Medical Law and Ethics
Handout 2.3
Reporting Duties for Healthcare Professionals
Part I

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Introduction

Physicians and other healthcare professionals handle a variety of cases dealing with the general public. Many of these duties involve officially recording certain data for governmental purposes (e.g. birth) as well as ensuring the safety and well-being of the patients under their care. Reporting events such as birth, death, and illness are considered public duties. **Public duties** refer to the responsibilities that physicians and healthcare professionals have to the public. For example, accurate reporting of birth data is not only important to the child and his or her parents, but its accuracy is required for government issued documents (e.g. official birth certificate).

In this handout, we will cover issues related to public health and vital statistics (such as birth and death records). We will also discuss how physicians and other healthcare professionals must handle reporting **communicable** (contagious or infectious) diseases and bites from animals (such as infected with rabies). Physicians and other healthcare professionals have a duty to maintain the public safety of not only their patients, but also, the general public (e.g. prevention of outbreaks within a given population) through accurate reporting to the appropriate authorities.

In Part II, we will examine more sensitive topics such as mandated reporting of neglect, abuse, violent injuries, rape, and sexual assault as it pertains to different populations (e.g. children, the elderly, and other vulnerable populations).

Vital Statistics

Vital statistics refer to major life events including live births, marriages, divorces, and deaths quantitatively recorded by professionals as data to indicate information about current population trends. Agencies within the United States government and public

health officials are examples of the professionals who collect and examine this information.

In the following points, we will look at some of the types of data that the agencies examine regarding population trends and needs.

Principles of Public Health

The Centers for Disease Control (CDC) prepares the **Morbidity and Mortality Weekly Report (MMWR)**. The MMWR contains articles (updated each week) pertaining to current issues in medicine and public health. For example, during the summer of 2016, Zika virus and articles related to its prevention and transmission were highlighted. Since the CDC needs to keep track of any threats of disease, prevent outbreaks from occurring, and maintain the safety of the American public, statistics and reports provided by healthcare professionals and other officials must be accurate as possible.

(Please see the link for the CDC's Morbidity and Mortality Weekly Report under additional readings on the main site)

The **morbidity rate** is the number of cases of individuals affected by an illness within a given population during a particular year. The two subcategories we will examine under the morbidity rate are prevalence rate and incidence rate.

Let's take a look at a basic overview of public health principles relevant to our discussion.

Prevalence rate measures the level of morbidity in a given population at a specific point in time. For example if we are looking at the frequency (number) of individuals affected by Zika virus in 2016 and divide it by the number of individuals of that given population during that time period (in our example, it is 2016), healthcare professionals can estimate the prevalence of that disease.

If 250 individuals (combination of old/preexisting cases and new diagnosed individuals) are affected by Zika virus in a population of 10 000, we can determine the prevalence through the following:

$$\frac{250\ affected\ by\ Zika\ virus\ (preexisting\ and\ new\ cases)}{10000\ individuals\ in\ population} \times 10^n$$

where 10^n = 1000 or 100 000 (for rare diseases)

$$\frac{250}{10000} \times 1000$$

$$= 25\%$$

The prevalence rate for Zika virus is 25 per 1000.

Incidence rate measures the number of new cases that have arisen from those recently diagnosed by a disease within a specific period of time. Incidence differs from prevalence because incidence examines new cases **only** while prevalence examines those who are currently affected at a certain time period (**previous and new cases**).

For example, 500 people developed the flu in 2010, but many quickly recovered afterward. The incidence rate would be high (there were 500 new cases of influenza), but prevalence would be low (since many individuals recovered and are not affected by influenza).

Let's examine an example:

An epidemiologist is examining a village at risk of developing mosquito-borne malaria from mosquitos in 2016. With a population of 114 people, 17 individuals developed malaria. The incidence rate is determined through the following:

$$\frac{17\ individuals\ who\ developed\ malaria}{114\ (total\ population\ at\ risk\ of\ developing\ malaria)} \times 100 =$$

$$\frac{17}{114} \times 100 = 14.9$$

The incidence of malaria for this population is 14.9 per 100.

The **mortality rate**, also known as the death rate, measures the ratio of the number of deaths from specified causes (e.g. disease) to the total size of the population at a given area or time period.

For example, if in 2012, 380 people died from meningitis in a small town with a population of 25 000, the mortality rate for the population is determined by the following:

$$\frac{380\ meningitis\ deaths\ in\ 2012\ (death\ from\ specific\ cause\ in\ one\ year)}{25000\ (total\ population)} \times 10^n$$

where 10^n = 1000 or 100 000 (for rare diseases)

$$\frac{380}{25000} \times 1000$$

= 15.2%

The morality rate for this population is 15.2 per 1000.

