



Headsmart Schools New Zealand
Managing Concussions in
Aotearoa New Zealand Secondary Schools

Headsmart Schools NZ

Framework for managing Concussions in Aotearoa New Zealand Secondary Schools

Foreword

This framework provides information about concussion for Aotearoa New Zealand secondary schools. The aim is to ensure that all students with a concussion are well supported during their recovery and return to learning and activity/sport.

Information is provided on how to recognise when a student has sustained a potential concussion, what information to provide at the time of injury, healthcare referral pathways, and the school's and individual responsibilities for implementing a recovery plan.

This document is informed by research conducted by New Zealand Rugby, the University of Otago and Auckland University of Technology (AUT). That research included input from school stakeholders, students with concussion and their whānau.

We have aligned the framework with the 2025 ACC Concussion guidelines for sports-related concussion, and by various stakeholders of secondary schools, and sports and health care provider organisations as part of the FRamework for maNaging Concussions in New Zealand secondary Schools (FRANCS) project.



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Ethics Approval

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The Auckland University of Technology (AUT) Ethics Committee granted ethics approval for the project (Reference number 24/84, dated 8th April 2024).

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Concussion Overview

Concussions can happen in all aspects of life. Data of the Accident Compensation Corporation (ACC) show that the highest rates of concussion are sustained in young people aged 13 to 19 years. About 40% of concussions are sports-related, and the majority occur during daily life, accidents, and at workplaces or schools.

A concussion is a brain injury. A concussion can interfere with the student's ability to learn.

It can be caused by a direct blow to the head, or indirectly by a whiplash style movement of the head. The sudden movement causes the brain to bounce around and twist inside the skull. This damages and stretches the brain cells which causes them to release chemicals, affecting how the brain works.

Only 10% of people are unconscious after sustaining a concussion.

The person with a concussion usually has a short-term impairment of the functioning of the brain, which resolves spontaneously. For most people a concussion resolves within two weeks, but some take longer.

Children and adolescents often take longer to recover than adults. Girls often take longer to recover than boys.

It is critical that all students with a suspected concussion are referred to a healthcare professional within a few days.

Headsmart Schools NZ: Framework for Management of Concussion in New Zealand Schools

The framework for management of concussion in schools was co-designed and assessed by the research team and the communities of more than 15 schools. We also sought input from members of national and regional sports, education and healthcare organisations (see publications on [p 45](#)).

The framework includes the following procedures that should be adapted to the school-specific processes and resources:

- Designation of a Concussion Officer(s) (alternatively 'Coordinator' or 'Navigator') within the school.
- A direct reporting line for concussion, e.g. specific email address concussion@schoolname.school.nz (or similar) linked to the Concussion Officer's email address or a mobile number for texting, as a direct reporting and support line between health care professionals and whānau and the school. The email address or mobile number should repeatedly be shared within and external to the school community.
- An automated email response linked to the reporting email address, providing the person reporting the concussion with immediate advice.
- Responsibilities for identifying and reporting a concussion.

- Monitoring appropriate immediate referral for medical care and access to on-going healthcare. While school staff are not responsible for making healthcare appointments, they should encourage the student and their parents/whānau to do so. The exception is for students of boarding houses, in which case the house parents organise such appointments and follow-up.
- Defining a communication plan for all relevant members of the school community.
- Defining and monitoring individual students' academic adjustments and return-to-learn and -physical activity/sports plans until clearance has been confirmed by a health professional trained in concussion care.

School Policy and Procedures

School boards are encouraged to develop written policy and procedures for concussion management that are suitable for their school's own context, and that are aligned with their Health and Safety Policies and Procedures.

Templates for such Policies are in the **Appendices of this document**, outlining roles and responsibilities to provide clarity and process.

Concussion management should be guided by a healthcare provider which can be a school nurse, a GP, physiotherapist or occupational therapist.

A consistent school-wide policy for standdown periods from sport is recommended, aligned with the current ACC national guidelines.

The 2025 ACC national guidelines specify a minimum of 14 days following the injury/concussion for return to 'normal' study and sport-specific training and 21 days for return to sports competition.

The school's **Health and Safety processes** should include the following:

- All school staff (including volunteer coaching team) are committed to regularly updating their concussion knowledge.
- The school leadership is committed to ensure that concussion information is regularly and repeatedly provided to teachers, coaches, team managers, the students, parents and whānau, and the wider school community via different modes. That can be through regular mini presentations at meetings, assemblies and also via available online resources that can be accessed by the community.
- Regularly reviews of concussion management procedures, updating these with current ACC guidelines.

School specific procedures may include the following:

- Designation of a Concussion Officer(s) (alternatively 'Coordinator' or 'Navigator') within the school.

- A direct reporting line for concussion, e.g. specific email address concussion@schoolname.school.nz (or similar) linked to the Concussion Officer's email address or a mobile number for texting, as a direct reporting and support lines between health care professionals and whānau and the school. The email address or mobile number should repeatedly be shared within and external to the school community.
- An automated email response linked to the reporting email address, providing the person reporting the concussion with immediate advice.
- Responsibilities for identifying and reporting a concussion.
- Monitor appropriate immediate referral for medical care and access to on-going healthcare. While school staff are not responsible for making healthcare appointments, they should encourage the student and their parents/whānau to do so. The exception is for students of boarding houses, in which case the house parents organise such appointments and follow-up.
- Define a communication plan for all relevant stakeholders.
- Defining and monitoring students' academic adjustments and return to learn and physical activity/sports until medical clearance has been confirmed.

The Concussion Management Team

At the core of the Headsmart Schools NZ team are the **students, parents and whānau, administrative staff, teachers, school nurses, GPs, physiotherapists and occupational therapists.**

A checklist is available in **Appendix 1** to facilitate discussion between school staff and to define specific roles and responsibilities.

Key Roles and Responsibilities

School Concussion Officer(s)

One or more individuals may act as concussion officers with the following responsibilities:

- Be the school's point of contact for concussion.
- Oversee reporting of concussion to Board of Trustees.
- Provide concussion information to students and parents.
- Inform relevant staff (including, teachers, deans, relief teachers, coaches, sport director, boarding house, pastoral care) of students with concussion. Communicates with the teacher who is responsible

for developing and monitoring an individual student's Return to Learn Plan, and assists with passing relevant information to other teachers, through KMAR, email or other appropriate means.

- Meet promptly with students and parents (or organise a meeting with year-level dean and student) following reporting of concussion to develop a Return to Learn plan.
- Keep a secure record of all concussion incidents, Return to Learn Plans, and recovery.
- Regularly follows up with students and staff during the recovery process.
- If symptoms are more than 4 weeks or graduated activity has not been tolerated, the student and their parent should be strongly encouraged to seek a health practitioner for a review. That may be a doctor, sports and exercise physician, neuropsychologist, physiotherapist or nurse practitioner.
- The health practitioner may refer the student to the ACC concussion services.

