

# Experience of a National Campaign for Hand Trauma Prevention in France

## Erfahrungen aus einer nationalen Kampagne zur Prävention von Handverletzungen in Frankreich

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### Abstract

**Introduction:** In France, hand injuries are the number one cause of all accidents referred to our hospital casualty departments. Their human and economic consequences are very serious. Two thirds of these accidents arise during everyday living activities and a third of them happen at work. The specific prevention of hand injuries in each of these domains has not been sufficiently developed. The authors present the national prevention campaign recently set up by the FESUM.

**Material and Methods:** The campaign took place in the form of events held in different towns in France. Each event, lasting from a minimum of 2 days to 10 days maximum, included press conferences, prevention workshops specific to hand injuries, theatrical animation for youngsters, conferences for the general public, meetings in industrial or training college environments, photography and video exhibitions, and the publication of pamphlets and posters. These manifestations were carried out in partnership with the association APAVC and the voluntary involvement of surgeons from the FESUM hand centres in each town visited.

**Results:** Over a period of 2 years, 22 large or medium-sized towns were able to hold these campaign events. By this means, thousands of people – adults, schoolchildren or young, professional apprentices – were made aware of hand injuries and how to prevent them. We were able to reinforce the broadcasting of simple prevention messages launched by the campaign, particularly with regard to wearing gloves for all manual activities, with the help of heavy local, regional and national media coverage.

**Conclusion:** This campaign was the first widespread action of its kind, aimed specifically at the prevention of hand injuries. Furthermore, it was a way of strengthening the credibility of the FESUM hand emergency centres with the health authorities and to promote the services available to patients.

### Zusammenfassung

**Einführung:** Handverletzungen sind in Frankreich die häufigsten Verletzungen in den Notaufnahmen der Krankenhäuser. Die Konsequenzen derartiger Verletzungen aus menschlicher und wirtschaftlicher Sicht sind äußerst schwerwiegend. Zwei Drittel dieser Unfälle ereignen sich in der Freizeit, ein weiteres Drittel sind Arbeitsunfälle. Bisher existierten keine spezifischen Präventionsmaßnahmen für die beiden Bereiche. In dem vorliegenden Artikel stellen die Autoren die von der FESUM initiierte nationale französische Kampagne zur Prävention von Handverletzungen vor.

**Material und Methoden:** Die Kampagne wurde in Form von Aktionen in verschiedenen französischen Städten durchgeführt. Jede Aktion, mit einer Dauer von mindestens 2 und maximal 10 Tagen, beinhaltete Pressekonferenzen, spezielle Workshops zur Prävention von Handverletzungen, Theateraufführungen für junge Menschen, Vorträge für die breite Öffentlichkeit sowie Veranstaltungen in Unternehmen oder Schulen, Foto- und Videoausstellungen sowie die Veröffentlichung von Flyern und Plakaten. Die Aktionen wurden in Kooperation mit der APAVC sowie mit Hilfe von freiwilligen Chirurgen aus den FESUM-Handzentren der besuchten Städte durchgeführt.

**Ergebnisse:** Innerhalb eines Zeitraums von 2 Jahren wurden die Veranstaltungen in 22 großen und mittelgroßen Städten durchgeführt. Dadurch wurde bei mehreren tausend Menschen – Erwachsenen, Schulkindern und Lehrlingen – das Bewusstsein für Handverletzungen und deren Vermeidung erhöht. Wir sorgten außerdem mit Hilfe einer verstärkten Berichterstattung durch lokale, regionale und nationale Medien dafür, dass eingängige Präventionsbotschaften aus der Kampagne verbreitet wurden.

## Introduction

Hand injuries represent a true concern in public health affairs. In France, they are at the top of the list of all home and leisure accidents (1.5 accidents out of 10) and work-related accidents. They are the main reason for patients going to casualty departments. The number of hand injuries per year has been estimated at 1 400 000 and 620 000 of these are very serious, that is to say, likely to cause permanent after effects [1]. Two thirds of them are everyday home and leisure accidents and one third are work-related accidents.

11% of injured patients must be operated on and hospitalised and 21% of these remain in hospital for over 24 h [2]. 35% are on sick leave and 2% remain permanently disabled [3].

