

■ How Do Students With Seizure Disorders Access Online Distance Education?

Students with seizure disorders may have little or no difficulty accessing traditional classroom education. However, these students may experience severe seizures involving loss of consciousness and involuntary movements, or what appears to be a lapse of consciousness. After a seizure, a student may experience symptoms such as confusion, fatigue, muscle weakness, headache, or pain. Additionally, students taking medication to control seizures may experience side effects like drowsiness or blurred vision.

As a result, students with seizure disorders may choose to access online distance education rather than traditional classroom education. Instructors should be aware that the design of their online learning courses could result in seizures for people with certain types of disabilities.

■ Photosensitive Epilepsy

According to the Epilepsy Foundation of America, over 100,000 people have a condition known as photosensitive epilepsy. For individuals with this condition, flashing light with a frequency of between 2 - 55 Hertz (Hz) is most likely to induce a seizure. A Hz is defined as "one cycle per second." Thus, 2 Hz is two cycles a second and 55 Hz is fifty-five cycles per second.

Instructors that have **flashing images** in their online courses should remove them or disable their ability to flash. If you do NOT have photosensitive epilepsy, examples of flickering images can be viewed at the National Center for Accessible Media (NCAM) website at: ncam.wgbh.org/richmedia/flicker_demo.html

■ Accommodations

Specific accommodations for individuals who experience photosensitive epilepsy include:

- Provide information in an alternative audio format.
- Avoid, remove or turn off animations, blinking text, offensive color patterns and/or certain audio frequencies.
- If elements that flicker are used, they should flash at a frequency of less than twice a second (2 Hz) or greater than 55 times a second (55 Hz).
- Offer flicker free monitors (LVCD display or flat screen), a glare guard and/or non-glare glasses for on-site labs or classes.
- Allow students to take several breaks if they are expected to process visual information for a prolonged time.