ETHICAL GUIDELINES FOR EPIDEMIOLOGICAL RESEARCH

17 June 2002

Ministry of Education, Culture, Sports, Science and Technology

Ministry of Health, Labour and Welfare
CONTENTS

CHAPTER 1. BASIC PRINCIPLES
   SECTION 1. PURPOSE
   SECTION 2. JURISDICTION OF GUIDELINES
   SECTION 3. BASIC RULES FOR RESEARCHERS
   SECTION 4. RESPONSIBILITIES OF INSTITUTE HEADS

CHAPTER 2. ETHICS REVIEW COMMITTEES
   SECTION 5. ETHICS REVIEW COMMITTEES
   SECTION 6. REPORTING EPIDEMIOLOGICAL STUDIES

CHAPTER 3. INFORMED CONSENT
   SECTION 7. PROCEDURES FOR OBTAINING INFORMED CONSENT
   SECTION 8. PROCEDURES FOR OBTAINING INFORMED CONSENT BY PROXY

CHAPTER 4. PROTECTING PERSONAL IDENTIFIABLE DATA
   SECTION 9. MEASURES TO BE TAKEN IN CONDUCTING RESEARCH
   SECTION 10. MEASURES FOR STORAGE AND USE OF SAMPLE MATERIAL(S)
   SECTION 11. USE OF SAMPLE MATERIAL(S) FROM OTHER INSTITUTIONS
   SECTION 12. MEASURES TO BE TAKEN IN PUBLISHING RESEARCH FINDINGS

CHAPTER 5. DEFINITION OF TERMS
   SECTION 13. DEFINITION OF TERMS IN THESE GUIDELINES
                (1) Epidemiological Research
(2) Interventional Studies
(3) Observational Studies
(4) Material(s)
(5) Personal Data
(6) Anonymizing
(7) Unlinkable Anonymizing
(8) Researchers
(9) Principal Investigators
(10) Research Institute
(11) Collaborating Research Institute
(12) Ethics Review Committee
(13) Informed Consent
(14) Stored Material(s)

CHAPTER 6. SPECIFICATIONS
SECTION 14. SPECIFICATIONS

CHAPTER 7. REVISIONS
SECTION 15. REVISIONS

CHAPTER 8. IMPLEMENTATION
SECTION 16. IMPLEMENTATION
Preamble

Epidemiological research entails studies of the distribution and determinants of disease and health related conditions affecting specific populations, and the application of studies to control health problems and events, in the effort to advance both medicine and the promotion of better health. Epidemiological research is essential to identify the causes of disease, to examine the efficacy of treatments and preventive measures, and to elucidate their relationships. Increased awareness of the incidence and prevalence of disease and health threats is essential for more effective prevention and treatment of disease, and for elucidating environmental, behavioral and biological factors associated with health conditions.

Epidemiological research can involve extensive data on research subjects and related physical, environmental and behavioral factors, frequently utilizing multidisciplinary approaches and researchers from various health professions.

In view of the expanding scope of epidemiological research methods and data acquisition, increased societal concerns for the rights and freedoms of research subjects and privacy protection are being addressed with the adoption of informed consent policies and more explicit guidelines for conducting research.

The following guidelines (hereinafter, the Guidelines) have been formulated for adoption, to duly protect the rights and privacy of research subjects, and to provide a standard for ethical dignity and professional conduct in epidemiological research and practice.

The Guidelines mandate the general practice of informed consent for research subjects of all epidemiological studies, according to the principles of the Declaration of Helsinki, adopted by the World Medical Association. In consideration of the diverse
approaches to epidemiological research, the Guidelines profile the basic principles ethics review committees should adopt in the evaluation of proposed studies and protocols, allowing discretionary application under special or extraordinary conditions.

Investigators are expected to conduct all epidemiological research in accordance with the Guidelines, unless deemed impractical by extraordinary circumstances, in order to advance high professional standards in both humane attitudes and quality of research, as well as to foster public confidence, support and participation in related epidemiological programs, in the efforts to provide improved community health conditions and promote public health issues.

CHAPTER 1. BASIC PRINCIPLES

SECTION 1. PURPOSE

All epidemiological research practices should be conducted in accordance with the principles defined in these Guidelines, established as the standards for all persons for better involved in epidemiological research. The Guidelines shall regulate appropriate conduct in epidemiological research for better public understanding and support, and address ethical issues protecting individual freedoms and privacy rights as well as scientific conduct, the importance of epidemiological research in public health as well enclosing as academic freedom.

