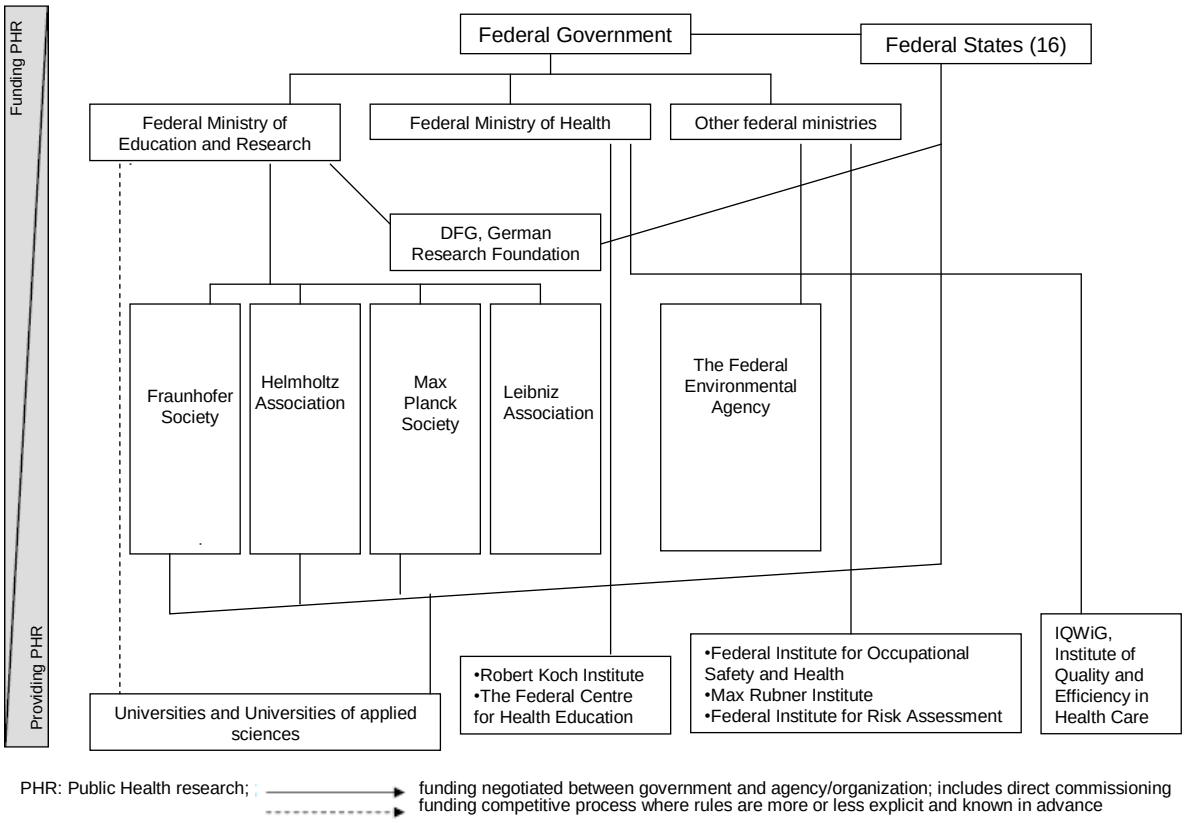
STrengthening Engagement in Public health reSearch

GERMANY

This information on national public-health research structures has been gained from country key informants and internet searches for STEPS (Strengthening Engagement in Public Health Research www.steps-ph.eu), a project funded by the European Commission Seventh Framework Research Programme. It builds on the country profiles and reports from Ministries of Health and Ministries of Science that were created previously for *SPHERE* (http://www.ucl.ac.uk/public-health/sphere/sphereprofiles.htm).

The organogram shows the structure for managing and providing public-health research from the perspective of financial flows.
The main organisations are also briefly described, with their URLs, and other relevant national documents and information on public-health research.
Note: 'Public-health research' includes all health research at population, organisation and system level broadly relevant to health and health-care policy and practice. It excludes clinical and laboratory (biomedical) research.

