

Who is funding the LANTERNS project?

- The LANTERNS project is funded by the National Institute for Health Research (NIHR) Public Health Research (PHR) programme
- The NIHR-PHR programme funds research to evaluate health impacts of non-NHS interventions
- The NIHR is funded through the Department of Health to improve the health and wealth of the nation through research, with contributions from the CSO in Scotland, NISCHR in Wales, and HSC R&D, Public Health Agency, Northern Ireland

How did the idea for the LANTERNS project come about?

- The UK has about 7.5 million streetlights which cost up to £500 million per year
- The cost of running and maintenance has risen significantly over recent years
- A number of local authorities are changing the provision of street lighting at night for financial reasons
- Very little research has explored the impact of street lighting on outcomes such as road safety, crime and other public health outcomes
- Existing research has tended to use small geographic areas which, and so results are vulnerable to random fluctuations in road traffic crashes and crime
- In April 2011 the NIHR-PHR programme invited research proposals to assess the impact of street light reduction schemes on public health.
- Our study aims to bring together information from across England & Wales to make a more reliable assessment of the possible impact of street light reductions on these important public health outcomes

What data are being collected?

- We are collecting data nationally on any changes made to street lighting provision at night
- Data include location of street lights, dates of changes, nature of changes (part night lighting, switch-off, dimming, lamp type change, etc.), maintenance costs, and energy savings
- The LANTERNS project team will help to digitise data from paper maps where data are not available in digitised format
- In eight selected areas we are also collecting data on local public opinion about street light provision, through interviews with key stakeholders and local residents

Who is taking part?

- We hope that every local authority in England & Wales that has made changes to street light provision at night will participate in LANTERNS

What analysis are you planning?

- We will assess statistically whether, and, if so by how much, crime and road traffic crashes change on roads where changes are made to street lighting provision at night
- We will conduct a controlled interrupted time series analysis of crime data and road traffic crashes that compares roads where changes to street lighting provision have been made, with similar roads where street lighting has not been reduced at night
- We will analyse data at a national level taking into account national trends in crime and road traffic crashes over time
- We will conduct separate analyses according to the nature of changes (switch-off, dimming, lamp type change, etc.)
- We will analyse interviews with residents to map additional concerns about street lighting and to help identify what information, and in what form, communities need in order to take part in consultations
- We will conduct a cost-benefit analysis (CBA) to compare the societal costs of street lighting reduction with its societal benefits. The scope of our CBA will include infrastructure, maintenance, and energy consumption costs, and any change in road traffic crashes and crime identified in our nationwide analysis of street level data
- Our CBA framework will consider implementing reduced street lighting on different road types; for each road type we will project the societal costs and benefits of two scenarios over different time horizons, one where street lighting is reduced, and one where it is maintained.

What do you expect to find?

- Very little research has explored the public health impact of street lighting and conclusions remain uncertain
- Our research will be the first national evaluation of the impact of night-time street light reduction and energy savings schemes on crime and road traffic crashes

How will the results be disseminated?

- We will write a report detailing our methods and results and make it publicly available
- At the end of 2014 we will convene a workshop with local authorities and third sector organisations to learn how our results might be of most use
- We will present our results at national and regional conferences and in academic articles.