School Camp Management Plan and Check-lists for Type 1 Diabetes
[To be used in conjunction with Action Plan]

Understandably, most students will want and should be given every opportunity to attend school camps or overnight excursions, as a part of the school’s learning program. Camps and excursions will vary from school to school and camp situations will vary between year groups and schools. Most camps for younger students may be close to medical facilities, and some schools will encourage or allow parent participation and support. For older students, camps may involve greater independence, no parents, perhaps no nursing staff, more remote locations and often physically demanding situations over an extended time period. For this reason, preparation requirements for camps will vary. In all cases, schools should refer to their education sector’s camp/excursion policy in conjunction with this Camp Management Plan and Checklist, and to the student’s Diabetes School Action Plan.

Students with Type 1 Diabetes can participate fully in a camp program. It is recommended that students who attend camp be reliably independent in the care of their diabetes. This may include the ability to:

- inject insulin
- test blood glucose levels
- recognise and treat hypoglycaemia
- count carbohydrates
- understand the need for meals to be on time
- understand the need for extra food before, during and after exercise.

Staff members attending camp are advised to become familiar with diabetes and the needs of their students by completing relevant training with a parent/carer or relevant organisation.

Making a Plan

A. The Check-Lists

Diabetes WA & specialist staff from Princess Margaret Hospital (PMH) have put together check lists to assist schools and families to identify considerations when planning diabetes management for a student attending a school camp. We encourage families and school staff to meet and discuss these considerations early in the school year. These check-lists may highlight where students and/or staff require training or an update of specific diabetes management skills.

B. Camp Management Plan

With the aid of the Camp Management Plan, families and school staff can develop a coordinated plan to address the issues, which may arise on a school camp. These include the impact of camp activities on glucose levels and insulin management. The extra energy needed for swimming, hikes and other camp activities are considered. This Camp Management Plan will apply, with the student’s regular action plan, for the camp duration.
**C. Camp Action Plan**

A copy of the student’s Diabetes School Action Plan, which ordinarily accompanies their Diabetes Management Plan for school, should be attached to the Camp Management Plan. The Action Plan includes a flow chart with instructions for dealing with hypoglycaemia (hypo) and hyperglycaemia (hyper). This is an important document that should be made readily available for all staff during the camp duration.

**Check-List for Families**

☐ Skills Refresher: Student

Revise and refresh diabetes skills for your child. It is recommended that students who attend camp be reliably independent in the care of their diabetes. It is essential to arrange extra education before the camp if needed.

**Does the student know how to:**

1. Check blood glucose levels?  ☐ Yes  ☐ With supervision  ☐ No
2. Check ketone levels?  ☐ Yes  ☐ With supervision  ☐ No
3. Record blood glucose/ketone levels?  ☐ Yes  ☐ With supervision  ☐ No
4. Treat high/low blood glucose levels?  ☐ Yes  ☐ With supervision  ☐ No
5. Dial up and administer insulin?  ☐ Yes  ☐ With supervision  ☐ No

**Does the student on pump know how to:**

1. Suspend and/or disconnect the pump?  ☐ Yes  ☐ With supervision  ☐ No
2. Calculate and perform meal/correction bolus?  ☐ Yes  ☐ With supervision  ☐ No
3. Insert a new infusion set?  ☐ Yes  ☐ With supervision  ☐ No
4. Give insulin via pen/syringe?  ☐ Yes  ☐ With supervision  ☐ No
5. Utilise the temporary basal feature  ☐ Yes  ☐ With supervision  ☐ No
6. Troubleshoot pump alarms or malfunctions  ☐ Yes  ☐ With supervision  ☐ No

*If NO to any of the above, please enable your child to learn or practice these skills.*

☐ Skills Refresher: Staff

See Checklist for Schools below. Provide staff with information about diabetes before the camp (ask the Principal to contact Diabetes WA for staff training if required). It is also useful if your child has one or two friends who know about diabetes and hypos and can act as buddies to alert teachers if there is a concern. Try to identify one or more staff that will take responsibility for any extra supervision that your child needs.

