Injuries are increasingly recognized as a global public health epidemic. Among injuries, road traffic accidents have been recognized globally as an important public health problem. Due to growth of motorization and rapid expansion of road networks, there has been an increase in road traffic accidents over the recent years. Road traffic accidents are the leading cause of unintentional injuries worldwide. Road traffic accidents are a leading cause of death among young people, aged 15-29 years. Low and middle-income countries account for almost 90% of global mortality due to road traffic injuries. In India, the total number of road accidents have increased by 2.5 per cent between 2014 and 2015.

A recent national review in India has estimated that a million injury deaths and 30 million hospitalizations occur every year at an average of 10.1 per lakh population. Southern Indian states reported higher number of deaths. 15.4 per lakh injuries occur in Karnataka with Bengaluru city reported 5660 injury deaths with suicides (2429) outscoring road traffic injuries as the leading cause.

Road traffic accidents also contribute to a major portion of severe injuries and deaths in the country, which has been on the rise. The total number of persons killed in road accidents increased by 4.6 per cent and road accident injuries by 1.4 per cent between 2014 and 2015. The severity of road accidents, measured in terms of number of persons killed per 100 accidents is increasing constantly.

Managing injuries puts a huge burden on not only the affected individuals but also on families and health care system. To plan policies in future and to reduce the burden of morbidity and mortality related to road traffic injuries (RTIs), an integrated surveillance system is need of the hour. Surveillance of road accidents injuries is needed to assess the burden, identify high risk groups, establish association with probable risk factors and plan interventions to control the occurrence and monitor impact. Effective RTI surveillance systems set up in developing countries have shown promising results in controlling the problem. It is the responsibility of all stakeholders to ensure the establishment of necessary data systems which will enable thorough collection of information related to road traffic injuries. A comprehensive road traffic accidents injuries surveillance system that can capture data from all sites - Health facilities, police, army and community level is required for the planning of control measures to tackle the problem of road traffic accident related injuries. However, systematic collection of road traffic data is not well developed in many developing countries including India and under reporting of road traffic injuries and deaths is common. Except the National Crime Records Bureau (NCRB) data, there are no nation-wide data on road traffic accident related injuries in India.

Community based surveillance could detect the burden and risk factors of morbidity and mortality of injuries but never became priority of any policy. Attention of planners is always diverted to epidemic prone communicable diseases and now some non-communicable diseases such as cardiovascular diseases, cancer, diabetes and stroke have received consideration to get resources. Road traffic injury is still a low priority despite its huge burden. A well-designed surveillance can open
the road for development of program to reduce suffering from immediate effect and long term impact of injuries.

**Proposed surveillance model**

A system for surveillance of injuries resulting from road traffic accidents should be designed. Data related to injuries and suspected risk factors should be collected from victims at each surveillance site with road traffic injuries.

Since RTAs are more common on urban roads and on roads connected to urban area and it has been seen that majority of the cases are referred to tertiary care hospitals, hence a passive surveillance system in tertiary care hospitals is required.

As more than 60% of the fatalities occur in rural areas, it is possible that a larger number of cases go unreported on rural roads, particularly non-fatal and minor injuries. Also, a significant proportion of fatalities that occur many days after the crash in rural areas are missed.

Some deaths escape from police records as parties involved in the accidents settle the dispute out of the legal system. In addition to all these, many non-fatal and minor injuries treated in smaller nursing homes and clinics. Usually these facilities are of private in nature, and they do not like to involve in medico-legal cases. Hence, an active surveillance system to cover police stations, community-based health facilities like primary health centres and community health centres and private nursing homes and clinics should be in place. Active surveillance is also to be placed in communities to track missing cases. The data should be analysed to find out the rate of road traffic injuries and determine the risk factors associated with these injuries. Finding should be made available to all stakeholders so that they can take action to remove or control those risk factors which can be modified. Awareness generation and advocacy should also be a part of such initiative.

**References**