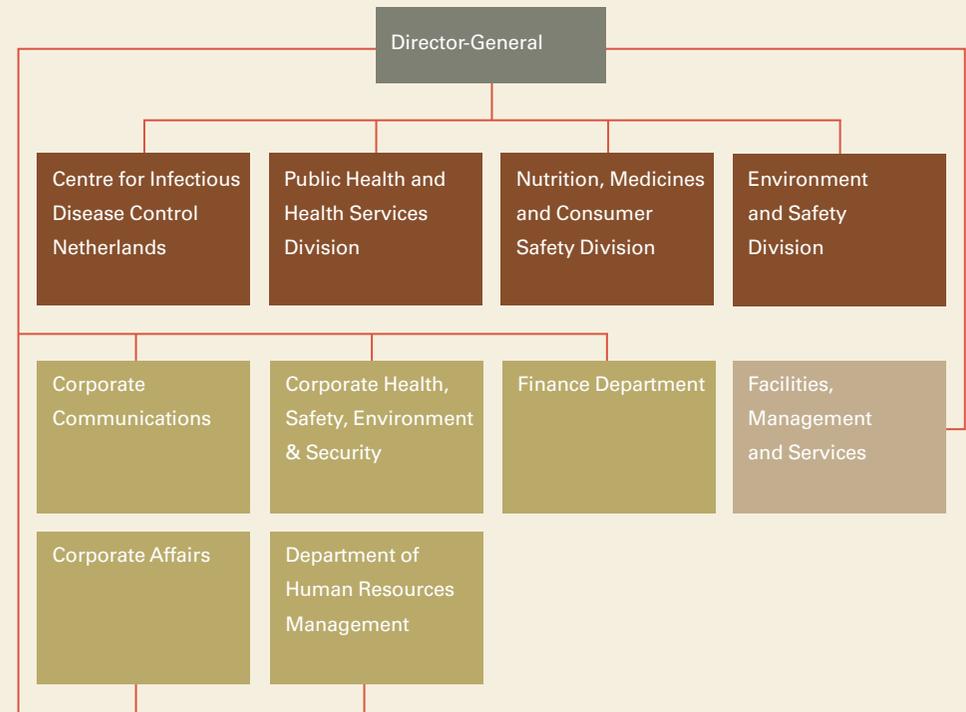
RIVM has many cooperation partners, both in the Netherlands and abroad. Within the Netherlands, RIVM collaborates with research institutes like TNO, the Netherlands Institute for Health Services Research (NIVEL), the Institute of Food Safety (RIKILT), the Royal Netherlands Meteorological Institute (KNMI), the Institute for Inland Water Management and Waste Water Treatment (RIZA), Deltares Institute for Delta Technology, SenterNovem and several universities. In addition, the Institute has vital ties with planning offices, as well as close functional ties with municipal authorities, provincial authorities and local health authorities.

Internationally, RIVM is part of several networks designed to support the European Commission. In addition, RIVM collaborates with organisations like the European Centre for Disease Prevention and Control (ECDC) in Stockholm, the European Food Safety Authority (EFSA) in Parma, the Organisation for Economic Cooperation and Development (OECD) in Paris, and the European Environment Agency (EEA) in Copenhagen. Finally, the Institute maintains close ties with the World Health Organisation (WHO) and the World Bank.

## RIVM to work in association with WHO Europe

Last year RIVM signed a cooperation agreement with WHO Europe. Under the agreement, the two parties will join forces in several areas which require closer attention, such as infectious disease (International Health Regulations, tuberculosis), nutrition, exercise and health, tobacco product regulations, and food safety. A concrete plan has been drawn up for each specific area. New WHO Collaborating Centres for tobacco and nutrition issues will be established at RIVM, thus further strengthening and formalising the collaborative ties between the two organisations.

