

Teacher Training Ohio Return to Learn Concussion Team Model



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Objectives of the Training



TO PROVIDE...



Information on how concussions can affect students' learning, health, and social-emotional functioning

Information about “return to learn” and why it is so important to student recovery

Strategies for helping students recover from concussion, including classroom tips

CONCUSSION=MTBI

MILD TRAUMATIC BRAIN INJURY

A concussion is caused by a direct blow or jolt to the head, face, or neck, or a blow to the body that causes the head and brain to shift rapidly back and forth.



it results in a short-term
impairment of neurological
function and a constellation
of symptoms.



Concussion Facts

Accurate prevalence estimates are difficult because many **do not seek medical attention**

Concussions are not visible on standard CT scans or MRIs

Nearly 33% of concussions in athletes still go unreported

(Meehan, Mannix, O'Brien, & Collins, 2013)

Concussions are not only experienced by athletes. Youth **ages 5-18** are at **increased risk** of experiencing a TBI and prolonged recovery

(Gilchrist, Thomas, Xu, McGuire, & Corondo)

Neurometabolic Changes

When one sustains a concussion, neurochemical changes take place in the brain

Potassium flows out of the brain cells

Calcium flows into the brain cells

This results in inefficiency of brain cells to properly deliver much-needed nutrients (especially **glucose**) to the brain.

These molecular changes hinder a person's ability to engage in many physical or mental activities.

Effects of a Concussion: Signs

- Appears dazed or stunned
- Is confused about events
- Answers questions slowly
- Repeats questions
- Can't recall events prior to and/or after the hit, bump, or fall
- May or may not lose consciousness (briefly)
- Shows behavior or personality changes
- Forgets class schedule or assignments



Effects of a Concussion: Symptoms

Cognitive (thinking)

- Feeling slowed down
- Difficulty concentrating
- Difficulty remembering new information

Physical

- Headache
- Fuzzy or blurry vision
- Nausea or vomiting (early on)
- Sensitivity to noise or light
- Balance problems
- Feeling tired/having no energy

Emotional/Mood

- Irritability
- Sadness
- More emotional
- Nervousness or anxiety

Sleep

- Sleeping more than usual
- Sleeping less than usual
- Trouble falling asleep

Effects of a Concussion



Symptoms flare when the brain is asked to do more than it can tolerate (trying to “tough it out” can make symptoms worse)

“Treatment” is physical and cognitive rest

Most students should receive academic adjustments as they slowly recover and return to school – which will be discussed in the next section

School-based Concussion Team

A **concussion team** ensures every student who sustains a concussion is monitored for return to activity



When a health issue affects a student's learning, school teams must **communicate** effectively with one another, with medical personnel, and with the family.

Listen, validate parents' feelings, avoid defensiveness, **recognize** fear and frustration, focus on solutions, **work together** toward common goals

Teacher Role & Responsibilities

TEAM MEMBER

Teacher



RESPONSIBILITIES

- Help the student get the best education possible given the circumstances
- Follow recommended academic adjustments
- Monitor student progress
- Monitor student symptoms



Return to Activity Plan

Because every concussion and every student is different, symptom clusters and recovery rates will vary.

Return to Learn



Return to Play

Students receiving academic adjustments do so because symptoms are present. Students who are symptomatic should not be resuming physical activity.

Return to School Progression

Initially, it is important to rest the brain & get good sleep

Limit physical, emotional, or cognitive activities to a level that is tolerable and does not exacerbate or cause re-emergence of symptoms