Live Births

The licensed physician or midwife is responsible for signing the certificate of live birth. The information provided in the certificate of live birth include the baby's name, the names of the parents, the name of the attendant (physician or midwife), the baby's date of birth, location of birth, and the sex designation of the baby. The certificate of live birth is used for data entry purposes by the hospital and must be filed with the official entity (such as the county registrar) of the state within 72 hours of the birth (each state may vary, but for most states this is the time period).

After data entry, the certificate of live birth is then given to the office that manages the vital statistics in the state in order to issue the official birth certificate. The ones who will usually do this is the hospital (for a hospital birth), the midwife, or a person in attendance of the birth. The official birth certificate is used for professional purposes such as identification, application for official documents (e.g. passport, social security card, or driver's license), and to provide evidence of nationality.

Deaths

When an individual dies, the physician, medical examiner, or coroner signs the death certificate. The death certificate must be signed and filed within 72 hours. After that is completed, the certificate is given to the funeral director/mortician. The death certificate includes information such as the exact time and date of death and the immediate cause of death (e.g. natural causes or a specific disease). Similar to the details for a birth certificate, the accuracy of the information on a death certificate is also important since it will be submitted to government agencies such as the Social Security Administration and the Internal Revenue Service.

Suspicious deaths refer to deaths whose circumstances cannot be explained from a legal or medical standpoint and are out of the ordinary. Examples include death from violence, criminal activity (e.g. homicide), a sudden outbreak, or suicide (unlawfully assisted or self-inflicted). In these cases, a normally healthy individual dies suddenly which raises questions. When an individual passes away due to complications with age or from a diagnosed illness (e.g. cancer or kidney failure), healthcare professionals and family members can be prepared and understand the cause of death.

We will go into more detail regarding death in Part II of this Handout. Topics such as the role of the medical examiner or coroner during investigations of suspicious deaths or

certain situations (e.g. death in prison or if a physician was not present at the time of death) will be covered in greater detail.

(Please see the informational brochure from the Florida Department of Health to see the different components that need to be filled out by a physician, coroner, or medical examiner)

Communicable Diseases

Reports on communicable diseases that pose as a public health threat must be reported to local health department within 24 hours of when the disease has been identified and diagnosed. In New York state, the New York State Sanitary Code (*10NYCRR* 2.10) require physicians and those involved with laboratory research and health care services (e.g. nurses) to immediately report the details of the disease (e.g. who was infected, the name of the disease, the onset of the disease, and names of those preparing the report).

Vaccinations

Each state sets their own laws regarding vaccinating children. However, children must be immunized against certain diseases in order to be eligible to attend school in the United States. The following are predominantly required, but may vary with the state (for example, DPT vaccination is required in all 50 states and Washington D.C., but only 48 states and Washington D.C. have a mandatory requirement for the varicella vaccination):

Diphtheria, pertussis, and tetanus (DPT)
Poliovirus vaccine
Measles, mumps, rubella (MMR)
Varicella (chickenpox)
Hepatitis B vaccine

The **National Childhood Vaccine Injury Act of 1986** (NCVIA) was passed by the United States Congress which set the regulations and compensation requirements pertaining to the administration of vaccines and procedures for reporting adverse events (injuries). Prior to the NCVIA, lawsuits against vaccine manufacturers were common in which damages were paid out to plaintiffs even if there was no concrete evidence to support their claims. As a result, the vaccine manufacturers began stopping production of vaccines which lead to shortages and rising prices. The NCVIA created new changes to address concerns with public health and liability.

Vaccine Information Statements (VIS) are given to the patient, parents, and/or guardians by healthcare professionals (prior to the vaccination) in order to provide them with a synopsis of the disease they are being vaccinated against along with the benefits and risks of receiving the vaccine. VIS are required to be given to the individual (or their caretaker) each time he or she gets vaccinated.

When a healthcare professional is informed that the patient experiences any problems after receiving a vaccination, he or she must report it through a federal system (VAERS). The **Vaccine Adverse Event Reporting System (VAERS)** allows the healthcare professional to notify health officials of any adverse effects which may be related to an administration of a vaccine.

The NCVIA also created the **National Vaccine Injury Compensation Program (NVICP)** to provide compensation on a no-fault basis for those who have been injured in relation to vaccine administration. Basically the individual can file a petition with the U.S. Court of Federal Claims which goes through a review by professionals such as the medical staff at the U.S. Department of Health and Human Services and the legal staff at the U.S. Department of Justice. The Court appointed special master oversees the process such as the hearing and the decision making. If the original petitioners are unsatisfied with the decision, they can take the case to civil court and sue the provider who administered the vaccine or vaccine manufacturer.