School Nurse

Schools that employ a school nurse would determine specific responsibilities of the nurse. The school nurse may act as the Concussion Officer or may take over specific responsibilities from the Concussion Officer (as listed above).

Students

Students are expected to report any potential concussion events or symptoms promptly and honestly to school staff, parents and whānau. Timely assessment of the student by a health professional is critical to minimise risk for long term symptoms and impairment.

Students should:

- Attend an education session on concussions, so that they can recognise the signs and symptoms that must be reported
- Understand the risk and seriousness of concussion
- Know that delayed reporting and management may lead to higher risk of delayed recovery
- Know who and where to report signs, symptoms and incidents of concussions
- Provide school with relevant medical information (medical certificate, diagnosis, medical clearance) about a sustained concussion
- Follow instructions of their health providers and school staff
- Encourage peers to take concussion seriously and report symptoms/incidence.

Parents and whānau

Parents, caregivers and whānau must take an active role in care for their child, and inform the school and healthcare practitioners about their child's health and well-being.

Parents should:

- Inform schools immediately of their child's potential and confirmed concussion so that the school can initiate appropriate learning support and accommodations, as needed.
- Ensure that their child is assessed by a relevant healthcare practitioner which may be a GP or Emergency Department physician, sports and exercise physician, neuropsychologist, physiotherapist experienced in concussion, or nurse practitioner.
- Discuss with the healthcare practitioner what is required for their child in terms of relative rest, and paced return to learn and activity, and share relevant information with the school.
- Be knowledgeable about concussion symptoms. That may be via pamphlets, email and/or information sessions, preferably at the start of the school year or sports season.
- Understand the risk of delayed diagnosis and recovery plan on their child's recovery and long-term well-being.
- Be aware of school's policies and procedures to identify, report and support students with concussion.

Teaching Staff

Teachers should:

- Immediately report any known/possible concussion incident to the school Concussion Officer.
- Know signs and symptoms of concussion, red flags, and how to best manage concussion recovery within the classroom and school environment.
- Review students' graduated Return to Learn plan as required and make relevant accommodations for students.
- Communicate with the Concussion Officer regarding any observations or concerns about a student's recovery.
- Follow the school's usual procedures if they are concerned about possible changes in the student's behaviour, concentration or work.

Year Level Dean

Year Level Deans should:

- Communicate with a student with concussion and their whānau to develop a Return to Learn Plan, and to establish any required support or accommodations.
- Share a student's Return to Learn plan with other relevant school staff.
- Liaise with staff about assessment extensions, or examinations impacted by the student's concussion recovery where applicable.
- Communicate progress, resolution or issues with the Concussion Officer.

Sport Directors and Coaches

Sport Directors and Coaches should:

- Know signs and symptoms of concussion and how to report a suspected or confirmed concussion to the school.
- Create a positive and supportive team culture towards concussion.
- Remove students with a suspected concussion immediately from the sports field/court or activity and report to the concussion officer.
- Inform the student and parent of the suspected concussion as soon as possible (e.g. if incident occurs on school trip, or weekend sport).
- Ensure the student with concussion does not participate in physical activity until cleared by a doctor or other healthcare practitioner experienced with concussion (e.g. physiotherapist).
- Work with the student and Concussion Officer on a Return to Play plan, based on health professional guidance.
- Check in regularly with the student to ensure they follow their planned return to learn and activity process.
- Know the steps of the graduated return to play/activity program.

Medical Practitioners (Emergency Department physicians or GPs)

Medical Practitioners must:

- Complete the relevant concussion diagnosis and lodge an ACC claim (\$60..).
- Provide students and parents information about recovery and care.
- Provide students with information to be passed to their school to support their recovery.

- With the students' and/or their parents' consent, communicate with the Concussion Officer, as appropriate.
- Provide guidance on Return to Learn and physical activity. This can be completed on the provided template: **Appendix 2** Return to Learn plan.
- Provide medical clearance when appropriate, or refer to further care.
- Based on the 2025 ACC national guidelines for concussion, a student who has had 3 or more concussions in one season or more than 5 during their sporting career should be reviewed by a clinician with expertise in sports-related concussion (Sports & Exercise Medicine Physician, Neurologist or Neuropsychologist).

The ACC claim with the correct Read Code for concussion (S60..) is particularly important to allow the student to access the Concussion Services, if necessary. We cannot predict which student will require such service. Thus, it is crucial that the school's key contact person (e.g. Concussion Officer) liaises with students, parents and whānau to ensure that ALL students with a suspected concussion seek formal assessment and diagnosis from a GP or an Emergency Department (ED) Physician, or a physiotherapist with experience with concussion.

Physiotherapists

In the past, ACC regulations required a medical doctor (e.g. at ED or a GP) to diagnose concussions, and to lodge an S60.. READ code for this injury (on an ACC45 form), and clear the student for full return to sports.

Some physiotherapists who are experienced in concussion are also able to lodge an ACC concussion claim. This is particularly helpful when a GP appointment is not available within two weeks.

Physiotherapists can assess the student for concussion-associated signs and symptoms, and plan and implement rehabilitation and progressive return to activity interventions until full recovery. They help work out strategies with the student to reduce and manage symptoms.

If concussion symptoms persist longer than expected, the physiotherapist may refer the student to a Concussion Service via the student's GP.

It is recommended that the school identifies physiotherapists with concussion expertise in their vicinity.

Concussion Service

Students with concussion who do not recover within 4 weeks, or do not tolerate graduated activity should be referred to a Concussion Service. **Only GPs and some physiotherapists with experience in concussion can refer students to Concussion Services**, which are fully funded by ACC, with **no cost to the patient**.

The Concussion Service consists of various healthcare professionals, including Occupational Therapists, Physiotherapists, Neuropsychologists, Nurses and Medical Practitioners. These health care providers offer specialised assessments for concussion, provide a patient specific rehabilitation plan, and provide

information about strategies to reduce and manage symptoms. The Concussion Service provides this support to the person with concussion in their own communities.

Who can access Concussion Services?

Students who are not recovering as expected, or have persistent symptoms can access the Concussion Service. The healthcare practitioner must complete an ACC883 form to refer the student to the Concussion Service. The following requirements are needed to allow such referral:

- A student with a concussion in the last 12 months AND
- An accepted current ACC claim specifically for concussion (which must have been lodged by a GP or at an ED) AND
- Been diagnosed with mild or moderate concussion, or has post-concussion syndrome AND
- Has continued signs and symptoms of concussion which significantly impacts the student in their daily life AND
- Has additional risk factors, such as
 - unable to attend school for more than one week
 - a second or subsequent concussion within 6 months
 - post-traumatic memory loss (amnesia) lasting more than 12 hours
 - pre-existing mental health issues.