1. Organogram



The Federal Republic of Germany is a federal state comprising the Federation and 16 federal states, the so-called Länder.
In the structure of the German state, the Länder represent an independent level of government endowed with its own rights and obligations
(Source: Adapted from: http://www.bundesfinanzministerium.de/nn_4480/DE/BMF__Startseite/Service/Downloads/Abt__V/The_20Federal_20Financial_20Equalisation_20System_20in_20Germany,templateId=raw,property=publicationFile.pdf, assessed in May 2010)

2. Research Commissioners

2.1 Ministry of Health

The Federal Ministry of Health (http://www.bmg.bund.de/EN/)
The following institutes are involved in PHR and are under the Ministry's of health technical and administrative supervision: Robert Koch Institute and Federal Centre for Health Education.

2.2. Ministry of Science

Federal Ministry of education and research (http://www.bmbf.de/en/index.php)
The GFR, German Health Research Council (http://www.gesundheitsforschung-bmbf.de/en/1160.php) gives counsel to the Federal Ministry of education and research on strategic themes of health research and for the design of the Health Research Programme. In addition the GFR has the task of improving collaboration between federal and state governments in health research and stimulating the dialogue between representatives of research and funding organisations in health research as well as between representatives of research and health care services.
In November 2004 the GFR initiated the formulation of a roadmap for the health research programme. The roadmap presents the foreseeable challenges for health research using broad scientific expertise in the field, and to identify strategic goals for scientific activities in the coming years (refer to 4.1).
The federal government supports non-university institutions in health research, among other fields, where it is necessary to undertake interregional and national tasks, realise long-term research tasks or support research that requires a specific and expensive infrastructure and where it is necessary to develop key technologies. The main actors among the non-university research institutions supported with public funds are the Max Planck Society (MPG), the Fraunhofer Society (FhG), the Helmholtz Association of German Research Centres (HGF) and the Gottfried Wilhelm Leibniz Scientific Association (WGL). The institutions are funded jointly by the federal and state governments within the framework of the institutional funding according to various financing plans. The goal is to secure the competence and strategic orientation of (health) research in Germany.
(Source: http://www.gesundheitsforschung-bmbf.de/en/211.php, assessed in May 2010)

2.3. Other ministries

The Federal Ministry of Labour and Social Affairs funds the Federal Institute for Occupational Safety and Health (3.1.3)
The Federal Ministry of Food, Agriculture and Consumer Protection funds Max Rubner Institute (3.1.4) and the Federal Institute for Risk Assessment (3.1.5).
The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) funds the Federal Environment Agency (3.2.5).

2.4. Regions

2.5. Foundations

Public Health research might be financed by several foundations. Besides the one presented there are others like the Alexander-von-Humboldt-Foundation (http://www.humboldt-foundation.de/web/home.html).

2.5.1. The DFG, German Research Foundation (Deutschen Forschungsgemeinschaft, http://www.dfg.de/en/index.jsp) funds research projects in all fields of science and the humanities. This includes support for individual projects and research collaboration, awards for outstanding research achievements, and funding for scientific infrastructure and scientific cooperation.

In organisational terms, the DFG is an association under private law. Its membership consists of German research universities, non-university research institutions, scientific associations and the Academies of Science and the Humanities. The DFG receives the large majority of its funds from the states and the Federal Government, which are represented in all Grants Committees. At the same time, the voting system and procedural regulations guarantee science-driven decisions.

3. Research Performers

3.1. State Institutes

The State Health Institutes report to the Ministries of Health of the 16 states. The tasks of the State Health Institutes comprise epidemiological studies, health monitoring, health reports, development and assessment of preventive measures, applied research, risk assessment, analysis, management and communication, surveillance, and education. As an example the reference of the Bavarian State Health Institute may be helpful (http://www.lgl.bayern.de/lgl/aufgaben/index.htm).

