McCallie Upper School Return to Learn Graduated Protocol for Day Students

1. Move forward to the next stage only when symptoms are at 0 in severity score of SCAT for a full 24 hours.

2. If symptoms re-appear, regress to previous stage and only participate in activities that can be tolerated

3. Contact McCallie Health team or overseeing physician office if symptoms worsen.

In Class Accommodation Options Centered on Symptom Type:

Headache: can lay head down at desk, Noise sensitivity: early class dismissal to avoid noise in hall

Light sensitivity: wear sunglasses; minimize projector/device screens, move to dimly lit space in class

Concentration problems: Place main focus on essential academic content/concepts, limit participation

McCallie Upper School Return to Learn Graduated Protocol for Boarding Students

Name:				<u>RECOVERY STAGE</u> 5
Start date Date of in Reinstater Reinstater RECOVERY STAGE <u>1</u> Complete Physical and Cognitive Rest until Medical Clearance Remains in Infirmary until stage 2 NO USE OF DEVICE Rest in low light and limited noise environment Restricted social visits & bedrest	-	RECOVERY STAGE3Continue AcademicAccommodations &May resume 1interactive or noisyclass (3.5 hrs.)Attend for 1/2 day ifPossible.Increase Work Loadgradually (class notetaking, no testing, 30min. of H.W./night)During Half-days,rest in the infirmaryor dorm in betweenclasses.Limited campusgathering: chapel isok, No big fivewatching, nosideline watchingDevice use 3 hrs/day	RECOVERY STAGE4ContinueAcademicAccommodationsAttend School halfa day or up to 4.5hrs. and attendschool event if notsporting event.May resume 2-3interactive ornoisy classesIncrease WorkLoad gradually(may resume fullnote taking, studyhall, etc.)Limited testing,Schoolwork in 4-5hours/day chunksHomework up to60 min/day	Attend School Full Time with little to no academic Accommodations Will resume all cognitive activities Can attend school functions and activities: ie Chapel, clubs, sideline and spectator events Homework – up to 90 min/day Accommodations will be removed and participate fully in academic work at school and at home without triggering symptoms. Next step: Resume Sports following Graduated Return to Activity/Play
Date Attained.	Date Attained.	Date Attained.		Dute Attained.

1. Move forward to the next stage only when symptoms are at 0 in severity score of SCAT for a full 24 hours.

2. If symptoms re-appear, regress to previous stages and only participate in activities that can be tolerated

3. Contact McCallie Health team or overseeing physician office if symptoms worsen.

In Class Accommodation Options Centered on Symptom Type:

Headache: can lay head down at desk, Noise sensitivity: early class dismissal to avoid noise in hall

Light sensitivity: wear sunglasses; minimize projector/device screens, move to dimly lit space in class

Concentration problems: Place main focus on essential academic content/concepts, limit participation

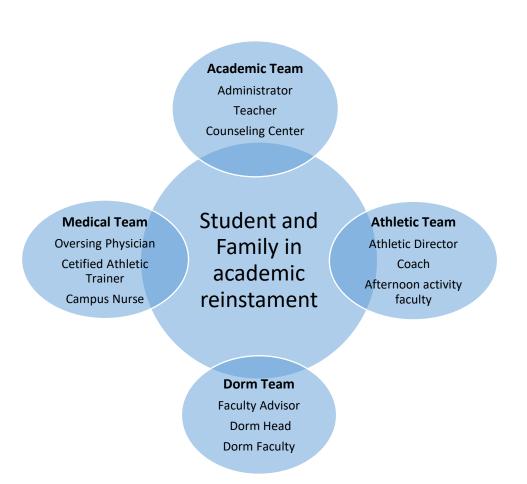
Return to learn in concussion recovery continues to have a vast and unfixed number of guidelines by the CDC and other organizations. The McCallie return to learn protocol is based on comprehensive research focused on academic reinstatement set in the latest neuroscience and education research (Blackwell, 2016). McCallie is dedicated to furthering the understanding of cognitive rest within the academic rigor and dynamic activities within our unique school setting. The day and boarding school settings provide a distinct backdrop for managing concussion injury due to an extended custodial responsibility of the school for the student. Managing cognitive rest for students who have sustained a concussion is an ever-increasing challenge for the educator, administrator, and school medical personnel (Baker, 2016). This return to learn concussion protocol outlines and designates the actions of a certified athletic trainer, educator, nurses, school administrator, and educators with the objective in establishing concrete concussion return to learn program by focusing on safe academic reinstatement (Carson, 2017).

Qualitative peer reviewed studies from Halstead et al, Baker and Carson et al center on return to learn and cognitive rest following a concussion event. Their studies addressed the question of when is strict physical and cognitive rest necessary following a concussion injury event in pediatric patients. The authors summarized the definition of physical rest, cognitive rest, application of rest and when strict rest needs to be implemented. Their studies purpose was to filter the vague post-concussion injury advice in order to institute practical cognitive rest guidelines for sport medicine professionals. Studies McLeod et al, McAbee, and Santiago specifically addresses prescription guidelines of mental rest and how strict this rest should be adhered to by the patient suffering from a concussion injury. Reuters et al. and Wing et al study's conclusion stated that proper rest and stress levels are needed to be applied systematically in order to have an advantageous recovery outcome from a concussion. The results of this meta-analysis research review also emphasized the need to further investigate cognitive test systems that could aid in further defining academic accommodation research for a concussion within education (Carson, 2017).