If a teacher suspects that the student has on-going concussion symptoms, the student and/or their parents and whānau should be recommended to consider seeking a referral by their GP to the Concussion Service (<https://www.acc.co.nz/assets/contracts/concussion-og.pdf>).

Recognising, Removing, Reporting, Referring and Recovering

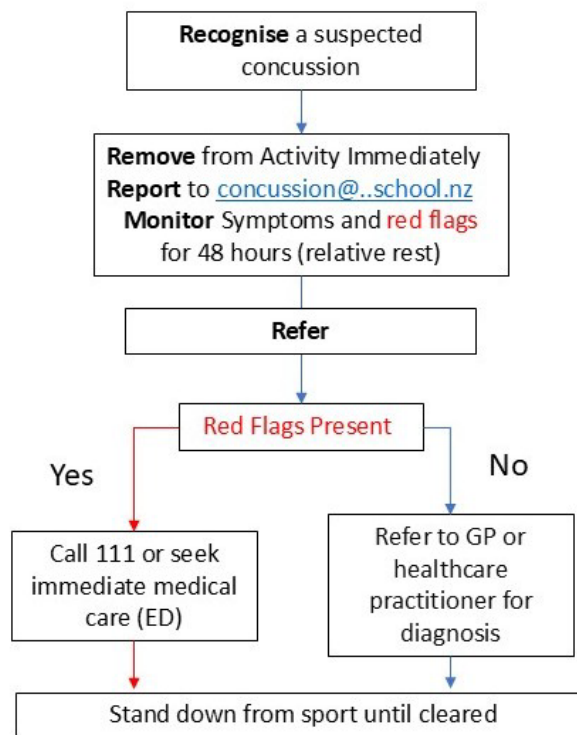


Figure 1. Recognising and referring a student with a suspected concussion in first 48 hours

Recognise and Remove

- A student who suffers a knock or strike to the head, a fall, collision, whiplash or sufficient impact to the body may have sustained a concussion.
- Check for neck injury, then immediately remove the student from play/activity. They must NOT return to sport/activity on the day of a suspected concussion.

Report

- Inform the parents and whānau and the school's concussion officer via phone or email (concussion@...school.nz or equivalent) that their child has a suspected concussion, noting what had happened, date, following the school's incidence reporting requirements.
- Monitor the student until a parent or caregiver arrives to collect them.
- A student with a **suspected concussion** should **not be left unattended** and should **not be sent home alone**.

The process for recognising or identifying a potential concussion and immediate management (first 48 hours) is illustrated in **APPENDIX 3: Concussion Identification Process**.

An example of a concussion incident form is provided in **Appendix 4**.

Student and Parent/Whānau are provided with Concussion Information Resources, APPENDIX 6: Information for Parents about Concussion and APPENDIX 7: Information for Students about Concussion

Refer

- **For any suspected concussion, the student must have an assessment with a health practitioner to confirm whether they have a concussion.**
- **Common concussion symptoms** that may develop over 48 hours include headache, dizziness, poor balance, nausea or vomiting, blurred vision or seeing stars, sensitivity to light or sounds, confusion or brain foggiess, ringing in the ears, feeling fatigued, irritable, sad or other emotions.
- Students with a suspected concussion who develop '**red flag**' symptoms (see Box below), must seek urgent medical help at an Accident and Emergency Clinic or hospital.
- If there is significant concern about the severity of the injury and/or symptoms, call an ambulance at 111.

Box 1. Red Flags that require urgent review

Complaint of neck pain	Loss of consciousness or seizures
Increasing confusion or irritability	Severe or increasing headache
<u>Repeated</u> vomiting	Unusual behaviour (different from normal)
Weakness or tingling/burning in arms or legs	Double vision
Becoming increasingly drowsy	Anyone who has inadequate supervision post-injury
History of bleeding disorder	Visible skull deformity
History of regular medication use that could results in prolonged bleeding (eg Warfarin, Aspirin).	

- **If no 'red flags' are evident**, the parents/whānau should monitor their child for concussion symptoms.
- **If symptoms worsen (as in Box 1)**, the student should seek immediate care.
- If a medical doctor (often a GP) is not available within 48 hours, the student may see a School Nurse (if applicable), or Physiotherapist who can help support their care and education until medical treatment can be sought. The School Nurse or Physiotherapist should liaise with the student and their parents/whānau and facilitate an appointment with a GP as soon as possible.

Recover

- The school must provide the parent and student written information about concussion (see **APPENDIX 6: Information for Parents about Concussion and APPENDIX 7: Information for Students about Concussion**).
- First 48 hours: relative physical and cognitive rest. That means that the student can move around the house, and minimise reading and electronic screen use. Light aerobic exercise that does not worsen symptoms during the activity is permitted.
- A graduated return to learning is needed, as well as graduated return to full activity and sports.
- Return to learn and social activities should come before return to sports contact training and competitive sports.
- If symptoms last longer than 4 weeks or graduated activity has not been tolerated, the students must be referred to a healthcare practitioner to review the diagnosis.
- The healthcare practitioner may refer the student to the ACC concussion service for specialised rehabilitation if they meet the criteria.

What happens if the student does NOT develop symptoms within 48 hours?

If no immediate symptoms occur following an incident, students are **still required to have 48 hours of relative physical and cognitive rest** as symptom onset can be delayed. It is recommended the student sees their GP to confirm whether or not they have sustained a concussion.