3.1.1. RKI, Robert Koch Institute,
http://www.rki.de//EN/Home/homepage__node.html?__nnn=true

The Robert Koch Institute is the central federal institution responsible for disease control and prevention and is therefore the central federal reference institution for both applied and response-orientated research as well as for the Public Health Sector.

The tasks of the Robert Koch Institute comprise: the identification of politically important health problems and associated scientific issues; applied and response-orientated research to resolve these issues; the assessment of scientific results through analysis of current international developments in the respective scientific areas; informing and the advising political decision makers and the scientific sector. The Robert Koch Institute is under the Federal Ministry's of health technical and administrative supervision.

(Source: http://www.bmg.bund.de/EN/Ministerium/ministry__node.html?__nnn=true, assessed in May 2010)

3.1.2. The Federal Centre for Health Education, http://www.bzga.de

The Federal Centre for Health Education (BZgA) is a central institution of the Federal Government. The Centre performs its task in close cooperation with the other players in the health system, with its public/private and federal structure. Constant adaptation to developments in science and society is of particular importance in this context. The research of the Centre focuses on quality assurance as a the basis of effective and efficient education. This includes the constant further development of the scientific foundations, and the review (evaluation) of the measures of the Federal Centre for health Education. In the fields of drug prevention, AIDS prevention and sex education, the Centre uses data from the nationwide studies it regularly conducts. They are the starting point for

optimising existing measures and developing new ones. The results of the scientific studies and the evaluation studies, as well as expert reports and the documentation of professional conferences, are published, partly in the specialist booklet series "Research and Practice of Health Promotion". The aim of this specialist booklet series is to promote and expand the exchange between research and practice.
Source: http://www.bzga.de/home/research/, assessed on August 2010)

3.1.3. The Federal Institute for Occupational Safety and Health (BAuA, http://www.baua.de/), as a major governmental research institution, advises the Federal Ministry of Labour and Social Affairs in all matters of safety and health and of the human design of working conditions. As a federal institution with research and development functions the Federal Institute operates at the interface between science and politics and renders transfer services from the science system into policy, corporate practice and the broader society and vice versa. BAuA's tasks range from policy advice, the performance of sovereign duties and knowledge transfer into corporate practice through to the educational and instructional work done by the German Occupational Safety and Health Exhibition (DASA).

3.1.4. The MRI, Max Rubner Institute, Federal Research Institute of Nutrition and Food' (http://www.mri.bund.de/en/de/home.html) research focus is health and consumer protection in the nutrition sector. Research performed includes studies of the nutritional behaviour of certain population groups and the improvement and enhancement of consumers' competence with regard to quality detection and quality preservation of foods. At MRI major research programmes are conducted, such as the National Nutrition Survey (NVS - a nationwide study on eating habits in Germany) and the National Nutrition Monitoring (NEMONIT - a nationwide monitoring programme to assess nutritional behaviour). The tasks of the MRI, assigned by law, are within the remit of the Federal Ministry of Food, Agriculture and Consumer Protection.

3.1.5. The Federal Institute for Risk Assessment,
(http://www.bfr.bund.de/cd/template/index_en) reports to the Federal Ministry of Food, Agriculture and Consumer Protection. It enjoys independence in respect of its scientific assessments and research. Its tasks include the assessment of existing and the identification of new health risks, the drawing up of recommendations on risk reduction, and the communication of this process. BfR conducts its own research on topics which are closely related to its assessment tasks in consumer health protection and food safety.

3.2. Mixed organizations
Besides the organizations presented here, sick funds might, as well, fund and perform health research.