☐ Camp Program

Obtain activities program and discuss with your Diabetes Nurse Educator (DNE) or Doctor during your clinic visit if required. Often the activity levels on camp will be higher than usual and lower insulin doses will be necessary. This is usually in the range of 15-30 per cent less than usual doses.
☐ **Camp Meals and Snacks**
Discuss food and meal needs with school so that they can make necessary arrangements with camp catering staff. Arrange for extra fast and slow acting carbohydrate food to be available to treat hypos and prepare for exercise. Overnight access to carbohydrate containing foods will also be necessary. For example: If access to food is limited during an extended activity the student will need to carry or have access to additional carbohydrate at all times.

☐ **Supplies**
Arrange for the supplies your child will need whilst on camp. In most cases, they will need:
- two bottles/vials of each type of insulin in addition to pen or pump
- glucagon
- a blood glucose meter
- extra batteries
- test strips
- urine or ketone test strips
- hypo foods and
- a means to keep the insulin cool in hot weather if a refrigerator is not available.

☐ **Hypo Kit**
Arrange for a hypo kit/s to be available at the camp, with instructions for staff about its use.

☐ **Contact Details**
Make arrangements so your child or staff can contact you. The family will be the contact point to discuss blood glucose levels and insulin doses while at camp. The family can contact PMH as needed for advice.

☐ **Remote Locations**
In cases where camps are in remote locations, you will need to discuss with the Principal whether there is a need for additional staff training. In cases where no medical staff is attending camp and/or the camp is not near medical facilities, extra training will be necessary. Usually in cases of severe hypo the Ambulance Service would be called and ambulance officers would give glucagon or a glucose infusion. However, on a remote camp where medical help may be delayed, staff will need to be trained in how to administer a glucagon injection in cases of severe hypo.

☐ **Camp Management Plan (attached) and Action Plan**
This will be different from the regular Diabetes Management Plan for school. Provide information to the school on expected target blood glucose levels, testing times, nighttime routine, expected insulin regime and doses while on camp. The student’s usual Diabetes School Action Plan should be attached to the student’s Camp Management Plan. Please contact Diabetes WA if school is in need of Management and Action Plans.
Check-List for Schools

☐ Skills Refresher
Revise and refresh diabetes management skills for staff (contact Diabetes WA if staff training is required). Check that all staff responsible for the student’s care on camp know when to call for help, the emergency medical evacuation procedures, and are familiar with correct injection technique so they can appropriately supervise the student.

Are staff:

1. Familiar with blood glucose testing □ Yes □ No
2. Able to suspend a pump □ Yes □ No
3. Confident to treat a hypo □ Yes □ No
4. Familiar with medical emergency procedures □ Yes □ No
5. Familiar with blood ketone testing □ Yes □ No
6. Familiar with injection technique □ Yes □ No

☐ Remote Locations
In cases where camps are in remote locations you will need to discuss with the Principal whether there is need for additional staff training in how to administer a glucagon injection in cases of severe hypo with limited access to emergency medical care.

7. Is the camp remote; with limited access to emergency medical care? □ Yes □ No
If yes, has a staff member(s) completed Glucagon training? □ Yes □ No

☐ Camp Meals and Snacks
Provide the family with a detailed meal program (including estimated timing of meals and access to food outside of these times). Carbohydrate foods should be served at every meal and snack time. For example; if meal times fluctuate each day of the camp, some additional planning may be required. Additional carbohydrate foods are needed for exercise and must be readily available where the exercise is taking place.

☐ Camp Program
Provide the family with a detailed activity program. The extra exercise at camps increases the risks of hypos. Insulin dosages are usually reduced by a quarter to a third; however, staff are not expected to be involved with adjusting doses.