Headsmart Schools NZ: School Management of Concussion

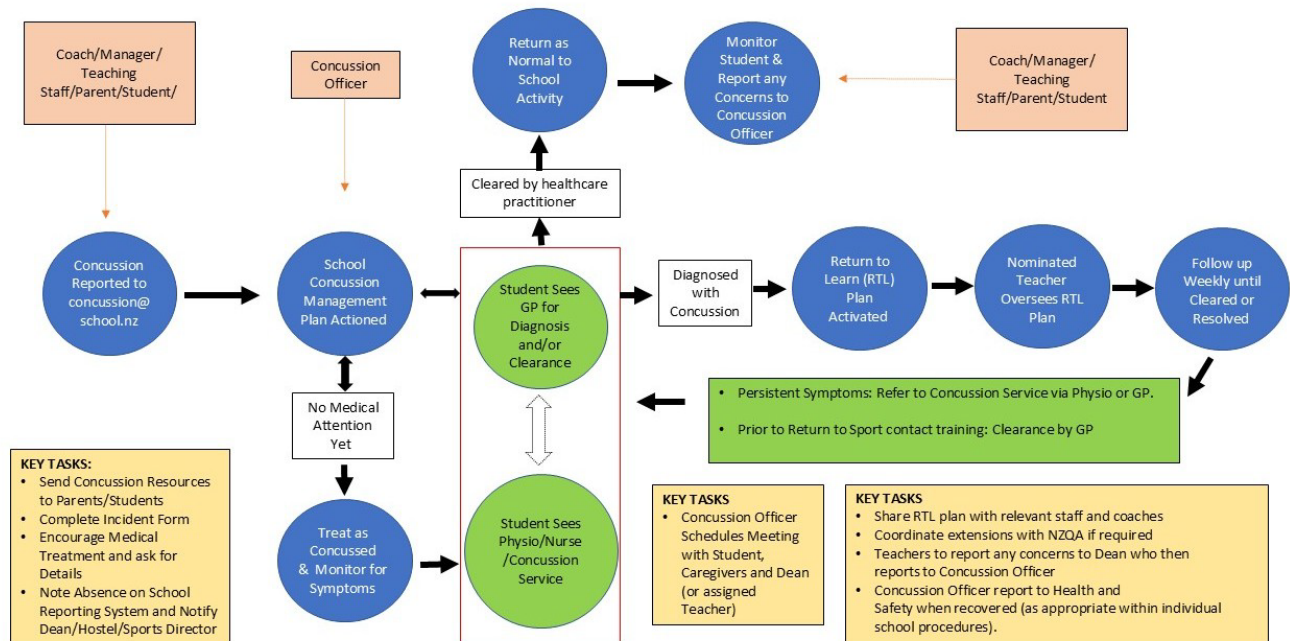


Figure 2. Headsmart Schools NZ Return to Learn Flowchart

- Following the **reporting of a concussion**, Concussion Officers must contact the parents/students, and the individual who reported the concussion as soon as possible (ideally within 24 hours of the incident occurring).
- A **concussion incident report**, or relevant school incident report must be filed and include:
 - Cause and description of injury
 - Signs and symptoms observed
 - Action taken by person in charge
 - Medical care received.

This must be passed to the school Health and Safety Manager.

- The **Concussion officer will notify all staff of the student's absence/potential concussion**. These include deans, teaching staff relevant for the student, sports directors/coaches and boarding hostels.
- The Concussion Officer will **investigate whether the student has received a medical diagnosis** or clearance. In New Zealand diagnosis of concussion should be made by a medical practitioner (GP or at ED). Some physiotherapists with specific experience with concussion may also make a diagnosis.
- If a GP appointment cannot be made within 48 hours, the student should be advised to **consult with a physiotherapist** to be assessed and to manage symptoms. The physiotherapist would assist the student and their parents to make a GP appointment as soon as possible.

- **Not assessed by a GP:** while the student is waiting for a GP appointment, the school needs to manage the student as though they have a concussion, following the required processes. If **symptoms are getting worse, the student must be taken to a hospital ED immediately.**
- If the incident occurred within 48 hours, students will be given permission by the Concussion Officer to stay home and rest. Information sheets about this will be provided to students and their whānau.

Return to Learn Plan Activated

The Concussion Officer will contact the Year Level dean to organise a student's **Return to Learn Plan**, and the School Sports Coordinator to define a **Return to Activity/Sports Plan**.

Return-to-learn plan:

- Includes accommodations recommended by medical professionals and/or student and teachers.
- The dean will share this plan with other staff members, and work with teachers/Ministry of Education Staff/NZQA on the student's behalf around assignment and assessment extensions.
- The dean should clearly communicate the plan to the student.
- The dean will report back to the Concussion Officer with this plan.
- The Concussion Officer should meet up with the student weekly for four weeks, or until clearance by a healthcare practitioner.
- A framework for concussion management, with a focus on the Return to Learn Plan can be found in the figure below and **APPENDIX 2: Return to Learn Process**

Return to Activity, Exercise and Sport

- Return to physical activity plans may start within 48 hrs at a symptom guided level that is appropriate for the individual. **Appendices 6 and 7** provide guidelines for information sheets for parents and students respectively.
- Some sport codes (such as rugby) may require medical clearance from a GP or physiotherapist with experience with concussion before returning to contact training.
- A graded, progressive return to physical activity/exercise plan should be guided by a healthcare practitioner experienced with concussion, and overseen by the sports coordinator or physical education teacher.
- Additional information about return to school after a concussion is provided in **APPENDIX 9: Return to Contact Sport/Exercise Plan**.

Persistent Symptoms or Concerns

The Concussion Officer will follow up with parents to suggest that their GP refers the student to the Concussion Service in the following cases:

- The student's challenges or symptoms are getting worse at any time, OR
- If the student has been absent from school due to the concussion for more than one week, OR
- The student still has ongoing symptoms for more than four weeks.

