## Downstream oil industry safety statistics

## 2003 report

The collection and analysis of accident data is an essential element of a modern safety management system, and its importance is recognised throughout the oil industry.

CONCAWE has been compiling statistical data for the European downstream oil industry for 11 years. The purpose of this activity is twofold:

- To provide member companies with a benchmark against which to compare their performance, so that they can determine the efficacy of their management systems, identify shortcomings and take corrective action.
- To demonstrate that the responsible management of safety in the downstream oil industry results in a low level of accidents, despite the hazards intrinsic to its operations.

The report for the year 2003 has recently been completed and will be published shortly (report no. 11/04). Beside the 2003 data, the report also includes a full historical perspective from 1993, as well as comparative figures from other industry sectors. Data for 2003 was submitted by 18 companies, together accounting for more than 80% of the refining capacity of EU-25. The area of coverage is primarily the former EU-15 plus Norway and Switzerland, and also includes Hungary and Slovakia. In addition some companies include in their data their operations in other new EU countries, such as Poland and the Czech Republic and, in some cases, Turkey.

In line with previous reports, the results are reported mainly in the form of key performance indicators that have been adopted by the majority of oil companies operating in Western Europe as well as by other branches of industry. These are: Lost Workday Injury Frequency (LWIF); All Injury Frequency (AIF); Road Accident Rate (RAR); and Fatal Accident Rate (FAR). The statistics include companies' own employees as well as contractors, and are split between 'manufacturing' (i.e. mostly refineries) and 'marketing' (i.e. distribution and retail).

## Figure 1 Personal incident statistics relating to the European downstream oil industry

- FAR = fatalities per 100 million hours worked
- AIF = injuries per million hours worked
- LWIF = lost time injuries per million hours worked
- RAR = road accidents per million km travelled



The results of such statistical analysis are mostly of interest in the form of historical trends, assisting the safety management efforts for continuous improvement. Figure 1 shows the evolution of the three-year rolling average for the four indicators over the past decade.

Following disappointing figures in the mid 1990s, the AIF has steadily improved ever since. Part of the early increase may have been due to a gradual improvement in reporting as, in many cases, this indicator has only been in use for a relatively short time. The more established LWIF shows a slow downward trend. It is already at a low level compared to other industries and further major reduction presents a challenge. Road accidents remain a concern and the RAR is now stationary after an initial period of steady decline.

The area of concern is the increasing number of fatalities reflected by the disappointing FAR figures in the past few years. Twenty-two fatalities were reported in 2003. Eight of those were due to road accidents, which remain the single main cause of death at work. There were, however, 14 fatalities due to activities directly related to our industry including fire and explosions, trips and falls, and workers being hit by equipment or flying debris.