Chapter 15
IRB Considerations Regarding Study Design

I. Epidemiological Research. Epidemiological research often makes use of sensitive, individually identifiable, private information (usually obtained from medical or other private records), and links this information with additional information obtained from other public or private records, such as employment, insurance, or police records. Epidemiological research may also combine historical research with survey and interview research.

Epidemiological studies often present significant problems regarding both privacy and confidentiality.

The IRB must first consider privacy issues, and must satisfy itself that the research does not constitute an unwarranted invasion of the subjects’ privacy. In doing so, the IRB shall seek to establish that the investigator has legitimate access to any identifiable information that is to be utilized. For example, if State disease registry information is to be utilized, the IRB will need to examine State law relative to the legitimate release of such information for research.

Once the IRB’s privacy concerns have been resolved, the IRB will examine mechanisms for maintaining the confidentiality of data collected. The IRB shall seek to establish that confidentiality protections are appropriate to the nature and sensitivity of the information that has been obtained.

Because epidemiological research typically requires large numbers of subjects, investigators almost always request that the IRB waive the usual requirements for informed consent. To approve such a waiver in epidemiological research, the IRB must find and document that the criteria for a waiver of informed consent have been met (45 CFR 46.116(d); specifically that (a) the research presents no more than minimal risk to subjects; (b) the waiver will not adversely affect the rights and welfare of the subjects; (c) the research could not practicably be carried out without the waiver, and (d) whenever appropriate, the subjects will be provided with additional pertinent information after participation.

II. Issues in Genetic Research. Information obtained through genetic research may have serious repercussions for the subject or the subject’s family members. As such, HSS’ IRB has developed detailed guidelines and a genetic informed consent for genetic research (Chapter 23). Genetic studies that generate information about subjects' personal health risks can provoke anxiety and confusion, damage familial relationships, and compromise the subjects' insurability and employment opportunities. For many genetic research protocols, these psychosocial risks can be significant enough to warrant careful IRB review and discussion. Those genetic studies limited to the collection of family history information and blood
drawing should not automatically be classified as "minimal risk" studies qualifying for expedited IRB review. The addition of the genetic analysis can radically alter the level of risk.

The protection of private information gathered for and resulting from genetic research is a major concern. The IRB should expect the investigator to describe in detail how individual privacy will be protected and how the confidentiality of obtained information will be maintained. (See Chapter 2 “Types of Research”.)

III. **Family History Research.** Family history research is a common technique used in bio-social and bio-behavioral research. Family history research typically involves obtaining information from one family member (called a proband) about other family members (third parties).

It is important to recognize the Federal regulations at 45 CFR 46.102 (f)(2) and the Common Rule include in the definition of human subject a living individual about whom an investigator obtains “identifiable private information.”

Thus, the family members identified and described by the proband may be human subjects under the regulations if the investigators obtain identifiable private information about them.

IRBs must determine whether family members (third parties) are human subjects in such research, and if so, consider the possible risks involved, and determine whether their informed consent is required or can be waived (see Chapter 9) under the conditions specified at 45 CFR 46.116(d). There is not total consensus in the available guidance on this issue. OHRP representatives have advised that “third parties” about whom identifiable and private information is collected in the course of research are human subjects. Confidentiality is a major concern in determining if minimal risk is involved. IRB's can consider if informed consent from third parties can be waived in accordance with Section 116 and if so, document that in the IRB minutes. In most cases waiver of consent may be appropriate.

IV. **Research Involving Potentially Addictive Substances.** Research involving potentially addictive substances often involves the use of what may be termed “abuse-liable” substances. Abuse-liable substances are pharmacological substances that have the potential for creating abusive dependency. Abuse-liable substances can include both legal and illicit drugs. The following are among the issues that the IRB should consider when reviewing research involving potentially addictive substances:

A. When this type of research is proposed, the IRB must consider the subjects’ capacity to provide continuous informed consent, ensuring that subjects are competent and are not coerced.
B. If such research involves subjects that are institutionalized, the subjects’ ability to exercise autonomy could be impaired.

C. The IRB must also consider the requirements for equitable selection of subjects and protections for maintaining confidentiality, as such a population may be at risk for being discriminated against, or over-selected.

D. The IRB must be sensitive to the ethical context of the research, in that there may be moral dilemmas associated with the use of placebos, or in cases where addicts are presented with alcohol and/or drugs.

E. It is critical that the IRB focus on the considerations of risk and benefit of such research.