## Organisation chart on January 2007



Director-General: Dr Marc Sprenger

Director of the Centre for Infectious Disease Control: Prof. Dr Roel Coutinho

Director of the Public Health and Health Services Division: Dr Moniek Pieters

Director of the Nutrition, Medicines and Consumer Safety Division: Dr André Henken

Director of the Environment and Safety Division: Dr Reinout Woittiez

# Financial statements 2007

Balance sheet at 31 December 2007 (all amounts in EUR x 1,000)

	31 December 2007	31 December 2006
<b>Assets</b>		
Intangible fixed assets	923	629
Property, plant and equipment	6.550	5.985
- land and buildings	-	-
- installations	1.960	1.671
- other fixed assets	4.590	4.314
Inventory	-	-
Accounts receivable	-	-
Debiteuren	9.616	6.003
Accounts receivable from Ministry of	-	-
Other receivables	44	97
Project sales not yet invoiced	5.339	3.941
Accrued assets	1.998	1.144
Cash and cash equivalents	70.622	67.061
<b>Total assets</b>	<b>95.092</b>	<b>84.861</b>
<b>Liabilities</b>		
Equity	10.270	8.855
- operating reserve	8.342	8.734
- reserves required by law	-	0
- undistributed profits	1.928	122
Loans from Ministry of Finance	-	-
Provisions	12.750	12.573
Accounts payable	8.075	4.887
Other debts	465	622
Instalments received in advance	36.907	26.169
Accrued liabilities	26.625	31.754
<b>Total liabilities</b>	<b>95.092</b>	<b>84.861</b>

Itemised statement of income and expenditure over 2007 (all amounts in EUR x 1,000)

Itemisation	A Amount originally budgeted	B Actual amount	C = B - A Difference
<b>Income</b>			
Revenues from Ministry of Health, Welfare and Sport (owner)	15.683	12.779	2.904-
Revenues from Ministry of Health, Welfare and Sport (commissioning body)	62.784	79.282	16.498
Revenues from Ministry of Housing, Spatial Planning and the Environment	34.647	42.816	8.169
Revenues from Ministry of Agriculture, Nature and Food Quality	500	1.737	1.237
Revenues from other departments	2.727	4.365	1.638
Revenues from third parties	41.135	55.975	14.840
Interest received	194	2.437	2.243
Released from provisions	2.233	527	1.706-
<b>Total income</b>	<b>159.903</b>	<b>199.918</b>	<b>40.015</b>
<b>Expenditure</b>			
Operating expenses	155.071	190.556	35.485
Interest paid	196	308	112
Depreciation	4.636	3.555	1.081-
Added to provisions	-	3.571	3.571
<b>Total expenditure</b>	<b>159.903</b>	<b>197.990</b>	<b>38.087</b>
<b>Balance</b>	<b>-</b>	<b>1.928</b>	<b>1.928</b>

## Note on the financial statements

Actual income and expenditure turned out significantly higher than budgeted. The discrepancy was caused by the prescribed budgeting system, under which only solid commitments from primary clients may be included. The actual amounts also include income and expenditure for contracts won during the course of the fiscal year. The 2007 result is attributable primarily to:

- higher turnover achieved with a less-than-proportional increase in operating expenses;
- higher accommodation expenses due to refurbishments and renovations;
- interest income on money deposited with the Ministry of Finance;
- higher safety and security expenses due to unavoidable measures;
- higher expenses on balance due to other windfalls and financial setbacks.

## Staff

At year-end 2007, RIVM employed 1556 staff, including 190 newly hired employees. 117 employees left last year. The Institute employed 746 university graduates, 390 of whom hold doctorates (a 27-percent increase from 2006). The number of professors employed by RIVM in 2007 was twenty, up from twelve in 2006.

48.1 percent of all RIVM staff employed in 2007 were female, but women remain underrepresented in the senior ranks. The average staff age was 43, the average length of service twelve years.

The sick-leave rate in 2007 was 3.6 percent. Short-term sickness absence accounted for about half of this figure, which is well below the 5.2-percent maximum legally defined as acceptable for RIVM.