SECTION 2. JURISDICTION OF GUIDELINES

The Guidelines present the set of ethical standards that shall be applied to studying the etiology of human disease, and improving prophylactic, diagnostic and therapeutic procedures. Researchers and others dealing with epidemiological issues should comply with these Guidelines, whereas the following types of studies are acknowledged exceptions:
1. Surveys conducted by legal authorization.
2. Epidemiological surveys of subjects whose identities are both anonymous and unlinkable.
3. Intervventional studies involving medical procedures, such as surgery, medication, etc.

(Provisions)
1. Exception (1) refers to surveys authorized by specific law. Examples include infectious disease surveillance pursuant to the "Infectious Disease Control and Medical Care Act".
2. Jurisdiction of the Guidelines is summarized as follows:

Examples for within jurisdiction of Guidelines
Collecting and analyzing patient medical information from multiple medical institutions with the specific purpose of estimating the numbers of individuals with a given disease, in efforts to better understand and evaluate treatment methods.

Supplying stored material(s) or material(s) extracted from stored material(s) is subject to Section 11, given that such practice is not considered research activity.

Examples for outside jurisdiction of Guidelines
Reviewing the medical records of various patients with a specific disease for the primary purpose of indicating treatment options for particular patients.
Collecting and analyzing medical records and other health-related patient information from a medical institution to which the researcher belongs, unrelated to patient treatment, and publishing research findings either within the institute or outside.

Examples for within jurisdiction of Guidelines
Studies involving subjects divided into two groups, one given a specific diet and the other given an ordinary diet, to examine the beneficial effects of a specific diet.
Examples for outside jurisdiction of Guidelines

Studies involving subjects divided into two groups, one given a specific drug and the other given a placebo, to examine the effects of a specific medication.

In clinical pharmaceutical trials, GCP (Good Clinical Practice, as defined by ministerial directive) shall be observed. (Unlinkable, anonymous data)

Analyzing the relationship between patient lifestyle-related disease and energy intake, on a regional basis, employing Patient Survey or National Nutritional Survey.

Examples for within jurisdiction of Guidelines

Developing prophylactic or preventative measures and elucidating geographical distribution of specific diseases using laboratory data or human specimens obtained by public health activities, including public registries for cerebral apoplexies and cancer. These Guidelines do not apply if a study is conducted as a public health activity.

Examples for outside jurisdiction of Guidelines

Public health activities conducted pursuant to law or other administrative orders.

3. In case stricter standards, if any, are applicable in partner countries of international cooperative projects, researchers shall abide by the stricter standards in addition to these Guidelines.

SECTION 3. BASIC RULES FOR RESEARCHERS

(1) Ensuring Scientific Soundness and Ethical Integrity in Epidemiology

1) Researchers shall conduct epidemiological studies with due consideration for the personal dignity and human rights of all subjects.
2) Researchers shall not conduct epidemiological studies which are not scientifically sound or ethical, and shall provide explicit, detailed research proposals that fully account for and address these issues.

3) Researchers shall obtain all appropriate permissions from the heads of their respective research institutes (institute head) for epidemiological study proposals and any modifications to research plans.

(Provision)
Examples of institute heads include the following positions:
- hospitals: administrators;
- public health centers: director of the center;
- medical schools: school dean;
- corporate research institute: institute director.

4) Researchers shall conduct epidemiological studies in compliance with all appropriate laws, these Guidelines, and the approved research proposal.

5) Researchers shall not select research subjects by inappropriate or arbitrary means.

(2) Protecting Personal Information
Researchers shall properly manage and protect the personal data of all research subjects.

(3) Informed Consent
1) Researchers, in principle, shall obtain written informed consent from all research subjects prior to conducting any epidemiological study.

2) Investigators shall stipulate in their research proposals:
   a) how a study is explained to the subjects involved,
   b) how informed consent will be obtained from subjects,
   c) and any other relevant issues concerning informed consent.
(4) Publication of Study Findings

Principal investigators shall publish research findings after taking necessary measures to protect the privacy of research subjects.