Appendices

Appendix 1: Implementation planning checklist for schools

Headsmart Schools New Zealand

Management of Concussion in Secondary schools Implementation planning checklist

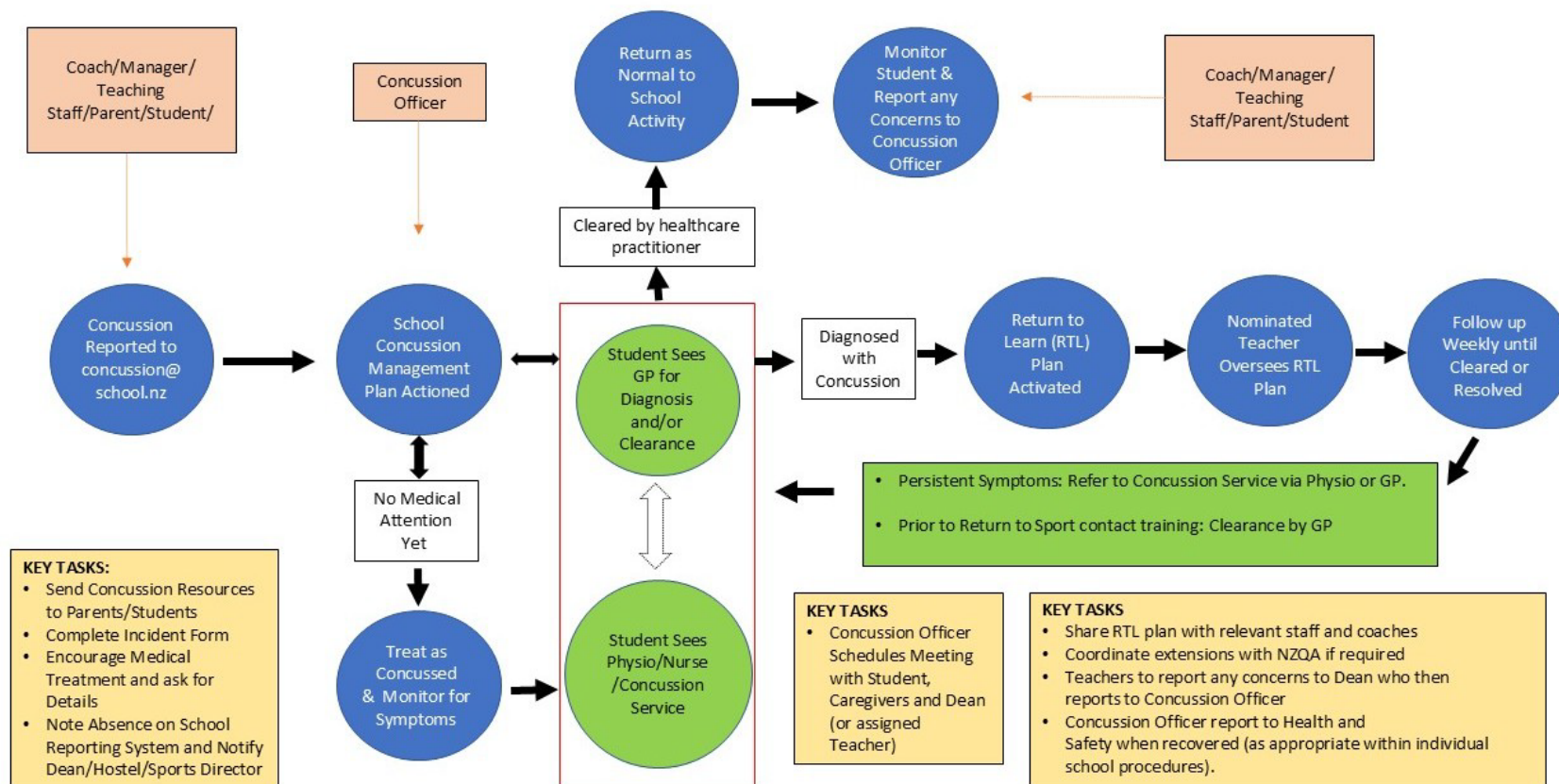
Identify key stakeholders implementing Headsmart Schools NZ (Driving team)	Name	Notes
<i>For example, school principal, director of sports, school nurse</i>		
School stakeholders involved in concussion management responsibilities		
<i>For example Deans, Nurses, Health and Safety committee, Sport Coordinator</i>		
Other resources available		
<i>For example, school clinic – how may this be used as part of Headsmart Schools NZ; specific communication platforms (e.g. KAMAR); or networks / relationships; or people that can help support</i>		

Key responsibilities	Assigned to [Role; name(s)]	Notes / How will this be done?
Concussion officer(s) role within the school. <i>"Who oversees concussion management?" (Headsmart Schools NZ guideline book page 7)</i>		
Ensure all relevant stakeholders understand their responsibilities (<i>see page 7</i>)		
Establish a direct way of reporting concussion (e.g. specific email address concussion@.....school.nz which is linked to the Concussion officer's email) <i>"How is concussion going to be reported?"</i>		
Activate an automated email response linked to the reporting email address, providing the reporting person with immediate advice (template for this email provided by research team). <i>"How will concussion notification/advice be shared?"</i>		
Identify who is responsible for communicating with coaches/manger/parents <i>"Does everyone know how to report concussion?"</i>		- Reminded of multiples times
Organising who will prompt parents to seek appropriate healthcare practitioner appointments <i>"How/when will students see a healthcare practitioner?"</i>		

<p>What other health provider is involved, such as a nurse, physiotherapist, or a member of the Concussion Service?</p> <p><i>"Who will communicate with that provider, if needed?"</i></p>		
<p>Develop a communication plan that includes all relevant stakeholders</p> <p><i>"How will all teachers, parents, coaches be informed of concussion/stand down?"</i></p>		
<p>Activate and document a tailored return to learn plan (accommodations etc)</p> <p><i>"Who manages academic accommodations?"</i></p>		
<p>Monitor students' return to learn.</p> <p><i>"Who checks in on student?" "How are students to be tracked and reported?"</i></p>		
<p>Making educational content provided as part of Headsmart Schools NZ accessible to all stakeholders within schools (i.e., concussion cards for coaches, educational resources for parents, students etc.).</p>		

APPENDIX 2: Headsmart Schools NZ Process

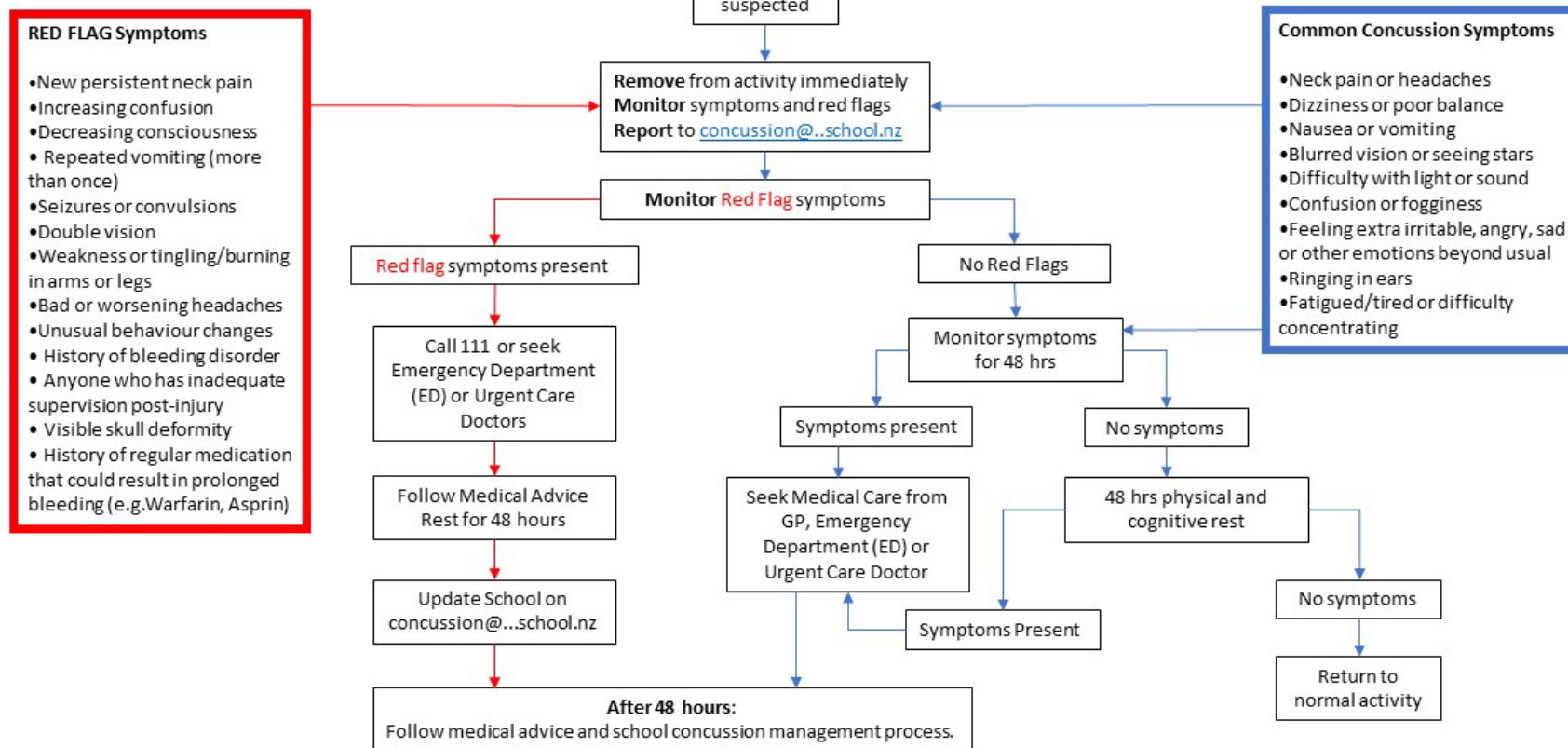
Headsmart Schools NZ: Return-to-Learn Process