## Highlights from the Annual Environmental Report

RIVM shares its premises with the Netherlands Vaccine Institute (NVI) and the Netherlands Environmental Assessment Agency (MNP). The Institute's environmental permit is issued for the entire site, where various facilities are shared, e.g. waste water and waste collection facilities. Therefore, our annual environmental report presents a combined picture for RIVM, NVI and MNP.

Under the Environmental Management Act, RIVM and NVI had to apply for five new permits in 2007. Under the terms of the Environmental Management Act and the Pollution of Surface Waters Act, RIVM had to submit a combined revision permit for RIVM, NVI and MNP. In addition, RIVM (partly on behalf of NVI and MNP) submitted a corporate environmental plan for the 2007-2010 period to the competent authority.

RIVM, NVI and MNP's combined burden on the environment was as follows in 2007. Overall water consumption amounted to 129,700 cubic metres, a two-percent increase from 2006. The number of pollution units was reduced to 834 in 2007, as less organic waste had to be disposed of. The total waste stream amounted to 933 tonnes, up 1 percent from 2006. The amount of industrial waste, fertiliser, sawdust and scrap metal increased substantially, while the amount of construction and demolition waste and waste paper decreased. Together, RIVM, NVI and MNP spent approximately EUR 5 million in 2007 on environmental fees, energy and water (including energy consumption, waste management and waste-water charges).

## RIVM Supervisory Board

The RIVM Supervisory Board was established to make sure the Institute maintains its high scientific standards. It does so by monitoring and advising on the standards and quality of the studies conducted by RIVM and on the quality management system the Institute has implemented. Using its findings, the Board then draws up an annual statement on RIVM's research standards and quality management system, which it submits to the Institute's Owner.

Special attention was devoted in 2007 to the cost-saving task RIVM was set due to imposed cutbacks in all governmental organisations. The Board was favourably impressed with the Institute's managers' insistence on maintaining high research standards during a time of cutbacks. The Board fully supports the Director-General and the Institute's management in this respect.

The Board was brought up to date on RIVM's ambition to raise the Institute's scientific profile, both domestically and abroad. The Board supports the Institute's international ambitions, as outlined in the strategic memorandum, and subscribes to the importance of trans-border ambitions. However, the Board would like to remind the Institute's managers that it would be wise to choose certain priority areas, as both funding and profiling require that choices be made.

In 2007 a new RIVM Strategic Research cycle commenced, covering the 2007-2010 period. The Board was closely involved in the determination of the study's scope framework (spearheads). It is highly pleased with the way in which the programme was drawn up and is confident that the results will be excellent. Furthermore, the Board would like to express its appreciation of the lessons learned from the previous Strategic Research cycle (2003-2006) and of the steps taken since then, which will have an impact on the current cycle. Finally, the Board requested the Institute to pay more attention in the new cycle to the way the societal impact of events is assessed. The Board suggests using a simple

method, and advises where possible to make a joint assessment of both scientific and societal impact.

A 'Knowledge Integration in the Fields of Public Health and Health Care' audit was scheduled for late 2007, but had to be postponed until 2008. 2008 will also see a scientific audit in the field of environmental quality measurement and modelling. Preparations for this audit began in 2007. Furthermore, the Board reviewed the 'Calamity Function' audit which took place at the Environment and Safety department in 2005. The Board is satisfied with the way the audits are being conducted. The Board is also highly pleased with the ISO 9001 certification which was obtained in 2007, meaning that the Institute's objective of implementing an RIVM-wide quality management system has now been realised.

Having reviewed the information provided by the Institute's managers both in writing and in personal meetings, the Board feels RIVM did a marvellous job safeguarding the scientific quality of its research in 2007.

## Colofon

**Text**  
RIVM Communications

**Project coordination and final editing**  
RIVM Communications

**Design**  
RIVM Publishing

This annual report is also available in Dutch.

Please e-mail RIVM at [info@rivm.nl](mailto:info@rivm.nl) for additional copies of this report.

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