Recent studies regarding concussion return to learn adherence have failed to establish a clear understanding of cognitive rest guidelines (Gagnon, 2017). Although the research has vastly increased in the cognitive effects of concussions over the last decade, a clearer understanding of what specifically constitutes cognitive rest remains to be successfully addressed as a standard of care. Many concussionbased tools have focused on neurocognitive skills sets or have described self-reported severity symptom list with little application to an academic return to learn protocol. Further research will be needed in realms of future return to learn guidelines in order to supply the student, parent, and educator practical guidelines for workload modification in various school settings (Reuters, 2016).

The intentions of a safe academic reinstatement is to avoid relapsed symptoms due to premature return to social and scholastic activity in various school settings (Irvine, 2017). The McCallie School return to learn graduated Protocol intention is to establish a better understanding of what constitutes cognitive rest within the boarding and day school setting. This protocol is intended to work under a concussion injury qualified physician's orders and Tennessee Department of Health. (TN health 2016) Additionally it is intended to decrease the students', parents', and educator's frustration on how to modify school workloads within return to learn guidelines. The following graphic illustrates the McCallie multidisciplinary team to facilitate academic reinstatement following a concussion injury.

McCallie Multidisciplinary Team to Facilitate Concussion Academic Reinstatement



References

- Bacon, C. E., Kay, M. C., & Mcleod, T. C. (2017). Athletic Trainers Roles and Responsibilities Regarding Academic Adjustments as Part of the Concussion-Management Process in the Secondary School Setting. Journal of Athletic Training,52(10), 937-945. doi:10.4085/1062-6050-52.7.02
- Baker, J. G., Rieger, B. P., McAvoy, K., Leddy, J. J., Master, C. L., Lana, S. J. and Willer, B. S. (2014), Principles for return to learn after concussion. International Journal of Clinical Practice, 68: 1286–1288. doi:10.1111/ijcp.12517
- Blackwell, L. S., Robinson, A. F., Proctor, M. R., & Taylor, A. M. (2016). Same Care, Different Populations. Journal of Child Neurology, 32(3), 327-333. doi:10.1177/0883073816681351
- Carson, J. D., Garel, A., Rendely, A., Meaney, C., Moser, S. E., Rabinovitch, S. T., Fremont, P. (2017). Survey of educators regarding the return to learn after a sport-related concussion. British Journal of Sports Medicine, 51(11) http://dx.doi.org.ezproxy.liberty.edu/10.1136/bjsports-2016-097270.224
- Gagnon, I., (C), D. M., Pt, L. G., Kocilowicz, H., Beaulieu, C., Straub, M., & Friedman, D. (2017). When is it time to start rehab? exploring the optimal timing to initiate active rehabilitation for concussion management in children and adolescents. British Journal of Sports Medicine, 51(11), 227. doi:10.1136/bjsports-2016-097270.225
- Halstead, M. E., Brown, B. E., & Mcavoy, K. (2016). Cognitive rest following concussions: rethinking 'cognitive rest'. British Journal of Sports Medicine, 51(3), 147-147. doi:10.1136/bjsports-2016-096674
- Irvine, A., Babul, S., & Goldman, R. (2017). Return to learn after concussion in children. Canadian Family Physical, 63(November), 859-864.
- McAbee, G. N. (2014). Pediatric Concussion, Cognitive Rest and Position Statements, Practice Parameters, and Clinical Practice Guidelines. Journal of Child Neurology, 30(10), 1378-1380. doi:10.1177/0883073814551794
- McLeod, Tamara C Valovich, PhD,A.T.C., F.N.A.T.A., Lewis, Joy H, DO, PhD., M.P.H., Whelihan, K., M.P.H., & Bacon, Cailee E Welch, PhD., A.T.C. (2017). Rest and return to activity after sport-related concussion: A systematic review of the literature. Journal of Athletic Training, 52(3), 262-287. http://dx.doi.org.ezproxy.liberty.edu/10.4085/1052-6050-51.6.06
- Return to Learn/Return to Play: Concussion Management ... (n.d.). Retrieved from https://www.tn.gov/content/dam/tn/health/documents/Returning_to_Learn_Guidelines.pdf
- Reuters et al. (2016, November 7). 'Return-to-Learn' laws may not help students after concussions. Retrieved February 25, 2018, from http://www.foxnews.com/health/2016/11/07/return-to-learn-laws-may-nothelp-students-after-concussions.html
- Santiago, S. (2016). Adolescent Concussion and Return-to-Learn. Pediatric Annals, 45(3), 73-75. doi:10.3928/00904481-20160211-01
- Wing, R., Amanullah, S., Jacobs, E., Clark, M., & Merritt, C. (2016). Heads up: communcation is key in school nurses' prepardness for faciliating "return to learn" following concussion. Clinical Pediatrics, 55(3), 228-235.
 Retrieved February 25, 2018, from journals.sagepub.com.ezproxy.liberty.edu/doi/pdf/10.1177-0009922815592879.