3.2.1. The Fraunhofer Society
Fraunhofer-Gesellschaft, http://www.fraunhofer.de/en/index.jsp
This organization pursues the implementation of innovative research findings in industrial and social applications. One of the topics of research is Medical engineering, environment and health research. Fraunhofer institutes are researching the development of drugs and therapies, food and biotechnical substances as well as sustainable water infrastructure systems and technologies. From a total of € 1.6 billion annual research budget,1.3 billion euros is generated through contract research. Two thirds of the research revenue is derived from contracts with industry and from publicly financed research projects. Only one third is contributed by the German federal and Länder governments in the form of

institutional funding. Fraunhofer Society has more than 80 research units, including 59 Fraunhofer Institutes in Germany.
(Source: http://www.fraunhofer.de/en/research-topics/medical-environmental-health/; http://www.fraunhofer.de/en/institutes-research-establishments/, assessed in May 2010)

3.2.2. The Helmholtz Association of German Research Centres (http://www.helmholtz.de/en/) is the Germany's largest scientific organization, has 16 research centres and an annual budget of approximately 3 billion euros. The Federal and Länder authorities share around 70% of the total budget in a ratio of 90:10. The remaining 30% of the budget is acquired by the Helmholtz Centres in the form of contract funding. Chronic major diseases such as cancer, cardiovascular diseases, diabetes, lung diseases, neurodegenerative disorders, infections and environmental hazards are the main topics of Helmholtz Health Research.
Some of the research centres are: German Cancer Research Center (Deutsches Krebsforschungszentrum, DKFZ, http://www.dkfz.de/en); German Centre for Neurodegenerative Diseases (DZNE, http://www.dzne.de/en/home.html?site=ueber_uns); Helmholtz Centre for Infection Research (http://www.helmholtz-hzi.de/en/); Helmholtz Centre for Environmental Research (UFZ, http://www.ufz.de/index.php?en=11382); Helmholtz Zentrum München- German Research Center for Environmental Health (http://www.helmholtz-muenchen.de/en/start/index.html) and the German Aerospace Center (http://www.dlr.de/en/desktopdefault.aspx).
(Source: http://www.helmholtz.de/en/research/health/, assessed in May2010)

3.2.3. Max Planck Society
Max-Planck-Gesellschaft, http://www.mpg.de/english/portal/index.html
The Max Planck Society for the Advancement of Science is an independent, non-profit research organization that primarily promotes and supports research at its own institutes. The research institutes of the Max Planck Society perform basic research in the interest of the general public in the natural sciences, life sciences, social sciences, and the humanities. To finance its 76 institutes and three other research institutions, the Max Planck Society has at its disposal an annual budget in the order of 1.72 billion euros, 97 percent of which is derived from the coffers of the public sector.

3.2.4. The Gottfried Wilhelm Leibniz Scientific Community, known as the Leibniz Association, (http://www.leibniz-gemeinschaft.de/) is the umbrella organisation for 86 institutions conducting research or providing scientific infrastructure. The Leibniz Institutes, have an annual budget of 1,3 billion euro. Its mission is to promote science and research at its member institutions while respecting the scientific, legal and economic independence of these institutions. The Bernhard-Nocht-Institute for Tropical Medicine (http://www.bni-hamburg.de/) is one of the institutions of this association.

3.2.5. The Federal Environmental Agency (http://www.umweltbundesamt.de/uba-info-e/index.htm) is Germany's central federal authority on environmental matters. Its key statutory mandates are: to provide scientific support to the Federal Government (e.g. the Federal Ministries for Environment; Health, Research; Transport, Building and Urban Affairs); implementation of environmental laws (e.g. emissions trading, authorisation of chemicals, pharmaceuticals, and plant agents); and information of the public about environmental protection.
The Federal Environmental Agency sees itself as an early warning system which detects potential future adverse impacts on mankind and his environment in a timely fashion, assesses associated risks, and offers proposals for practicable solutions. To that end, experts at the Agency carry out research in in-house laboratories in addition to

commissioning research projects to scientific institutions in Germany and abroad. The Federal Environmental Agency adopts an exacting interdisciplinary approach in its activities. For example, economists, chemists, biologists or legal experts may well work together to find solutions to environmental problems.

3.3. Universities

Health research in Germany primarily takes place at universities. The basic financing of the universities is the responsibility of the states (the German Länder). They are also responsible for the structures of the university research landscape. However, the federal government exerts a significant influence through broad funding programmes such as the Health Research Programme. The health research at the universities is supplemented by the non-university research institutions financed jointly by the federal government and states as well as institutions of the federal and state governments.