APPENDIX 3: Concussion Identification Process

Headsmart Schools NZ management of Concussion in Secondary schools

Concussion Identification Process for Staff and Coaches



APPENDIX 4: Suspected Concussion Incident Form

Headsmart Schools NZ management of Concussion in Secondary schools

Suspected Concussion Incident Report form

This form is to be completed by the Concussion Officer to provide formalised documentation of concussion incidents at the school.

Student	Date
Contact Information	
Emergency Contact Person for Student	Were they contacted? Y/N Date:
Name and Position of Person Reporting Concussion:	
Date of Incident	Activity and Location of Incident:
Description of Incident:	
Has Student Seen GP or other health practitioner? Yes / No	Concussion Diagnosed: Yes / No
Medical advice or accommodations recommended by GP or other healthcare practitioner:	
GRTL Plan required? Yes / No/ Maybe	Dean/ RTL staff (if applicable):
Staff signature: _____ Student signature: _____ DATE: _____	

APPENDIX 5: Medical Information Form

Headsmart Schools NZ management of Concussion in Secondary schools
Medical Assessment Letter for High School Concussion

To Whom it may concern,

The following student has presented for concussion assessment. Permission has been given by them to forward the following information to school to support a Return to Learn Plan.

Student Name: _____ DOB: _____

_____ Has not sustained a concussion and is able to return to normal activity

_____ Has sustained a concussion.

The following recommendations for return to school:

	48 hours complete relative rest
	Gradual return to school, beginning with _____ hours per day.
	Provision of a quiet space at school to avoid noises
	Students to leave class or other school situation if feeling poorly
	Students take mini breaks during class time/leave early as required
	Recommend paper-based learning to reduce screen time
	Extensions for due dates/assignments/exams
	Postponement of exams or assessment
	No PE or Sport until _____
	Other recommendations: - - -

Students and whānau should meet weekly with staff to review the progress on recommendations and adjust accordingly.

The symptoms should resolve and the individual be back to normal schooling within _____ weeks.

If symptoms persist or if the school or student has any concerns, please refer the student back to the GP or healthcare practitioner with concussion experience. Please support them in accessing further medical treatment/assessment for these.

Signed: _____

Date: _____

APPENDIX 6: Information for Parents about Concussion

Headsmart Schools NZ management of Concussion in Secondary schools

Concussion Information for Parents, Caregivers and Whānau

Our School/College has a concussion management process in place to support students.

All incidents outside of school must be reported to the concussion officer _____ who will oversee the management of return to learn and play, in conjunction with your child's year level Dean.

What is Concussion?

A concussion is a mild traumatic brain injury caused by impact to the head or body. You do not need to be unconscious to be concussed, and even minor impacts can cause a concussion.

With relative rest, concussions usually resolve quickly. The recovery process must be gradual and guided by symptoms. Early guidance from a medical or healthcare practitioner experienced with ongoing concussion management will minimise risk of symptoms becoming persistent.

It is very important to visit a doctor (by a GP or at a hospital Emergency Department, ED) and follow their advice if symptoms get worse or if your child is not returning to activity due to the symptoms.

As it may be difficult to remember things when having a concussion, a parent or other member of the whānau should preferably accompany your child to the doctor.

If your child has been knocked or struck unconscious, or experience any of the following, they should seek immediate medical treatment.

Red Flags that require urgent review

Complaint of neck pain	Loss of consciousness or seizures
Increasing confusion or irritability	Severe or increasing headache
<u>Repeated</u> vomiting	Unusual behaviour (different from normal)
Weakness or tingling/burning in arms or legs	Double vision
Becoming increasingly drowsy	Anyone who has inadequate supervision post-injury
History of bleeding disorder	Visible skull deformity
History of regular medication use that could result in prolonged bleeding (eg Warfarin, Aspirin).	

How to take care of your child with concussion:

During the first two hours, it is important not to leave your child alone. Then, monitor your child for any signs and symptoms over 48 hours. If you notice any of the above symptoms, contact your GP, take your child to an ED or Urgent Doctors.

There is no need to wake your child or limit their sleep during the first 48 hours – rest is important to recovery.

It is important to act on symptoms, as ignoring them will prolong recovery.

If symptoms persist, your child may be referred to a Concussion Service. ACC funds the Concussion Service and the student/whānau do not pay a surcharge.

What is the recovery process?

For 48 hours after an injury, it is important your child has relative physical and cognitive rest. This means limiting physical activity and screentime, concentration, and schoolwork.

They can walk around the house. Your child may sleep a lot during this time and take time away from social gatherings.

After 2 days, light mental and physical activity can gradually increase, as long as your child remains symptom free. Follow the Return to Learn process recommended by the school.

The school will work with your child to develop a personal Return to Learn Plan. They will make accommodations for assessments and assignments during the recovery time.

Should symptoms get worse again, decrease the amount of thinking work and physical activity again. Make sure your child does not rush through stages, as this can prolong recovery times.

Be aware of your child's mental health during their recovery. Talk to your child, and if you have any issues or concerns contact a medical professional, mental health provider, physiotherapist, or your school's concussion officer to seek appropriate support.

Link to ACC Sports-related Concussion Guidelines: <https://www.acc.co.nz/assets/Uploads/National-concussion-guidelines-v4.pdf>

Rugby-specific guidelines: <https://www.nzrugby.co.nz/assets/G RTP-Concussion-Poster.pdf>

Who do I contact at school?

Please email concussion@.....school.nz to inform the school about your child's concussion.

The designated Concussion Officer _____ will contact you or your child to support their return to learn and activity/sport.

To support your child's return to the classroom, please share relevant information about medical or other health provider treatment, advice or diagnosis with the school.

