**Participant Information Sheet for  
“In-Situ Mobile App for the Triage of Pedestrians in Vehicle Collision” (SENTINEL).**

We are inviting people who have been a pedestrian involved in a road traffic collision (RTC) with a vehicle to take part in research on brain injury prediction.

We would like to include you in this study. Please read this Participant Information Sheet to decide whether you are happy to be included in this study or not.

Before you decide to take part, it is important that you understand why the research is being done and what it will involve. Please take the time to read the following information carefully.

**What is the purpose of this research?**The research aims to create a new app to help the ambulance service and hospital improve the detection of brain injury at the roadside.

SENTINEL is an AI based computer mobile app developed using pedestrian collision data from databases from the UK Department of Transport. We need to test it against new pedestrian collision cases to make sure it works and is accurate. For this, we would like to ask you to grant us access to your anonymised medical records.

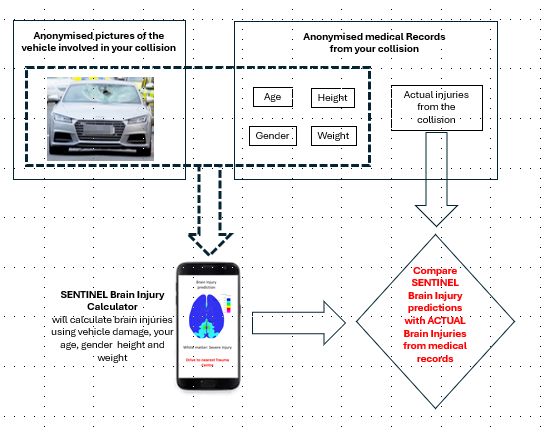


Figure 1: SENTINEL - Predicting pedestrian brain injuries by the roadside.

**Why have you been invited to take part?**You have been invited to take part in this research because you were a pedestrian who was involved in a road traffic collision (RTC) with a vehicle. The Care Team (consisting of research nurses and medical doctors) believes that you are fit enough to understand the purpose of this research and can make an informed decision.

**Who is organising and funding the research?**The research is being organised and funded by the Road Safety Trust (Grant award: RST 358\_13\_23).The research was granted ethical approval by Coventry University’s Research Ethics Committee (P174028). Further ethical approval was granted by the Health Research Authority 343910.

**What will happen if I decide to take part?**You will be asked to sign a form to allow the research team to access your medical records. This will include accessing any photos of the vehicle on the ambulance records as well as your age, sex, height, weight, and information about your injuries (including CT scan results). This information will be used to create a computer simulation of the collision. This simulation will help to build the brain injury mobile app.

**Do you have to take part?**No – it is entirely up to you. If you do decide to take part, please keep this Participant Information Sheet (PIS) and complete the Consent Form to show that you understand your rights in relation to the research, and that you are happy to participate. You will be given a participant number (by text or email) which you can provide to the lead researcher if you wish to withdraw by 3rd November 2027 (the end date of the study). You do not need to provide a reason for withdrawing. A decision to withdraw, or not to take part, will not affect you in any way. Data shared by the UHCW with the lead researcher (CU) will be anonymised (it can no longer be associated with you). We may use this data indefinitely without further notice to you.

**Who has Reviewed the Study?**  
All research in the NHS is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given favourable opinion by Wales Research Ethics Committee 1.

**What are the benefits and potential risks and benefits in taking part?**By taking part, you will be helping Dr Christophe Bastien and Coventry University to better predict traumatic brain injuries in pedestrian collisions, which represent 26% of all road traffic fatalities. By taking part, you will help the development of an app that will reduce the number of deaths and improve victims’ recovery. Your consent to share your anonymised data is important to the success of the SENTINEL project, as it will provide the information needed to validate this app.

There are limited risks associated with participation. If you have been affected by the emotional trauma of a road traffic accident, you may wish to contact the ***RoadPeace*** ([www.roadpeace.org/](http://www.roadpeace.org/)) and/or ***Brake*** ([www.brake.org.uk/](http://www.brake.org.uk/)) charities. Both ***RoadPeace*** and ***Brake*** provide information and support services to people who are bereaved or seriously injured in road crashes.

**How will we use information about you?**We will need to use anonymised information from your medical records, including:

* Age
* Gender
* Height
* Weight
* Medical records of injuries sustained during the collision (CT-scan, notes)
* Photographic evidence of the vehicle brand, model and damage sustained during the collision

People will use this information to do the research or to check your records to make sure that the research is being done properly.

**Coventry University** is responsible for looking after your information. We will share your information related to this research project with the following types of organisations:

* ARUP, Hexagon, Altair Engineering (software vendors to model accident reconstruction)
* Department for Transports, The Transport Research Laboratory (working on accident data)
* Jaguar LandRover (improve safety of vehicles)
* Imperial College (Head Lab)/ Loughborough University (Transport Safety Research Centre) and the University of Leeds (Institute for Transport Studies / Warwick Medical Schools (human safety modelling)

We will keep all information about you safe and secure by:

* Anonymising all your medical records at the onset on NHS premises.
* Anonymising the vehicle involved in the collision’s number plate on WMAS premises.
* Creating an Index file linking your “Collision Case” with an identifier unrelated to your NHS/ name or any identifiable on NHS premises. This Index file will be kept secure on NHS premises and will only be accessed by NHS staff should you wish to withdraw from the study before the end of the project.
* Transferring and storing your anonymised “Collision Case” with its Index on an encrypted server located in the UK, managed by CU
* Only providing access to SENTINEL researchers and to the organisations having requested access to the anonymised medical and vehicle information,

**International transfers**

We may share or provide access to data about you outside the UK for research related purposes to develop human computer models, which can used by vehicle manufacturers to develop safer vehicles and save people when subjected to blunt trauma impact at world level. Road Traffic Collisions is a global problem and requires international collaborations.