(Source: Adapted from: http://www.gesundheitsforschung-bmbf.de/en/210.php, assessed in May 2010)

Traditionally, the universities have formed the backbone of the German research system with a spectrum of project styles ranging from basic to contract research. Universities of applied sciences (Fachhochschulen) function as a link between science and, most importantly, the region's industry. At the moment, there are 345 universities in Germany, of which 183 are universities of applied sciences. Institutional financing for the universities is provided by the German Länder.

(Source: ERAWATCH Research Inventory Report: Germany, http://cordis.europa.eu/erawatch/index.cfm?fuseaction=ri.content&topicID=4&countryCode=DE, assessed in February 2010)

Most of the Public Health university departments and schools are covered in the following list:

Center for Development Research, University of Bonn (http://www.zef.de/); Berlin School of Public Health (http://bsph.charite.de/en); Bielefeld School of Public Health (http://www.uni-bielefeld.de/gesundhw/english/); University of Bremen: Bremen Institute of Prevention Research and Social Medicine (http://www.bips.uni-bremen.de/), Institute for the Psychology of Work, Unemployment and Health (http://www.ipg.uni-bremen.de/index.php?cLang=en), Institute for Public Health and Research in Nursing (http://www.public-health.uni-bremen.de/); Technical University of Dresden: Institute and Policlinic for Occupational and Social Medicine(http://tu-dresden.de/die_tu_dresden/fakultaeten/medizinische_fakultaet/inst/ias/index_html/document_view?set_language=en&cl=en); University of Düsseldorf (Heinrich – Heine – Universitat, http://www.uni-duesseldorf.de/ and http://www.uniklinikum-duesseldorf.de): Public Health Study Programme (http://www.uni-duesseldorf.de//publichealth) and Centre for Health and Society (http://www.uni-duesseldorf.de/PublicHealthUnit/de/index.html); University of Hannover: Medical School Hannover (http://www.mh-hannover.de/index.php?id=2&L=1) and Centre for Public Health and Health Care (http://www.mh-hannover.de/228.html?&L=1); University of Heidelberg: Institute of Public Health (http://www.klinikum.uni-heidelberg.de/6729.0.html) and Mannheim Institute of Public Health (http://www.umm.uni-heidelberg.de/inst/miph/front_content.php?idcat=2&lang=1); University of Munich: Pettenkofer School of Public Health (http://www.uni-muenchen.de/einrichtungen/zuv/uebersicht/komm_presse/verteiler/presseinformationen/2010/pettenkofer_school.html); Social Science Research Center Berlin: Working Group Public Health (http://www.wzb.eu/default.en.asp); Institute of Medical Biometry, Epidemiology and Medical Informatics (http://www.imbei.uni-mainz.de/extern/institut/uebersicht1/index.html?L=1); Interdisciplinary Centre of Public Health Erlangen (http://www.public-health.uk-erlangen.de/e2667/index_ger.html).

The Academy of Public Health in Dusseldorf (http://akademie-oegw.de/), based in Düsseldorf, is a public educational institution, funded by the six federal states

Bremen, Hamburg, Hessen, Lower Saxony, North Rhine-Westphalia and Schleswig-Holstein. The Academy' mission is to facilitate all levels of training for professionals in the public health system and to conduct applied research in the area of public health.

3.4. Health Services

3.5. Independent organizations

3.5.1. The IQWiG, Institute of Quality and Efficiency in Health Care (http://iqwig.de/institute-for-quality-and-efficiency-in-health.2.en.html) is an independent scientific institute that investigates the benefits and harms of medical interventions for patients. It produces independent reports on drugs, non-drug interventions, methods and guidelines. The sole contracting agencies are the Federal Joint Committee (G-BA, http://www.g-ba.de/institution/sys/english/) and the Federal Ministry of Health. IQWiG can also tackle topics on its own initiative (general commission).