☐ Hypo Kit
A hypo kit is a pack containing fast acting and sustaining carbohydrates. Arrange for a hypo kit/s to be available at the camp, with instructions for staff about its use. In cases of severe hypo, the Ambulance Service would be called and ambulance officers would give glucagon or a glucose infusion. The student needs to know it is their responsibility to have a hypo kit on their person at all times. On a remote camp where medical help may be delayed, a trained staff member must be available to give a glucagon injection in cases of emergency.
☐ **Contact Details**  
Make arrangements so staff can contact the child’s parents to discuss blood glucose levels and insulin doses while at camp if this is necessary/possible. In the emergency event that a parent/carer cannot be reached, make arrangements so staff can contact the PMH triage phone line.

☐ **Camp Management Plan (attached) and Action Plan**  
This will be different to the regular Diabetes Management Plan for school. Obtain information from the family on expected target blood glucose levels, testing times, nighttime routine, expected insulin regime and doses while on camp.

The student’s usual Diabetes School Action Plan (for pumps, MDI or BD) should be attached to the Camp Management Plan. Please contact Diabetes WA if school are in need of Management and Action Plans.

8. The Principal has ensured the student’s Diabetes School Action Plan?  
Is reviewed and attached to Camp Management Plan? ☐ Yes ☐ No

Action plan example:
School Camp Management Plan for Type 1 Diabetes

[To be used in conjunction with Action Plan]

This document is to be read in conjunction with the School Camp Check-lists for Type 1 Diabetes and your education sector’s camp/excursion policy. The student’s usual Diabetes School Action Plan should also be attached for management of hypoglycaemia (hypo) and hyperglycaemia (hyper).

Parents are requested to arrange a meeting with relevant school staff to discuss the contents of this document. This form is to be completed in consultation with the family. If needed, families should speak to their PMH Diabetes Education Team/treating Diabetes Nurse Educator (DNE) at the clinic visit prior to the camp departure.

The use of this camp management plan is to assist in risk management when supervising a student with diabetes while on excursion from the regular school environment. Diabetes WA and PMH do not accept any liability for any injury, loss or damage incurred by use or misuse of this plan.

<table>
<thead>
<tr>
<th>Student Name: ____________________________________________</th>
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<tbody>
<tr>
<td>DOB: <em><strong>/</strong></em>/_____    Year: _____    Departure date of Camp: <em><strong>/</strong></em>/_____</td>
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<tr>
<td>Contact Numbers:</td>
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<tr>
<td>Parent/Guardian 1</td>
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<tr>
<td>Name: ____________________    Contact Number: ____________________</td>
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<tr>
<td>Parent/Guardian 2</td>
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<tr>
<td>Name: ____________________    Contact Number: ____________________</td>
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<tr>
<td>Closest medical facility to camp:</td>
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<tr>
<td>________________________________</td>
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<tr>
<td>Contact Number: ____________________</td>
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Blood glucose monitoring

Blood glucose levels will be checked routinely during the following times:

- Before breakfast, lunch and dinner
- Before morning and afternoon snacks
- Before bed
- At midnight and 3 am (supervised by an adult)
- Any time student is showing signs of a “hypo” or illness.

An ideal range for blood glucose levels is 4-8mol/L. It is not unusual for the result to be outside this range.

Preferred pre-bedtime BGL (range): ________________

ACTION is needed if the BGL is < 4mmol/L or > 15mmol/L. (Refer to the student’s Diabetes School Action Plan). Should you wish for any further checks, please note what times here:

______________________________________________________________

My child is aware when they are experiencing a hypo

☐ Yes  ☐ A little  ☐ No (extra supervision is required) My child’s typical hypo symptoms are:

______________________________________________________________

Insulin requirements:

☐ Injection

Student able to administer insulin? ☐ Yes  ☐ No

Staff member allocated to supervise: ________________

Usual Insulin Requirements:

<table>
<thead>
<tr>
<th>Insulin Type</th>
<th>Breakfast Dose</th>
<th>Lunch Dose</th>
<th>Dinner Dose</th>
<th>Snacks</th>
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Insulin Adjustments/Corrections whilst on camp:

The student’s insulin needs will change on camp due to the change in exercise, eating and sleep patterns. If you wish, please note any changes in dose that your child may implement.