If this happens, we will only share the data that is needed. We will also make sure you can’t be identified from the data that is shared where possible. If your data is shared outside the UK, it will be with the following sorts of organisations:

* Medical research organisations
* Transport Safety organisations / charities
* Organization responsible for the development of human computer models for safety improvements (biomechanics laboratories, software vendors with the ambition to develop computer models to improve human safety)
* Vehicle Manufacturers safety research Centres

We will make sure your data is protected. Anyone who accesses your data outside the UK must do what we tell them so that your data has a similar level of protection as it does under UK law. We will make sure your data is safe outside the UK by doing the following**:**

* some of the countries your data will be shared will have an adequacy decision in place. This means that we know their laws offer a similar level of protection to data protection laws in the UK
* we use specific contracts approved for use in the UK which give personal data the same level of protection it has in the UK. For further details visit the Information Commissioner’s Office (ICO) website: [https://ico.org.uk/for-organisations/uk-gdpr-guidance-and-resources/international-transfers/](https://urlisolation.com/browser?url=https%3A%2F%2Fico.org.uk%2Ffor-organisations%2Fuk-gdpr-guidance-and-resources%2Finternational-transfers%2F&traceToken=1744614501;coventryuniversity_hosted;https:/www.hra.nhs.uk/planning-a&clickId=5B23191E-0796-41D7-9800-3BB7E5E5B57C)
* we do not allow those who access your data outside the UK to use it for anything other than what our written contract with them says
* we need other organisations to have appropriate security measures to protect your data which are consistent with the data security and confidentiality obligations we have. This includes having appropriate measures to protect your data against accidental loss and unauthorised access, use, changes or sharing
* we have procedures in place to deal with any suspected personal data breach. We will tell you and applicable regulators when there has been a breach of your personal data when this is legally required. For further details about UK breach reporting rules visit the Information Commissioner's Office (ICO) website: [https://ico.org.uk/for-organisations/report-a-breach](https://urlisolation.com/browser?url=https%3A%2F%2Fico.org.uk%2Ffor-organisations%2Freport-a-breach&traceToken=1744614501;coventryuniversity_hosted;https:/www.hra.nhs.uk/planning-a&clickId=5B23191E-0796-41D7-9800-3BB7E5E5B57C)

**How will we use information about you after the study ends?**Once we have finished the study, we will keep some of the data so we can check the results. We will write our reports in a way that no-one can work out that you took part in the study.

We will keep your study data for a maximum of 10 years (until 03/11/2037). The study data will then be securely archived or destroyed.

**What are your choices about how your information is used?**

You have the right to ask us to access, remove, change or delete data we hold about you for the purposes of the study. You can also object to our processing of your data. We might not always be able to do this if it means we cannot use your data to do the research. If so, we will tell you why we cannot do this

**Where can you find out more about how your information is used?**You can find out more about how we use your information, including the specific mechanism used by us when transferring your personal data out of the UK:

* by asking one of the research team,
* by sending an e-mail to the project team at [sentinel-rtc@coventry.ac.uk](mailto:sentinel-rtc@coventry.ac.uk), or contacting the Data Protection Officer [dpo@coventry.ac.uk](mailto:dpo@coventry.ac.uk)
* by accessing the project website link: <https://sentinel-rtc.coventry.ac.uk/> (“***Get in Touch***” menu tab)
* more information is available from Coventry University: www.coventry.ac.uk/gdpr-and-data-protection/privacy-notices/.

**What will happen to the results of the research?**The results of this research may be published in scientific journals, reports and presentations. These results will be available from the project website <https://sentinel-rtc.coventry.ac.uk/> . Alternatively, the lead investigator can be contacted directly.

**What will happen next?**If you would like to take part, a member of the Care Team has the paperwork and can answer any questions you may have. You will be asked to complete a consent form before taking part.

**Lead researcher’s contact details:**

* **Name:** Dr Christophe Bastien, Associate Professor
* **Email:** [sentinel-rtc@coventry.ac.uk](mailto:sentinel-rtc@coventry.ac.uk)
* **Address:** Coventry University, Priory Street, Centre for Future Transport and Cities, c/o Dr Christophe Bastien, SENTINEL Project, Coventry CV1 5FB

**Who do I contact if I have any questions or concerns about this research?**If you have any questions, or worries about this research, please contact Dr Christophe Bastien. If you still have concerns and wish to make a complaint, please contact the University’s Research Ethics and Integrity Manager by e-mailing [ethics.uni@coventry.ac.uk](mailto:ethics.uni@coventry.ac.uk) and provide the reference P174028. Please provide information about the research project, specify the name of the researcher and detail the nature of your complaint.

Thank you for taking time to read this information sheet and for considering participating in this research.