Gradual Return to Learn and Sports Process

Stage	Return to mental activity	Return to physical activity and training
1. Rest (48 hours)	Avoid any activities that provoke symptoms. Rest from thinking tasks and screens, and relative physical rest (light activities around the house)	Relative rest from – light activities of daily living around the house that do not provoke symptoms are OK. Gentle exercise, that is walking around the house.
2. Things that do not give you symptoms*	No symptoms with things that you would do at home. Minimum of 24 hours between stages before progressing. Gradually introduce more daily activities. Activities away from school/work: e.g. reading, texting, screen time or watching TV, as long as they do not increase symptoms (e.g. headaches, dizziness, fatigue). Start with 5 minutes at a time.	Light physical activity, e.g. short walks outside. Start with 5-15 minutes at a time and gradually build up.
3. School/Work activities at home*	No symptoms with study/work. Symptoms should be improving. Increase study/work-related activities with rest periods. Reading, checking emails, homework or other thinking tasks.	Increase intensity of exercise guided by symptoms.
4. Return to School/Work (Part-Time)*	Gradually return to school and exercise, guided by symptoms. If symptoms worsen, drop back a stage. May need to start with a half day at school or take regular or additional breaks during the day.	Start training activity without risk of head impact, no contact training.
5. Return to School/Work (Full-Time) Earliest Day 14	Return to normal school/work & sport-specific training; Full return to school BEFORE full training No Competitions/Games Gradually increase school attendance until fully back at school. May need to take breaks during the day to rest their brain until they tolerate a full day.	May progress to full sports specific training if they have: Completed Stages 1-4 AND have fully returned to school/learning activities AND have no symptoms AND at least 14 days post-injury
6. Return to sports competition Earliest Day 21	Return to sports competition and games; Minimum 21 to 23 days following concussion Fully back at school.	Can return to sports competition and games if they have completed Stage 5 AND are Symptom free during sports training AND are at least 21 days post-injury. For contact sport: whilst not mandated by ACC, it is strongly recommended that the student seeks clearance from a health practitioner experienced in concussion management prior to return to contact sport competitions/games

* A minimum of 24 hours is required for stages 2 to 4. If symptoms get worse, drop back a stage.

APPENDIX 7: Information for Students about Concussion

Headsmart Schools NZ management of Concussion in Secondary schools

Concussion Information for Students

If you receive an injury to your head or impact to your body, you may have sustained a concussion. With rest and gradual return to school and sports, these usually resolve quickly.

You should also report any concussion to your school concussion officer as soon as possible so that a support plan can be set up with you.

It is very important to visit a doctor, who will assess whether you have concussion. As it may be difficult to remember things when having a concussion, a parent or other member of the whānau should preferably accompany you to the doctor.

What to do if you have a concussion:

Over the first 48 hours, it is important to rest your brain and body. That means staying home from school, walking around the house if that does not make the pain or symptoms worse, and limiting:

- Screen time (on any electronic device e.g. phone, TV, computer, Tablets)
- School work/concentration
- Loud noises and social situations
- No alcohol
- No driving

The more you rest during this time, the faster the recovery and return to normal.

Book a doctor appointment as soon as possible, to be assessed or cleared of concussion.

What to watch out for:

If any of the following symptoms occur, inform your parents/caregivers and contact your doctor for advice. If symptoms worsen, it is important to get immediate medical care – this could indicate a more serious injury:

Complaint of neck pain	Loss of consciousness or seizures
Increasing confusion or irritability	Severe or increasing headache
<u>Repeated</u> vomiting	Unusual behaviour (different from normal)
Weakness or tingling/burning in arms or legs	Double vision
Becoming increasingly drowsy	Anyone who has inadequate supervision post-injury
History of bleeding disorder	Visible skull deformity
History of regular medication use that could results in prolonged bleeding (eg Warfarin, Aspirin).	

It is important not to ignore these symptoms, as this will delay recovery.

The Recovery Process

- After 48 hours, you can begin the Gradual Return to Learn process.
- Your school will support you through the Return to Learn Process and manage your school workload, assessments or commitments. Your year level dean will make a plan and communicate with school staff on your behalf.
- Make sure you see your doctor before returning to sport contact training.
- Take care of your mental health during recovery. Talk to your parents, coaches and friends, and ask for help if you need it.
- **Who to contact:** It is important to contact your doctor or physiotherapist (or other health provider looking after you) if you have any signs or symptoms of concussion, or if the symptoms get worse. Please also inform _____ at concussion@..school.nz, who will inform your teachers and deal with any immediate assessment/commitment concerns so you can rest. Your teacher/dean will contact you to make a return to learn plan.
- Rugby-specific guidelines: <https://www.nzrugby.co.nz/assets/G RTP-Concussion-Poster.pdf>

Headsmart Schools NZ Gradual Return-to-Learn and -Sports Processes

	Return to mental activity	Return to physical activity and training
Stage 1 First 2 days Relative Rest	Avoid any activities that provoke symptoms. Rest from thinking tasks and screens, Relative physical rest (light activities around the house)	Relative rest from – light activities of daily living around the house that do not provoke symptoms are OK. Gentle exercise, that is walking around the house.
Stage 2 Things that do not give you symptoms*	No symptoms with things that you would do at home.	
	Minimum of 24 hours between stages before progressing. Gradually introduce more daily activities. Activities away from school/work: e.g. reading, texting, screen time or watching TV, as long as they do not increase symptoms (e.g. headaches, dizziness, fatigue). Start with 5 minutes at a time.	Light physical activity, e.g. short walks outside. Start with 5-15 minutes at a time and gradually build up.
Stage 3 School/Work activities at home*	No symptoms with study/work. Symptoms should be improving.	
	Increase study/work-related activities with rest periods. Reading, checking emails, homework or other thinking tasks.	Increase intensity of exercise guided by symptoms.
Stage 4 Return to School/Work (Part-Time)*	Gradually return to school and exercise, guided by symptoms. If symptoms worsen, drop back a stage.	
	May need to start with a half day at school or take regular or additional breaks during the day.	Start training activity without risk of head impact, no contact training.
Stage 5 Earliest 14 days post-injury Return to School/Work (Full-Time)	Return to normal school/work & sport-specific training; Full return to school BEFORE full training No Competitions/Games	
	Gradually increase school attendance until fully back at school. May need to take breaks during the day to rest their brain until they tolerate a full day.	May progress to full sports specific training if they have: Completed Stages 1-4 AND have fully returned to school/learning activities AND have no symptoms AND at least 14 days post-injury
Stage 6 Earliest 21 days post-injury Return to sports competition	Return to sports competition and games; Minimum 21 days following concussion	
	Fully back at school.	Can return to sports competition and games if they have completed Stage 5 AND are symptom free during sports training AND are at least 21 days post-injury. For contact sport: Whilst not mandated by ACC, it is strongly recommended that the student seeks clearance from a health practitioner experienced in concussion management prior to return to contact sport competitions/games

* A minimum of 24 hours is required for stages 2 to 4. If symptoms get worse, drop back a stage.