(Additional Information on NCVIA and NVICP are under additional readings)

Healthcare professionals are required to be vaccinated against certain diseases. For example, under New York Codes, Rules and Regulations, Title 10, § 2.59 *Prevention of influenza transmission by healthcare and residential facility and agency personnel*, personnel working in healthcare institutions (including individuals such as students and volunteers) who have a potential to transmit influenza (if they get infected) to others must receive the influenza vaccination. The vaccination must also be documented.

The CDC has written an informative article which compiled state vaccination laws and requirements.

(Please read the CDC's Vaccination Laws for Children under the Public Health Law Program)

Anti-Vaccination

A famous case revolving around anti-vaccination was by Dr. Andrew Jeremy Wakefield. Dr. Wakefield, a former British physician, published a paper in The Lancet, a medical journal in the UK, in 1998 linking the MMR vaccine with autism. After trials and investigations, the scientific and medical communities were not able to find evidence to support Dr. Wakefield's conclusions. Many of the authors of the original study renounced his findings after learning about the details of the situation.

(The paper had been retracted by The Lancet, but I will provide you with a link to Andrew Wakefield's 1998 paper under the additional readings section)

After an investigation by the United Kingdom's General Medical Council, they found evidence of Dr. Wakefield's unethical behavior which included receiving financial compensation from lawyers representing parties who instigated a lawsuit against vaccine manufacturers in order to collect damages. As a result, Dr. Wakefield's medical license was revoked.

Certain states do allow individuals and parents to apply for exemption from vaccination. The rules vary with each state. For example, Hawaii will not allow exemptions in the event of a serious disease outbreak. Iowa will allow an exemption from vaccination if there is a conflict with one's religious belief.

Waste and Disposal

Healthcare professionals, medical facilities, and clinical laboratories handle medical waste throughout their work. Since this waste can be potentially dangerous to living beings and the environment, proper disposal of hazardous medical waste is important.

Waste commonly found in medical and laboratory settings can be classified into four categories:

- **Solid**
  - Solid waste is commonly referred to as garbage or rubbish which are solid or semi-solid in nature. Examples found in hospitals, clinics, and other medical facilities are food containers, tissue paper, recyclable materials (e.g. bottles, paper, and metals such as aluminum cans).
- **Chemical**
  - Chemical waste refers to waste produced from hazardous chemicals such as industrial solvents and certain pharmaceuticals (such as chemotherapy drugs). Usually chemicals that are poisonous, flammable, corrosive, or combustible fall under this category.
  - The United States **Environmental Protection Agency (EPA)** set regulations for the disposal to prevent chemical waste from causing injury to living organisms or polluting the environment. For example, under Subtitle C of the Resource Conservation and Recovery Act (RCRA) passed by Congress in 1976, the EPA oversees the safety and proper management of hazardous wastes.
- **Radioactive**
  - Radioactive waste refers to waste containing radioactive material. This can come from nuclear power or nuclear technology. Since our focus is on medicine and health, we will focus on the latter.
  - Nuclear medicine utilizes radiopharmaceuticals (radioactive agents) to perform diagnostic tests on patients or may be used for treatment. Healthcare professionals in medical and scientific facilities such as physicians, pharmacists, and researchers must properly handle and dispose radiopharmaceuticals with the assistance of licensed entities.

    - **For specifics regarding radiopharmaceuticals please see the additional readings on the main site: Procedure Guideline for the Use of Radiopharmaceuticals by Dr. Ronald J. Callahan and his co-authors from the Journal of Nuclear Medicine Technology and a synopsis of radioactive waste by the United States Nuclear Regulatory Commission.**
- **Infectious**
    - According to the World Health Organization, infectious waste refers to waste that has been contaminated by bodily fluids, waste resulting from individuals contained in isolation wards (e.g. their bandages or used tissue paper), or waste from laboratory research with infectious agents (e.g. cultures from contaminated specimens).
    - In a healthcare setting waste from medical products such as needles, syringes, and swabs must be properly disposed of in the appropriate container to prevent the spread of infection. The containers should be properly labeled with the contents it is designed for and should be handled and disposed by licensed professionals.

Material Safety Data Sheet (MSDS) (also referred to as a Safety Data Sheet) is a form containing information on how to safely handle and dispose chemicals. The Occupational Safety and Health Administration (OSHA) has provided examples of material safety data sheets on various chemicals which include first aid measures when an individual is exposed to the specific product as well as its details (e.g. what it is composed of, any hazards associated with it, and handling and storage).

OSHA requires employers to provide employees with updated MSDS information on the hazardous chemicals used in their facilities. Manufacturers and distributors must also provide MSDS to the employers of a facility who accept shipments of these hazardous chemicals.