In the professional field, hand injuries represent 38% of all work-related accidents. These are the number 1 cause of accidents with sick leave and the main cause of accidents with permanent incapacity [2, 3].

The cost of hand injuries is just as considerable as their sheer number [4–6]. A recent study focusing on occupational accidents reported a mean cost of 1 348 Euros per accident taking into account all medical fees, daily compensation, invalidity pension and various other financial indemnities [7]. Besides these direct costs, Rosberg demonstrated the extrapolation of costs related to the loss of productivity and the loss of quality of life, bringing the bill up to an average total cost of 12 000 Euros [6].

The number of hand injuries at work seems to have settled over the years, probably due to the efficacy of individual prevention measures and the machines which have now been made compulsory by the Health and Safety at Work authorities [7]. But these preventive measures must be reinforced, particularly regarding the targeted populations such as builders, workers from the metallurgy and agro-alimentary industries, as well as the often young and poorly qualified temporary staff.

However, regarding home and leisure accidents, their number is in constant progression [8]. Socio-economical reasons may be evoked: pensioners are more and more active, the development of sports and leisure activities, the increasing popularity of D-I-Y from gardening to home decorating, which is all the more fashionable now particularly due to the current economic situation (Table 1). However, we must recognise that their specific prevention is poorly identified or even non-existent [9].

Yet hand injuries need not be a fatality. Simple preventive measures should be able to reduce their number and gravity as the majority of accidents are related to dangerous individual behaviour due to poor knowledge of the dangers and their consequences, or simply by not protecting the hands [9, 10].

Faced with all these epidemiological, economic and behavioural considerations, the FESUM (Fédération des Services d'Urgences de la Main), French Federation of Hand Trauma Centres, consisting of 57 public and private hand emergency centres, decided to

Dabei lag ein besonderer Fokus auf dem Tragen von Handschuhen bei jeglichen handwerklichen Tätigkeiten.

**Zusammenfassung:** Die Kampagne war die erste umfassende Aktion dieser Art zur Prävention von Handverletzungen. Außerdem bot sie eine gute Möglichkeit, bei den Gesundheitsbehörden die Glaubwürdigkeit der FESUM-Notfallzentren für Handverletzungen zu erhöhen sowie den Patienten die dort verfügbaren Leistungen vorzustellen.

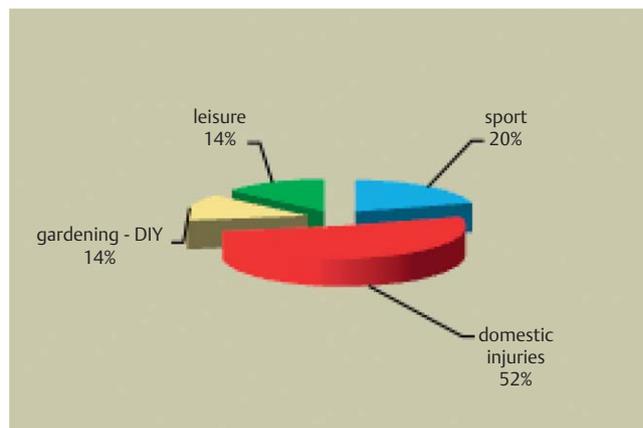
set up a national campaign for the prevention of hand injuries whose experience is reported in this article [9].

## Aims, Organisation and Progress of the Campaign

The aims of the campaign were (i) above all, to be directed towards the general public, the target of everyday accidents, (ii) to be heard by health administrations, (iii) to have a powerful media coverage, and (iv) not to be resumed by a single national event but, on the contrary, a large number of regional events all coherent with one another by the way in which the messages were broadcast. These messages had to be simple: Mind your hands, wear gloves to protect them, remove wedding rings or other jewellery before doing manual work or practising sport. Each event known as "National hand injury prevention day" (Fig. 1) took place in a major town of a French region or department.