APPENDIX 8: Return-to-Learn Plan

Headsmart Schools NZ Management of Concussion in Secondary schools

Individual Return to Learn Plan following Concussion (extended recovery)

This plan supports students with concussion symptoms to gradually return to learning. It outlines the subjects and assessments and steps to be taken. An individual Return to Learn plan can be either formal (written) or informal (verbal), using this plan as reference point. However the plan is developed, it is important to be communicated to relevant teachers/staff, and reviewed every week until symptoms resolve or medical clearance is received.

1) Information – review and attach any medical assessment letter or recommendations

Student:	Year Level:	TIC:
Date of Plan:	Injury Date:	Medical Advice Given: Y/N

2) Concussion Symptoms Experienced which may impact learning -

- ☐ Headache
- ☐ Tiredness
- ☐ Nausea
- ☐ Difficulty concentrating
- ☐ Sensitive to light
- ☐ Sensitive to noise
- ☐ Trouble using screens
- ☐ Restless or sore – needing regular movement
- ☐ Forgetful/confused/dazed

2) Student Commitments – Identify all subjects and teachers, as well as extra-curricular activities that need to be notified of the Return to Learn.

Subjects/Activities	Level	Teachers	Upcoming Assessments

3) Return to Learn Plan –Tick boxes that apply to students based on medical accommodations. List any other actions

Attendance:

- ☐ No attendance for ____ days
- ☐ Part Days until:
- ☐ Full days with intermittent breaks
- ☐ Maximum ____ classes per day

Workload:

- ☐ No homework for ____ days
- ☐ Limited homework of ____ minutes
- ☐ No change required

Breaks:

- ☐ Permission to leave class for mini break
- ☐ Permission to rest on desk
- ☐ Permission to leave early or arrive late to class
- ☐ Breaks no longer required

Testing/Assignments

- ☐ No assessments for ____ days
- ☐ Extension on assessments due before ____
- ☐ Extra time for exams/internals
- ☐ Open book tests
- ☐ No changes required

Visual Stimulus

- ☐ Pre-printed notes or summary of topics
- ☐ Students avoid screens
- ☐ Enlarged font use
- ☐ Sunglasses or hats allowed in classroom
- ☐ None

Physical Activity:

- ☐ No physical activity or recreation
- ☐ No activity during lunch or breaks
- ☐ Gradual return to activity permitted
- ☐ Normal activity

Other Actions Required (e.g. rest breaks during class)

- _____
- _____
- _____
- _____

Date for review:	Completed:
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Signed:

	DATE:
	DATE:

APPENDIX 9: Return-to-Contact Sport/Exercise Plan

Headsmart Schools NZ Management of Concussion in Secondary Schools

Return to Contact Sport/Exercise Plan

This plan is a guide for schools to manage student's return to sport /exercise for contact sports. This can be completed by sports coordinators, teachers or coaches. It is important this information is shared across all sports/activities students participate in.

Student:	Year Level:	TIC:
Date of Plan:	Injury Date (Day 0):	Medical Advice Given: Y/N

ACC guidelines (2025) for sports-related concussion (also apply to non-sports related concussions)

Stage 1	Days 1 and 2	Relative for 24-48 hours. Light activities around the house that do not provoke symptoms are OK. <ul style="list-style-type: none"> Minimise screen time. Walking around the house.
Stage 2	Minimum of 24 hours between stages before progressing. Symptoms should be progressively improving. If symptoms worsen, drop back a stage.	Gradually introduce daily activities: Activities away from school/work (introduce TV, increase reading, games, etc). Exercise – light physical activity (e.g. short walks outside).
Stage 3		Increase tolerance for mental & exercise activities: Increase study/work-related activities with rest periods. Increase intensity of exercise, guided by symptoms.
Stage 4		Return to work/study & sport training: Part-time return to work/education. Start training activity without risk of head impact.
Stage 5	Earliest Day 14	Return to normal work/study & sport training: Completion of Stages 1-4 AND Fully reintegrated into work or school AND Symptom free AND at least 14 days post-injury: re-integration into full sport-specific training can occur
Stage 6	Earliest Day 21	Return to sports competition Completion of Stage 5 AND Symptom free during sports training AND At least 21 days post-injury AND whilst not mandated, it is strongly recommended for the student to have received clearance from a health practitioner experienced in concussion management.

Signed:

_____ Student

DATE:

_____ Staff

DATE:

Useful websites

Ministry of Education Te Kete Ipurangi Concussion guidelines: <https://inclusive.tki.org.nz/guides/brain-injury/align-processes-and-policies-with-national-guidelines/>

Accident Compensation Corporation (2025). Sport Concussion in New Zealand: National Guidelines <https://www.acc.co.nz/preventing-injury/sport-recreation/concussion-in-sport>

ACC Concussion service providers. <https://www.acc.co.nz/for-providers/treatment-recovery/referring-to-rehabilitation/concussion-service-providers/>

Healthify NZ, Concussion. <https://healthify.nz/health-a-z/c/concussion/>

Publications

Salmon DM, Badenhorst M, Keung S, Lucas P, Mossman K, Thompson K, Walters S, Sole G (2023) **Designing, implementing and evaluating a framework for managing concussions in New Zealand secondary schools: A study protocol.** *New Zealand Journal of Physiotherapy*, 23:S1-S9. <https://dx.doi.org/10.15619/nzjp.v51i3.276>

Salmon D, Badenhorst M, Zoellner A, Skilton D, Mossman K, Lucas P, Thompson K, Walters S, Keung S, Sole G (2025). **Slipping through the cracks? Concussion management in Aotearoa New Zealand secondary schools.** *Journal of School Health*, 95:317-331. <https://doi.org/10.1111/josh.13544>

Badenhorst M, Skilton S, Zoellner A, Lucas P, Salmon DM, Walters S, Mossman K, Keung S, Thompson K, Sole G (2025). **Sport, healthcare and educational organisations' perceptions of a framework for managing concussion in New Zealand schools: A qualitative study.** *Journal of Primary Care*. Accepted June 2025. <https://doi.org/10.1071/HC24190>

Sole G, Badenhorst M, Mossman K, Caya R, Zoellner A, Sutherland C, Skilton D, Salmon D, Keung S, Lucas P, Thompson K, Walters S (2025). **"Easy when everyone is on board": Implementing a framework for managing concussions in New Zealand secondary schools.** *New Zealand Journal of Physiotherapy*, 53, 53-69. <https://doi.org/10.15619/nzjp.v53i2.452>