

## Florida's School-based HIV/STD and Teen Pregnancy Prevention Project: Assisting School Districts with Strategies to Improve Student Health and Academic Success

Florida Statute 1003.42 (2)(n) requires comprehensive health education in grades K-12, which includes "family life", "consequences of teen pregnancy", and "prevention and control of disease". Instruction in Acquired Immune Deficiency Syndrome (AIDS) is included in Florida Statute 1003.46. The challenge for school districts is to determine in which courses these essential health topics will be delivered because in most Florida school districts "stand alone" health courses are not required for graduation.

The purpose of this document is to review cross-curricula connections where the integration of health education standards are included in other subject area course descriptions. Physical education and science courses for middle and high school students were chosen for examination. Also, Florida standards for health education were reviewed to determine alignment with "CDC's 16 Critical Sexual Health Education Topics".

# CDC's 16 Critical Sexual Health Education Topics, Florida Health Benchmarks and Science Courses

The CDC recommends addressing 16 critical sexual health education topics related to "family life", "consequences of teen pregnancy", and "prevention and control of disease" instruction. These topics are based on scientific evidence for what helps students avoid the risk and consequences of HIV/STD infection and teen pregnancy.

#### The 16 topics are:

- ✓ Benefits of being sexually abstinent;
- ✓ How to access valid and reliable health information, products and services related to HIV, other sexually transmitted diseases, and pregnancy;
- ✓ Influences of family, peers, media, technology and other factors on sexual risk behavior;
- ✓ Communication and negotiation skills related to eliminating or reducing risk for HIV, other STDs, and pregnancy;
- ✓ Goal-setting and decision-making skills related to eliminating or reducing risks;
- ✓ Influencing and supporting others to avoid or reduce sexual risk behaviors;
- ✓ Importance of using condoms consistently and correctly;
- ✓ Importance of using a condom at the same time as another form of contraception to prevent both STDs and pregnancy;
- ✓ How to create and sustain healthy and respectful relationships;
- ✓ Importance of limiting the number of sexual partners;
- ✓ Preventive care that is necessary to maintain reproductive and sexual health;
- ✓ How HIV and other STDs are transmitted;
- ✓ Health consequences of HIV, other STDs, and pregnancy;

- ✓ Effectiveness of condoms:
- ✓ How to obtain condoms;
- ✓ How to correctly use a condom.

Rationale for incorporating the health education topics of "family life" instruction and "prevention and control of disease" into science courses is based on a review of science education standards for grades 6-12. Courses with science standards which support instruction in the health topics listed above are included in Comprehensive Science and Life Science for middle school students. High school courses which support the instruction of the health education topics include Biology (required for graduation), Anatomy and Physiology, and Human Body Systems (electives).

The review of science education standards for grades 6-12 revealed alignment with two of CDC's 16 critical sexual health topics for sexual health instruction.

- ✓ How HIV and other STDs are transmitted.
- ✓ Health consequences of HIV, other STDs, and pregnancy.

Three middle school and four high school standards were identified which are in alignment with the two critical topics.

#### **Identified Middle School Science Standards**

- SC.6.L.14.5 Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis. (M/J Comprehensive Science, M/J Life Science)
- SC.6.L.14.6 Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites. (M/J Comprehensive Science, M/J Life Science)
- SC.7.L.16.3 Compare and contrast the general processes of sexual reproduction requiring meiosis and asexual reproduction requiring mitosis. (M/J Life Science)

### **Identified High School Science Standards**

- SC.912.L.14.33 Describe the basic anatomy and physiology of the reproductive system. (Anatomy and Physiology)
- SC.912.L.14.52 Explain the basic functions of the human immune system, including specific and nonspecific immune response, vaccines, and antibiotics. (Biology 1, Biology 1 Honors, Anatomy and Physiology)
- SC.912.L.14.6 Explain the significance of genetic factors, environmental factors, and pathogenic agents to health from the perspectives of both individual and public health. (Biology 1, Biology 1 Honors, Biology 2 Honors)

• SC.912.L.16.13 Describe the basic anatomy and physiology of the human reproductive system. Describe the process of human development from fertilization to birth and major changes that occur in each trimester of pregnancy. (Biology 1, Biology 1 Honors, Biology 2 Honors)

Health Education Standards are integrated within science courses and are also in alignment with the two critical topics for sexual health education mentioned above.

#### Middle School - Health Standards

- HE.6.C.1.5 Explain how body systems are impacted by hereditary factors and infectious agents. (M/J Comprehensive Science, Health 6-8)
- HE.6.C.1.8 Examine the likelihood of injury or illness if engaging in unhealthy/risky behaviors. (M/J Life Science)

## **High School - Health Standards**

- HE.912.C.1.5 Analyze strategies for prevention, detection, and treatment of communicable and chronic diseases. (Biology 1, Biology 1 Honors, Anatomy and Physiology)
- HE.912.C.1.8 Assess the degree of susceptibility to injury, illness, or death if engaging in unhealthy/risky behaviors. (Biology 1 Honors)

Several school districts in Florida have chosen to deliver the health education topics of "family life", "consequences of teen pregnancy", and "prevention and control of disease" instruction at the middle school and the high school level through science courses. High school Biology teachers report the benefits of providing an engaging topic of high interest to students after the end of course exam.

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