SECTION 4. RESPONSIBILITIES OF INSTITUTE HEADS

(1) Emphasizing Ethical Considerations in Research

Institute heads shall assure that researchers within their organizations are aware of the importance of respecting the personal dignity and human rights of research subjects, and that necessary measures are taken to protect the privacy of individuals in epidemiological studies conducted, by this means serving to avoid potential ethical, legal or communal disputes related to research studies.

(2) Establishing Ethics Review Committees

Institute heads shall establish ethics review committees in their institutes, to review the appropriateness of research proposals. The institute head shall delegate these review functions to out-of-house ethics review committees (established by a collaborating research institute, public corporation or academic organization), when the size of their institute is not large enough to warrant an independent ethics review committee.

(Provision)

Out-of-house ethics review committees referred to in the second paragraph of this section include those established jointly by the heads of multiple collaborating research institutes.

(3) Obligation of Ethics Review Committees

Institute heads shall seek evaluations from ethics review committees when epidemiological study proposals are put forward by researchers, pursuant to Sec.3(1)3).
(Provisions)
1. Researchers who do not belong to a specific research institute shall be exempt from permission by institute head as specified in Sec.3(1)3), Sec.7, Sec.8, Sec.10(2), Sec11(1)(2)2)3).
2. Researchers who do not belong to a specific research institute are encouraged to voluntarily seek evaluations from an established institutional ethics review committee, to which collaborating researchers of the study belong (e.g., universities, public corporations or other academic institutions).

(4) Permission by Institute Head
Institute heads shall decide whether to approve or disapprove a proposed epidemiological study respecting the opinions put forward by ethics review committees. Institute heads shall not give approval to applications in contradiction to the expressed opinions of the ethics review committee.

(Provision)
Institute heads may choose to approve an epidemiological proposal if they determine the study needs to be carried out urgently to prevent or control a serious public health threat before evaluation by an ethics review committee can be performed. In such cases, institute heads shall seek an ERC opinion as soon as possible following approval of a research proposal, and ensure that the principal investigator suspends or modifies the study in accordance with the recommendations of the ethics review committee.

CHAPTER 2. ETHICS REVIEW COMMITTEES

SECTION 5. ETHICS REVIEW COMMITTEES
(1) Organization and Obligations

1) When so requested by institute heads, ethics review committees shall assess research proposals considering both ethical and scientific perspectives, and provide written evaluation on how the proposal complies with these Guidelines and other research methodologies.

2) Ethics review committees shall be organized in a manner that assures fair and unbiased reviews, taking into account and representing the interdisciplinary and pluralistic viewpoints of committee members from various backgrounds.

(Provision)

Ethics review committees shall be organized to include authorities, experts and professionals in both clinical and experimental medicine, as well as specialists in the social sciences (notably law), in addition to representatives of the general public. Committee membership should also be extended to outsiders (members who are not affiliated to the institute), and consist of both sexes.

3) Members of ethics review committees shall not disclose confidential information obtained in the review process without appropriate reason either during and/or after their tenure.

(2) Reviewing Process by Ethics Review Committees

1) Committee members who have conflicts of interest related to research proposals should not be involved in the review process. This restriction, however, shall not prevent such members from attending the committee or giving an account of the proposals when requested.

2) Procedures of the review process, the names and credentials of members, and a summary of the review discussion should be disclosed to the public. However, confidential information pertaining to the rights and privacy of study subjects
and any intellectual property rights associated with the research proposal may remain confidential.

3) Ethics review committees may include a provision in their regulations and procedures allowing the institute heads the option to delegate review of the proposal, with respect to its adherence to these Guidelines and other methodology issues, to an alternative ethics review committee or appropriate academic body.

(Provision)

An alternative ethics review committee or appropriate academic body may include those jointly established by the heads of multiple collaborating research institutes.

4) Ethics review committees may include a provision in their regulations and procedures allowing for a summary (expedited) review for minor agendas conducted, for example, by a single member of the committee appointed by a committee chairperson. These summary reviews should be provided to all other committee members.