Exertion (and rest) falls along a continuum

No activity/full rest

Full activity/no rest



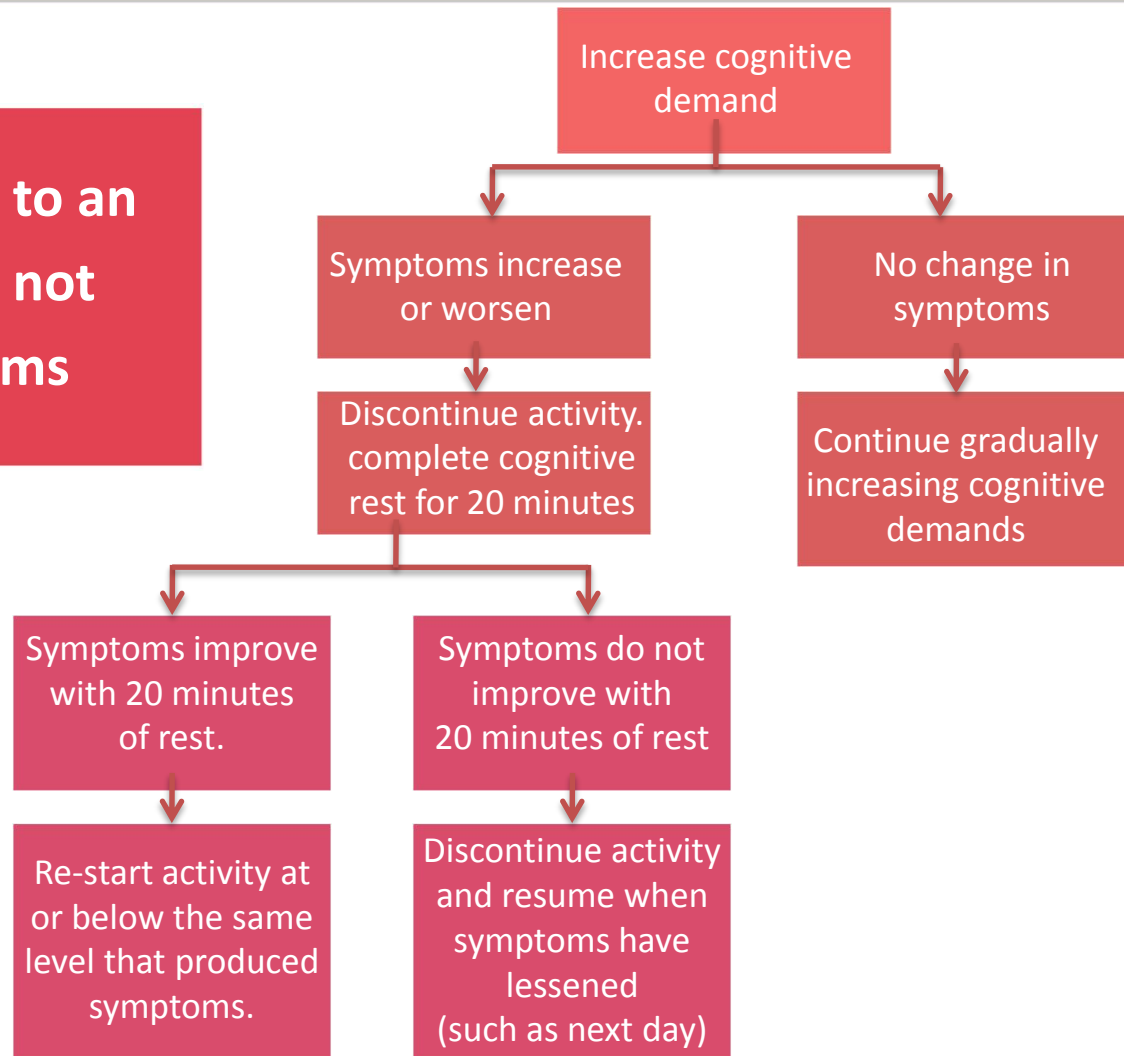
Return to Academics Progression

(SEE HANDOUT FOR DESCRIPTIONS)

Steps	Progression
1	No School—Cognitive and Physical Rest Family should receive guidance from health care professional regarding student's readiness to return to school (based on number, type, and severity of symptoms)
2	Partial Day Attendance with Accommodations Maximum accommodations Shortened day/schedule; breaks
3	School—Full day with accommodations
4	School—Full day without accommodations No physical activity until released by a healthcare professional
5	School—Full day with extracurricular involvement

Decision-Making Chart

Allow participation to an extent that does not worsen symptoms



Academic Adjustments Following Concussion

Front-load academic adjustments

Note: Students may be reluctant to accept adjustments and instead push through symptoms to complete work because of the anxiety associated with work piling up (Halstead et al., 2013; Sady, Vaughan, & Gioia, 2011)



Map adjustments onto symptoms

see following slides for details...

General

Cognitive/Thinking

Fatigue/Physical

Emotional

Determine how to modify work load

(Heintz, 2012)

Excused assignments

-not to be made up-

Accountable assignments

-responsible for content, not process-

Responsible assignments

-must be completed by student and will be graded-

Academic Adjustments: General

Adjust class schedule (alternate days, shortened day, abbreviated class, late start day).

Avoid noisy and over-stimulating environments (i.e., band) if symptoms increase.

No PE classes until cleared by a healthcare professional. No physical play at recess.

Allow students to drop high level or elective classes without penalty if adjustments go on for a long period of time.

Remove or limit testing and/or high-stakes projects.

Allow students to audit class (i.e., participate without producing or grades).

Alternate periods of mental exertion with periods of mental rest.

Academic Adjustments: Cognitive/Thinking

Reduce class assignments and homework to critical tasks only. Exempt non-essential written class work or homework. Base grades on adjusted homework.

Provide extended time to complete assignments/tests. Adjust due dates.

Once key learning objective has been presented, reduce repetition to maximize cognitive stamina (e.g., assign 5 of 30 math problems).

Allow student to demonstrate understanding orally instead of writing.

Provide written instructions for work that is deemed essential.

Provide class notes by teacher or peer. Allow use of computer, smart phone, tape recorder.

Allow use of notes for test taking..

Academic Adjustments: Fatigue/Physical

Allow time to visit school nurse/counselor for headaches and other symptoms

Allow student to wear sunglasses indoors. Control for light sensitivity (e.g., draw blinds, sit away from window, hat with brim).

Allow strategic rest breaks (e.g., 5-10 minutes every 30-45 minutes) during the day.

Allow student to study or work in a quiet space away from visual and noise stimulation.

Allow student to spend lunch/recess in a quiet space for for rest and control for noise sensitivity.

Allow hall passing time before or after crowds have cleared.

Provide a quiet environment to take tests.

Academic Adjustments: Emotional

Develop a plan so student can discreetly leave class as needed for rest.

Keep student engaged in extra-curricular activities. Allow student to attend but not fully participate in sports practice.

Provide quiet place to allow for de-stimulation.

Encourage student to explore alternative activities of non-physical nature.

Develop an emotional support plan for the student (e.g., identify adult to talk with if feeling overwhelmed).

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