

WORKPLACE ELECTRIC BIKE TRIAL

Guidance Notes



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INTRODUCTION

The following guidance notes provide summary information on the Oxford Health e-bike trail. The e-bike trial will be for 6 months across Oxford City with volunteers from the Community District Nursing Team and Estates Maintenance team.

Background

Electrically assisted bicycles (e-bikes) can have an important role in enabling UK transport to achieve net zero, improve air quality, increase levels of physical activity, and improve mental and physical health.

Reducing emissions

E-bikes can contribute to the decarbonisation of land-based transport. Data from several studies suggest that each e-bike adopted saves 2000 kms driven and 460 kg CO₂ emitted per year, further benefits include:

- 🔗 Increase in active travel and health & wellbeing.
- 🔗 Reduced pressure on car parking.
- 🔗 Makes streets quieter, safer and cleaner.
- 🔗 Reduces stress on staff regarding traffic congestion and improved patient community visits.

WHO WILL USE THE EBIKES?

Staff will complete induction prior to using Ebikes (Appendix 1)

The ebikes will be used by staff volunteers from the Oxford based Community team and maintenance team at Littlemore /Warneford sites.

The ebikes will be located at four locations in Oxford as follows:

- 🔗 East Oxford Health Centre x 2
- 🔗 Cornwallis House
- 🔗 Littlemore Mental Health Centre
- 🔗 Warneford Hospital

WHAT IS LENGTH OF TRIAL?

6months from Monday March 27th – Monday 2 October 2023 (British Summer Time)

HOW WILL STAFF ACCESS THE EBIKES?

- 🔗 Undertake a one-time induction,
- 🔗 Book the ebike.
- 🔗 Collect the ebike and accessories such as lock and helmet.
- 🔗 Make the journey.
- 🔗 Return everything to the correct places.
- 🔗 Put the battery on to charge, if necessary.

- 🚲 Log the journey (destination, approximate distance, comments);
- 🚲 Report any incidents according to the Trusts usual procedures.
- 🚲 If any faults or issues arose on the trip, log and report them.

BOOKINGS, PUNCTURES & FAULT REPORTING

The volunteers will take responsibility for the ebike,

Fault reporting: please contact Bainton Bikes - t: 01865 311610/t: 07903 938177/t: 07969 295502



STORAGE, SECURITY AND BATTERY CHARGING?

Ebikes must be always stored securely, and locks will be provided. Batteries will need to be charged - they are best charged indoors, somewhere warm, dry and with good ventilation.

A fire Risk Assessment may also need to be completed, and chargers Portable Appliance Testing (PAT) tested. Consider suitable location for charging with fire detection, such as a smoke alarm.

WHATS INCLUDED IN THE TRIAL?

1. Premium Electric Bike
2. Cargo Electric Bike
3. Customising bikes for individual usage
4. Monthly site attendance to service bikes
5. GPS Trackers x 3
6. Monthly GPS Tracker subscription x 3



INSURANCE

The NHS will provide indemnity under Liability Third Party Scheme (LTPS Schedule 2 and Schedule 3) for staff using *ebikes* providing that the *ebikes* are used by a person employed or engaged by the Trust and for the carrying out of the relevant function of the Trust.

This would also be dependent on evidencing various factors, for example:

- 🔗 A robust user induction is carried out.
- 🔗 The ebikes are stored securely.
- 🔗 The lock supplied is of a suitable standard.
- 🔗 Maintenance is carried out regularly by a competent mechanic.
- 🔗 Maintenance is documented.

MONITORING & EVALUATION

It is important to collect good quality data throughout the trial, this will inform expanding the fleet.

Data gathering to include:

- 🔗 Total mileage of the ebikes;
- 🔗 Number of individual trips made.
- 🔗 How many ebike journeys are replacing car journeys.
- 🔗 How many car miles have been replaced.
- 🔗 Number of individuals using the ebikes.
- 🔗 Carbon footprint & air pollution benefits.
- 🔗 Business mileage expense claims



Appendix 1: On-site Induction Checklist

Location:	Site Contact	
Name:	Signed	Date:
Dept:	Email:	Phone:

Task	Completed (tick)	Notes
Check that you have read and understood all associated documents – RA /Agreement		
Risk Assessment		
User Agreement		
M-check sheet (Appendix 3)		
Dress for the weather. Use the hi-vis gilet		
As per the RA, check for any hazards which might arise today: weather, road surfaces, visibility, light, car park extra busy etc. In poorer conditions, allow more time for your journey.		
Have a look over the ebike to familiarise yourself with it, switching it on and checking over the controls, battery level etc		
Familiarize yourself with how the gearing and brakes work		
Understand common faults and what to look out for		
Bike seat and handlebars adjusted to best fit the rider		
Agree customisation required for bike, i.e. to carry cargo		
Adjust the helmet to fit correctly		
Check that the lock is working and stored safely		
Check that you are starting in low boost and first gear, and taking time to get used to the boost, set off for your ride. If you need to park anywhere, lock the ebike securely through its frame to an immovable object.		
Agree time and location for bikes to be delivered to end user		
If the battery is below fully charged, put it on to charge		Locations TBC
On return put the ebike back into secure storage		
Log your journey		

Appendix 2 - Risk Assessment

Location	
Date	March – October 2023
Associated Documentation	
Description	Provision of 4 electric bikes to dedicated staff for 6-month period March – September. Ebikes will be for used by Community nursing system within Oxford City as part of daily workplace visits Ebikes only available to staff who have completed induction and signed user agreement.