(Provision)

Minor agendas which are eligible for summary review are generally defined as:

1- Minor alterations in research proposals;
2- Review of a research proposal to be conducted as part of a collaborative study, when ethics review committee approval is already given by the principal investigator’s institute;
3- Review of a research proposal that does not exceed minimal risk for subjects in the study. Minimal risk refers to risks within the normal range of physical, psychological and social hazards likely encountered in daily living or routine medical exams, and which are socially acceptable.
SECTION 6. REPORTING EPIDEMIOLOGICAL STUDIES

(1) Principal investigators shall submit progress reports to the ethics review committee through the institute head, as specified in the approved research proposal for a study period extending for several years.

(Provision) Research proposals should include deadlines for submission of progress reports, which shall be subject to approval by the ethics review committee. The benchmark time period should be every three years.

(2) Principal investigators shall immediately report any adverse events to study subjects that may arise to the ethics review committee, through the institute head.

(3) Ethics review committee shall provide a statement on alteration or termination of the research proposals and other issues on epidemiological studies when principal investigators submit or present progress reports, pursuant to parts (1) and (2).

(4) When deciding alteration or termination of the research proposals and other epidemiological issues, the institute head should respect the opinion of the ethics review committee.

(5) Principal investigators shall modify research proposals or terminate studies when so stipulated by the institute head or the ethics review committee.

(6) Principal investigators shall report a summary of research findings to the ethics review committee through the research institute head immediately upon conclusion of epidemiological
(Provision)
Researchers not belonging to a research institute are required to report to the ethics review committee from which they seek evaluation, pursuant to sections (1), (2) and (6).

CHAPTER 3. INFORMED CONSENT
SECTION 7. PROCEDURES FOR OBTAINING INFORMED CONSENT

Ordinarily, informed consent should be obtained from research subjects according to the following rules.

Where it is infeasible to observe these rules due to such reasons as methodology or purpose of the research, nature of research subjects, or the like, exceptions to the Guidelines may be permitted only when approval of both the ethics review committee and the institute head have been secured. In such cases, these general rules may be relaxed, excused, or replaced by another appropriate procedure for obtaining informed consent, as the case may be.

(Provisions)
Ethics review committees shall make certain that all of the following conditions are met in research proposals, whenever relaxing, waiving or deviating from the general rules for obtaining informed consent:

1- The epidemiological research involves no more than minimal risk to the subjects;
2- The relaxation, waiver or deviation will not adversely affect the interests of the subjects;
3- The epidemiological research could not practically be carried out without the relaxation, waiver or deviation;
4- Whenever appropriate, any of the following measures
shall be taken:

A. The population in which the subjects are included shall be informed about the details of collection and use of human biological materials and information, including collection methods;

B. Research subjects shall be provided with pertinent information after participation, as soon as practically possible (group briefings are also acceptable);

C. Where human biological materials and information are collected or used continuously for a long period of time, reasonable efforts shall be taken to make all relevant details known to the public by disseminating pertinent information including the methods of collection and use;

5- The epidemiological research is recognized as having great social importance.

(1) Interventional Studies
1) Research using human biological specimens

A. In the event specimens are collected by invasive methods (e.g., venipuncture):

Written informed consent (both explanation and consent must be in writing) shall be, in principle, obtained from all research subjects.

B. In the event specimens are collected by non-invasive methods:

Informed consent shall be, in principle, obtained from all research subjects. Informed consent for these types of research does not necessarily need to be in writing, but researchers should keep record of the explanations provided and consent obtained.

2) Research not using human biological specimens

A. In the event interventional research is focused on individual subjects:

Informed consent shall be, in principle, obtained from
all research subjects. Informed consent for these types of research does not necessarily need to be in writing, but researchers should keep record of the explanations provided and consent obtained.

B. In the event interventional research is focused on an entire population:

Informed consent does not necessarily need to be obtained from all research subjects. For these types of research, researchers shall publish all relevant information regarding the study to be carried out and provide each prospective subject an opportunity to refuse inclusion in the research.

(Provisions)
1. Personal information of those refusing to be included in the research shall not be collected, but it may be included in counting the study population.
2. The publication of all relevant research details in these cases shall be made in such a manner that research subjects can readily obtain the information.

(2) Observational Studies
1) Research using human biological specimens
   A. In the event specimens are collected by invasive methods:

   Written informed consent (both explanation and consent must be in writing) shall be, in principle, obtained from all research subjects.