3.5.2. Other
In addition, the Public health research also takes place in some foundations as Bertelsmann foundation (http://www.bertelsmann-stiftung.de/cps/rde/xchg/SID-3B260489-7A0B541B/bst_engl/hs.xsl/index.html that does not make grants or support other parties projects but conducts its owns.

4. Research Strategies

4.1 The High-Tech Strategy 2020, launched in August 2006, is "to make Germany the leading provider of science- and technology-based solutions in the areas of climate/energy, health/nutrition, mobility, security, and communication. ... "High-technology products are the lifeblood of the German economy. That is why innovations are a basic prerequisite for economic and social prosperity in our country." Prioritised areas include "Treating illnesses more effectively with the help of individualized medicine; Better health through an optimized diet; Living an independent life well into old age."
http://www.bmbf.de/en/6618.php

4.2. Roadmap for the German Health Research Program of the Federal Government. Executive Summary. A publication of the German Health Research Council, 2007 (http://www.bmbf.de/pub/Roadmap_Summary.pdf)
This document presents as prioritised research issues: Musculoskeletal disorders; Nutritional and metabolic diseases plus endocrinological diseases; Cardiovascular, lung and kidney diseases; Infections, chronic inflammation and inflammatory skin diseases; Cancers; Neurological and mental illnesses and diseases of the sense organs.
Three multidisciplinary issues were also prioritised: Clinical method development; Multi-organic translational research and Health service research. This last area includes: Research to implement current knowledge on chronic diseases in routine care; Research to transfer scientific findings into clinical practice; Evaluation of multi-modal therapeutic concepts; Palliative medicine.

5. Programmes and calls

5.1. Health Research: Scientific Research for the People

The Programme "Health Research: Scientific Research for the People" was set by the Federal Ministry of Education and Research (BMBF) together with the Federal Ministry of Health (BMG) and takes responsibility for this programme which is financed with funds from the BMBF. The programme is characterised by a comprehensive approach that encompass research of the causes of disease, health care needs and structural changes in the research landscape to better cooperation between industry and science. This programme presents four areas for action: Effective fighting of diseases; Research on the health care system; Health research in cooperation with industry and science; Strengthening of the research landscape through structure optimisation and innovation.

A total of 161,5 million EURO was employed in the year 2009 by the Federal Ministry of Education and Research to project funding within the framework of this programme.

(Source: http://www.gesundheitsforschung-bmbf.de/_media/GF-Programm_engl_o-V.pdf
http://www.gesundheitsforschung-bmbf.de/en/104.php
http://www.gesundheitsforschung-bmbf.de/en/110.php, assessed in May 2010)

6. European contacts

6.1.National FP7Contact point (Health area)[1]

6.1.1. Jutta Deppe (PT-DLR/PTJ Project Management Agency – part of the German Aerospace Center, http://www.nks-lebenswissenschaften.de); 6.1.2. Wilfried Diekmann (PT-DLR/PTJ); 6.1.3. Annette Kremser (PT-DLR/PTJ); 6.1.4. Stephan Micha (PT-DLR/PTJ); 6.1.5. Petra Oberhagemann (PT-DLR/PTJ); 6.1.6. Anne Pflug (PT-DLR/PTJ, Life Sciences National Contact Point); 6.1.7. Jan Skriwanek (PT-DLR/PTJ, Life Sciences National Contact Point); 6.1.8. Sabine Steiner-Lange (PT-DLR/PTJ, Life Sciences National Contact Point); 6.1.9. Rolf Stratmann (PT-DLR/PTJ, Life Sciences National Contact Point); 6.1.10. Caroline Töx (PT-DLR/PTJ); 6.1.11. Ingrid Zwoch (PT-DLR/PTJ)

6.2. National DGSANCO Contact point[2]

6.2.1. Dominik Dietz, Federal Ministry of Health Unit 311 "Policy Dialogue and Coordination, Health Monitoring, European and International Affairs"; dominik.dietz@bmg.bund.de

[1] Source: http://cordis.europa.eu/fp7/ncp_en.html, assessed in February 2010
[2] Source: http://ec.europa.eu/health/programme/policy/index_en.htm assessed in February 2010