Hazards	Risk	Mitigations	Risk Rating	Further Controls	Action by Whom	Date Completed
Bike Failure	Minor injuries due to Poor Maintenance Poor use of bike Potholes	User Induction Maintenance Schedule	Low	User Agreement M- check guide	Ongoing	
Bike set up	Minor injuries due to Unsuitable bike setup Rider unfamiliar with bike operation	User induction Familiarity with bike operation	Low	The ebikes are step through to maximise safety and comfort		
Manual Handing of Bikes	Injury from moving bike	User agreement /Induction	Low			
Fire Risk from battery charger	Fire	Chargers pat tested.				

		No batteries left on charge overnight.				
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Appendix 3 – USER Agreement

USER AGREEMENT	
Username	Dept
Email	Phone

Please tick as appropriate:

- I have been on THE Induction and completed the on-site Induction Checklist
- I am able to ride a bicycle safely
- I have no known condition that would prevent me from cycling safely.

I understand and agree to the following terms and conditions of the use of the workplace ebike:

1. The ebike is only for use on business journeys.
2. I am responsible for the security of any ebike and equipment that I use. I will take care of it, securing it to something immovable whenever it is left unattended, with the lock provided. After use I will return the ebike, accessories and keys to the correct locations.
3. Wearing a helmet is always recommended while riding.
4. I understand how to carry out an M-check and will carry it out each time I use the ebike.
5. I will ride the ebike legally, appropriately, and safely and in accordance with the Highway Code. I will not adjust or tamper with any setting or cabling other than those explained to me.
 1. If I find a problem with the ebike then I will report to Bainton Bikes - t: 01865 311610/t: 07903 938177/t: 07969 295502 I will hang the "Do Not Use" sign (in the pannier) on the handlebars.
6. I will take care when moving and handling the ebike.
7. If the ebike is lost or stolen I will report this to the police on 101 and to Bainton Bikes
8. If I have an accident, I will follow the usual procedures including contacting my line manager.
9. If the battery is below full on return, I will plug it in to charge. I will unplug it before I leave the building.
10. I understand that my employer provides insurance cover through NHS for employees travelling for work.



Signed	Date
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Appendix 4: The M-check

How to "M-check" your ebike

Saddle

Set at the right height for you?
Secure?
In below the max height mark?

Computer

Enough charge / predicted range for your trip?

Handlebars

Facing backwards, hold the front wheel between your knees and check for looseness in the handlebars / headset: secure?

Battery

Securely clicked in?
Enough charge? Check the battery or handlebar display.
Need to charge up when you return?

Rear reflector: Present, clean?

Rear lights: Working properly?

Rear Wheel

Tyre pressure good?
Runs straight without rubbing?
If there's a quick release lever, is it tightly closed over?

Rear brake

Check by squeezing the back brake (left hand side) and pushing the ebike backwards. Working well?
If the ebike has rim brakes, are the pads still grooved, or worn flat?



Front reflector: Present, clean?

Front lights: Working properly?

Front Wheel

Tyre pressure good?
Runs straight without rubbing?
If there's a quick release lever, is it tightly closed over?

Front brake

Check by squeezing the front brake (right hand side) and pushing the ebike forwards. Working well?
If the ebike has rim brakes, are the pads still grooved, or worn flat?

Pedals and cranks

Pedals not loose?
Crank not loose?

Chain

Clean, not rusty, running smoothly?

Appendix5 – Trial Volunteers

Volunteers	Position	Location	Contact Number	Cycle size
(Ruth.Ballantyne@oxfordhealth.nhs.uk)	Speech and Language Therapy Assistant	EOHC	07721734987	169cm
mary.hardwick@oxfordhealth.nhs.uk	Team leader • District Nursing	EOHC	07920 278215	
Laeanne Riley	Occupational Therapist	Cornwallis House	07818 780596	167cm
Philip Broadermann	Estates Officer	Warneford		

Appendix 6- Induction Agenda

1. Introduction, purpose of trail
2. health & Safety briefing / risk assessment
3. Electric bike fitting for staff
4. Helmet fitting
5. How to charge / where to charge battery.
6. Maintenance
7. Security- Locking etc.
8. Staff familiarise with ebikes.
9. Staff Sign off bike agreement.
10. Any questions

Appendix 7 -Battery Data Sheets

Bosch battery information

Are e-bike batteries safe?

Yes. E-bike batteries are safe. Some more so than others. Premium brands like Gazelle, Cannondale, Trek, and Riese & Müller use Bosch batteries along with the Bosch motors. Internet and entry-level brands use generic, unbranded imported batteries. They typically power rear hub motors.

The Bosch systems Gazelle employs are Underwriters Laboratory (UL) Certified. Underwriters Laboratory is the leading safety science organization. UL certification ensures Bosch batteries used on Gazelle e-bikes have been tested to meet technical, safety, and regulatory standards.

The unbranded **generic batteries are not UL certified**. That said, it's fair to say Bosch Gazelle batteries are *very safe*. The imported batteries used by individuals on actual e-bikes are *generally safe*.

Safety Precautions

As a safety matter its prudent to keep a fire extinguisher handy.

Guidance From Bosch

The charging time depends on the battery's capacity. Using the standard charger (for a half charge) the PowerPack 400 takes about 1.5 hours and the PowerPack 500 roughly 2 hours. A totally depleted PowerPack 400 takes 3.5 and a PowerPack 500 roughly 4.5 hours. PowerPacks with their lithium-ion cells can be charged for as short a period as you like irrespective of their charge status. The PowerPack's integrated battery management system, combined with a Bosch charger, protects the battery from overload when charging. Interrupting the charging process does the battery no harm. An important point to bear in mind is that eBike batteries should only be charged with the right charger because irreparable damage might otherwise result and warranty or guarantee claims might become invalid.

Bosch eBike Systems provides innovative and inspiring mobility solutions. For people who want to get around in a relaxed, sustainable and above all, safe manner. For people with a joy for riding.