   B. In the event specimens are collected by non-invasive methods:

   Informed consent shall be, in principle, obtained from all research subjects. Informed consent for these types of research does not necessarily need to be in writing, but researchers should keep record of the explanations provided and consent obtained.
2) Research not using human biological specimens
   
   A. Observational research using data other than existing materials:
      
      Informed consent does not necessarily need to be obtained from research subjects. For these types of research, researchers shall publish all relevant details regarding the study to be carried out and provide each prospective subject an opportunity to refuse inclusion in the research.
      
   B. Observational research using only existing materials:
      
      Informed consent does not necessarily need to be obtained from research subjects. For these types of research, researchers shall publish all relevant details regarding the study to be carried out.

SECTION 8. PROCEDURES FOR OBTAINING INFORMED CONSENT BY PROXY

Where it is impracticable to obtain informed consent from research subjects themselves, informed consent may be obtained by proxy (legally acceptable representatives who can advocate the research subject’s wishes and interests), only when the ethics review committee and the institute head have agreed upon their inclusion as essential to the epidemiological study.

(Provisions)

Cases in which obtaining informed consent from research subjects is impracticable and obtaining informed consent by proxy is permissible are as follows:

(1) Where research subjects can be objectively determined unable to give valid informed consent due to dementia and the like;

(2) Where research subjects are minors. Provided that, even in such cases, principal investigators endeavor to secure the subject’s understanding, by providing adequate explanation to subjects themselves in simple and plain language. Where
research subjects are 16 years or older, informed consent from the subjects themselves as well as the proxies must be obtained;

(3) Where research subjects are deceased, and inclusion in the study is known not to contradict their express intent.

CHAPTER 4. PROTECTING PERSONAL IDENTIFIABLE DATA

SECTION 9. MEASURES TO BE TAKEN IN CONDUCTING RESEARCH

Principal investigators shall ensure all necessary safeguards for protecting personal identifiable data in conducting epidemiological research.

SECTION 10. MEASURES FOR STORAGE AND USE OF SAMPLE MATERIAL(S)

(1) Storage of Material(s)

Principal investigators should declare proposed methods for preserving sample materials collected for epidemiological study and take necessary measures to protect samples from leakage, adulteration, loss and theft, and store them properly for later use and verification in study findings.

(2) Use of human specimen samples

If researchers use specimen samples collected from human subjects prior to research proposal approval, in principle they should obtain informed consent from all donors from whom specimens have been collected, before initiating research and keep record of how informed consent was obtained. If obtaining informed consent from donors is impracticable, researchers may use specimens without informed consent, when the institution head grants permission after approval of the ethics review committee, while additionally meeting either of the following conditions:
1) Specimen samples are anonymous.  
2) If not anonymous, then these conditions apply:  
   A. The epidemiological study is to be made public.  
   B. All of the study subjects are given the right to refuse inclusion in the research study.

SECTION 11. USE OF SAMPLE MATERIAL(S) FROM OTHER INSTITUTIONS

(1) Procedures to initiate research using material(s) from other institutions  
   Principal investigators should obtain permission from the institution head with approval of the Ethics review committee, specifying in the research proposal the contents of stored material(s) and the need for such material(s) in the study, when obtaining material(s) from a third party.

(2) Procedures to be taken in providing stored material(s)  
   Parties storing material(s) utilized for research should in principle obtain informed consent of donors from whom the material(s) was derived, before providing the material(s). However, when obtaining informed consent is impracticable, those parties may provide such material(s) to outside researchers, if one of the following conditions is met:
   1) Sample material(s) is anonymized.  
   2) If sample material(s) is not anonymized, the institution head can approve specimen release without informed consent upon agreement of the ethics review committee, and following these two conditions:
      A. Research conducted and details of the material(s) donated and/or transferred should be publicly disclosed.  
      B. All research subjects must be given the right to refuse inclusion in the study.  
   3) When the above two conditions 1) and 2) can not be met due to the nature or methodology of the study, the nature of
stored material(s) or other reason, but the epidemiological research is of important social significance, relevant health information may be provided on the condition that other appropriate measures are taken as necessary, with permission of the institution head and approval of the ethics review committee.

(Provisions)
1. When parties/institutions provide stored material(s) to an outside researcher pursuant to section 11(2) 2) or 3), but no ethics review committee exists, review and approval can be delegated to an ethics review committee of another institution, public corporation or academic organization.
2. Ethics review committees shall ensure that all conditions 1) through 5) specified in the provisions supplementary to Section 7 are fulfilled when approving the donation/transfer of stored material(s) by other appropriate measures under Section 11(2) 3).