The event, a sort of travelling campaign for the prevention of hand injuries, included (i) a press conference with the main local and regional media, (ii) conferences on accidents and their prevention destined to the general public, schoolchildren, students from professional establishments, and those in charge of health and safety matters in factories, (iii) workshops on hand protec-

**Table 1** Distribution of causes of everyday home and leisure accidents [10].



**Fig. 1** Logo for the prevention campaign featured on all documents.

tion, “glove workshop” showing the interest of wearing gloves and their diversity according to specific tasks, (iv) a photographic exhibition and video report focusing on hand injuries and the way these are dealt with in a specialised centre, showing testimonials from injured patients and the way these accidents could have been avoided, (v) a stand with several stickers, pamphlets and posters designed specifically for this campaign and (iv) a theatrical animation for children (■ ■ ■ ○ Fig. 2, 3).

The date and venue for the prevention campaign in each town were chosen so that a maximum number of members of the public could be reached. This might have been, for example, on the occasion of a major event organised by the town (trade fair, exhibition) or, failing this, in a much-frequented public area such as a shopping arcade, main public square or hospital entrance hall.

Each stage of the campaign lasted a minimum of 2 days but certain stages were as long as 10 days.

### Players in the Campaign

Those taking part in the campaign were the FESUM and an association for the prevention of everyday home and leisure accidents, APAVC (Association pour la Prévention des Accidents de la Vie Courante).

The FESUM was responsible for the campaign's general organisation and held a press conference in Paris with the main national media, marking the start of the campaign. The FESUM also had posters printed and distributed leaflets during the campaign. The local FESUM centre of each town was the main supporter. The surgeons at the centres organised press conferences and held conferences for the general public, during which the anatomic and functional specificities of the hand, main accidents encountered, their treatment, prevention and what to do in an emergency were discussed.

The APAVC was in charge of installing the mobile prevention campaign on the spot and, with the help of volunteers, was able to man the stands, run the hand protection workshops and perform theatrical animations for the children.

### Funding

Although the campaign benefited from the sponsorship of Health, Work and Education Ministries, no specific budget from these organisations had been granted for it.

Funding of up to 4064 Euros for each stage was ensured by the FESUM. The APAVC's requirements were self-financed thanks to its own public and private funds. The rest of the budget was covered by donations from local or regional structures: industries, pharmaceutical laboratories, professional organisations (construction, agriculture, D-I-Y stores), temping agencies, public or private hospitals, complementary health insurance companies, Regional Health Agencies, Health networks etc.

A great deal of non-budgeted, physical support was given by Town Halls and Regional or Departmental councils for the holding and running the events: premises and sites were made available, a bus shuttle service was organised to transport pupils, and help was given to publicise the event in the local papers and public areas.



Fig. 2 3 actions carried out during an event: a public conference, b glove workshop, c theatrical animation for children.



Fig. 3 Example of a poster produced for the occasion of a town event.

## Outcome of the Campaign



The campaign began in October 2010 and will end in December 2013. In all, 22 towns will have held the event and all the budgets balanced out very well.

At each stage, thousands of people were made aware of hand injuries and their prevention, particularly schoolchildren and young apprentices. Heavy advertising was used for all the events to reinforce the messages broadcast by the campaign.

Apart from the primordial aim of the prevention campaign, this manifestation has undeniably contributed to identifying the whole public health problem of hand injuries. It has also reinforced the image and credibility of hand emergency centres in the eyes of the health administrative authorities.

At the end of each event, the FESUM centres were regularly solicited either to hold new local campaigns or to carry out preventive actions in factories or professional training establishments.

One collateral effect of this campaign was the setting up of an administrative enquiry like an epidemiological, financial study on hand injuries, aimed at clearly identifying risk factors, establishing specifications and working on new prevention tools.

## Conclusion



Hand injuries represent a major, often underestimated problem in public health and their specific prevention has so far been poorly identified. The undeniable expertise of surgeons at the hand emergency centres may be emphasised in prevention actions destined to the general public.

The experience of our campaign has shown that it was extremely well perceived at each event and that it positively reinforced the image of emergency hand centres. We expect that with the help of the health administrative authorities the prevention of hand trauma injuries will continue and spread thanks to the efforts of public or private institutions concerned with the hand trauma injuries

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**Conflict of interest:** None



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– International Wrist Investigators WorkShop (IWIW).

– European Wrist Arthroscopy Society (EWAS).

French Society and College of Orthopaedic and Trauma surgery-Société Française de Chirurgie Orthopédique et Traumatologique (SOFCOT).