______________________________________________________________

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Pump (Type or model) ________________________________

- Insertion site: change required while on camp □ Yes □ No
- Continuous glucose monitoring site: change required while on camp □ Yes □ No □ NA

Staff member allocated to supervise bolus doses: ________________

Please record basal of bolus settings on the table below or attach the download from your pump settings page. This will provide a paper backup if the settings are lost.

<table>
<thead>
<tr>
<th>BASAL RATES</th>
<th>CARBOHYDRATE RATIO</th>
<th>SENSITIVITY</th>
<th>TARGET BGL</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time u/hr</td>
<td>Time gms/unit</td>
<td>Time mmol/L / Unit</td>
<td>Time Target</td>
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Every attempt will be made to contact parents to discuss any required adjustments to insulin dosage, but in the event of limited network coverage, please outline below, any adjustments to insulin dose. For those on a pump, set a temporary basal rate at the first strenuous activity.

If the BGL’s are consistently above 15.0mmols: ______________________________________

If BGL’s are consistently below 4mmols: ______________________________________

Meals on Camp

Supply additional carbohydrate snacks in the event a meal/snack is delayed or activity runs over time. Examples include muesli bars, packets of sultanas etc.

Comments after family have viewed and discussed the meal schedule for the camp.

________________________________________________________________________

Does the student have coeliac disease?

□ No □ Yes – please list appropriate hypo foods

________________________________________________________________________
**Activity**

Physical activity of all forms usually lowers blood glucose levels. Depending on the intensity of activity, glucose levels may drop quickly or up to 24 hours later. The best way to avoid a hypo is to check blood glucose levels before, during and after exercise. Be sure to check blood glucose levels during the night following daytime exercise.

**Recommendations for insulin adjustments for planned activity:**

- **MDI** – Reduce the pre exercise bolus insulin dose by 50% if activity is within 1 hour of insulin injection (for example meal bolus)
  
  To prevent post exercise hypo, reduce the nighttime long acting insulin dose by 20%

- **Pump** – Reduce the basal insulin dose by up to 50% from 90 minutes prior to exercise (via temp basal feature)
  
  To prevent post exercise hypo, reduce the basal insulin dose by 20% until 3am (via temporary basal feature)

**Recommendations for unplanned activity**

- Consume 15-30g of a fast acting carbohydrate for every 30 minutes of unplanned activity

- Vigorous activity should **not** be commenced if BGL >15mmol/L and blood ketones of >0.6mmol/L

**Additional comments relating to specific exercise on camp, i.e. times of sustained or high intensity activity:**

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**Equipment to be supplied**

- Active Aid Pouch/Insulated Pouch – (for insulin to be stored)
- GlucaGen and Authority Letter
- Hypokit – fast acting and sustaining carbohydrates
- Extra snacks as may be required
- Insulin vials
- Blood glucose meter and test strips
- Ketone strips
- Booklet for hand recording BGL
- Spare batteries for all equipment
- Sharps container
- Pen needles
- Alcohol swabs

**Extra insulin pump equipment**

- Long acting insulin pen and consumables (if pump malfunction)
- Rapid acting insulin for the pump (Novorapid/Humalog vials)
- Rapid acting insulin for corrections (Novorapid/Humalog pen)
- Insertion kits
- Reservoir
- Skin swabs
- Spare pump (remote location camps)
- Lithium battery
Agreement

I have read, understood and agree with this Camp Management Plan. If I cannot be contacted and in the case of an emergency, I give consent for the school to communicate with the student’s PMH Diabetes Education Team / treating DNE about my child’s diabetes management whilst on camp.

Parent/Guardian 1 Name: ________________________________

Signature 1: ___________________________ Date: ________________

Parent/Guardian 2 Name: ________________________________

Signature 2: ___________________________ Date: ________________

School Camp Coordinator: ________________________________

Signature: ___________________________ Date: ________________

School Principal: ________________________________

Signature: ___________________________ Date: ________________