SECTION 12. Measures to be taken in publishing research findings

When researchers publish study findings, appropriate precautions should be taken to guarantee that the identities of individual human subjects can not be traced.

CHAPTER 5.DEFINITION OF TERMS
SECTION 13. DEFINITION OF TERMS IN THESE GUIDELINES

(1) Epidemiological research

Epidemiological research refers to scientific research elucidating the prevalence and distribution of various health related conditions in a well defined population, and identifying the factors influencing them.

(Provisions)
1. Clinician’s review and analysis of medical records stored in their institutions for the primary purpose of treatment are not considered epidemiological research defined under these Guidelines.

2. Preventive medical activities conducted by municipal governments, prefectural governments and public health centers, surveys conducted by occupational health physicians or school health physicians within their official capacities, and reporting systems such as cancer registry or apoplexy registry are not considered as epidemiological research defined under these Guidelines.

(2) Interventional Studies

Interventional studies are a category of epidemiological research in which researchers divide a defined population into two or more subgroups, assigning them different treatments, preventive measures or other factors affecting health, for comparative analyses.

(3) Observational Studies

Observational studies are epidemiological research other than interventional studies.

(4) Material(s)

Material(s) used for epidemiological research refer to any part of the human body including blood, tissues, cells, bodily fluids, excrement, and human DNA as well as personal health data such as diagnoses, medication and laboratory findings. Material(s) include human biological specimens from living and nonliving individuals.

(5) Personal Data

Personal data refers to information concerning specific individuals identifiable by using personal information such as name, date of birth, or other description. Personal data also
includes any information which can easily be matched with other information and can identify specific individuals.

(6) Anonymizing

Anonymizing refers to removing identifiers from personal data and replacing them with codes unlinked to a person’s identity. Where personal data might not be identifiable per se, but can nevertheless be made identifiable by correspondence with other readily available data, such as directories, it is necessary to remove all or part of the linking information.

(7) Unlinkable Anonymizing

"Unlinkable anonymizing" refers to a form of anonymizing, without any matching links to personal data with codes (such as corresponding tables).

(8) Researchers

Researchers include principal investigators, institute heads and other persons involved in conducting epidemiological research (excluding those who simply supply stored materials with no further involvement in epidemiological research).

(9) Principal Investigators

Principal investigators refer to researchers who conduct and supervise the entire epidemiological study at each research institute.

(10) Research Institute

Research institute refers to organizations that conduct epidemiological research (excluding organizations which simply supply stored materials with no further involvement in epidemiological research).

(11) Collaborating Research Institute

Collaborating research institute refers to research institutes
specified in a research proposal as collaborating in an epidemiological study.

(12) Ethics Review Committee

Ethics review committee refers to a consultative panel, organized by the institute head, with the mandate of reviewing the appropriateness of an epidemiological study, particularly issues related to the ethical and scientific aspects protecting human rights and dignities of research subjects.

(13) Informed Consent

Informed consent refers to consent given by prospective research subjects for participation in a study and/or to allow one’s biological material or personal data to be used in a study. Consent should be based on one’s own free will and cognizance of the significance, purpose, methods, expected outcomes and potential risks of the epidemiological research proposed, after being adequately briefed by the researcher.

(14) Stored Material(s)

Stored material(s) refers to either:

a) Material(s) already collected prior to research proposal.

b) Material(s) to be collected after research proposal, but not intended to be used for the proposed epidemiological study.

CHAPTER 6. SPECIFICATIONS
SECTION 14. SPECIFICATIONS

Further specifications will be defined for implementation of the Guidelines.

CHAPTER 7. REVISIONS
SECTION 15. REVISIONS

These Guidelines shall be revised as necessary, or
minimally within 5 years after their implementation with thorough examination of the whole contents.

CHAPTER 8. IMPLEMENTATION
SECTION 16. IMPLEMENTATION
These Guidelines shall take effect on 1 July 2002.

(Provisions)

Epidemiological studies which were started prior to the implementation of the Guidelines will be exempted, nonetheless fair compliance with these Guidelines is advocated.