



**CITUC**  
Información Toxicológica

## OCCUPATIONAL EXPOSURE TO PESTICIDES: A REPORT FROM THE POISON INFORMATION CENTER, PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE (CITUC).

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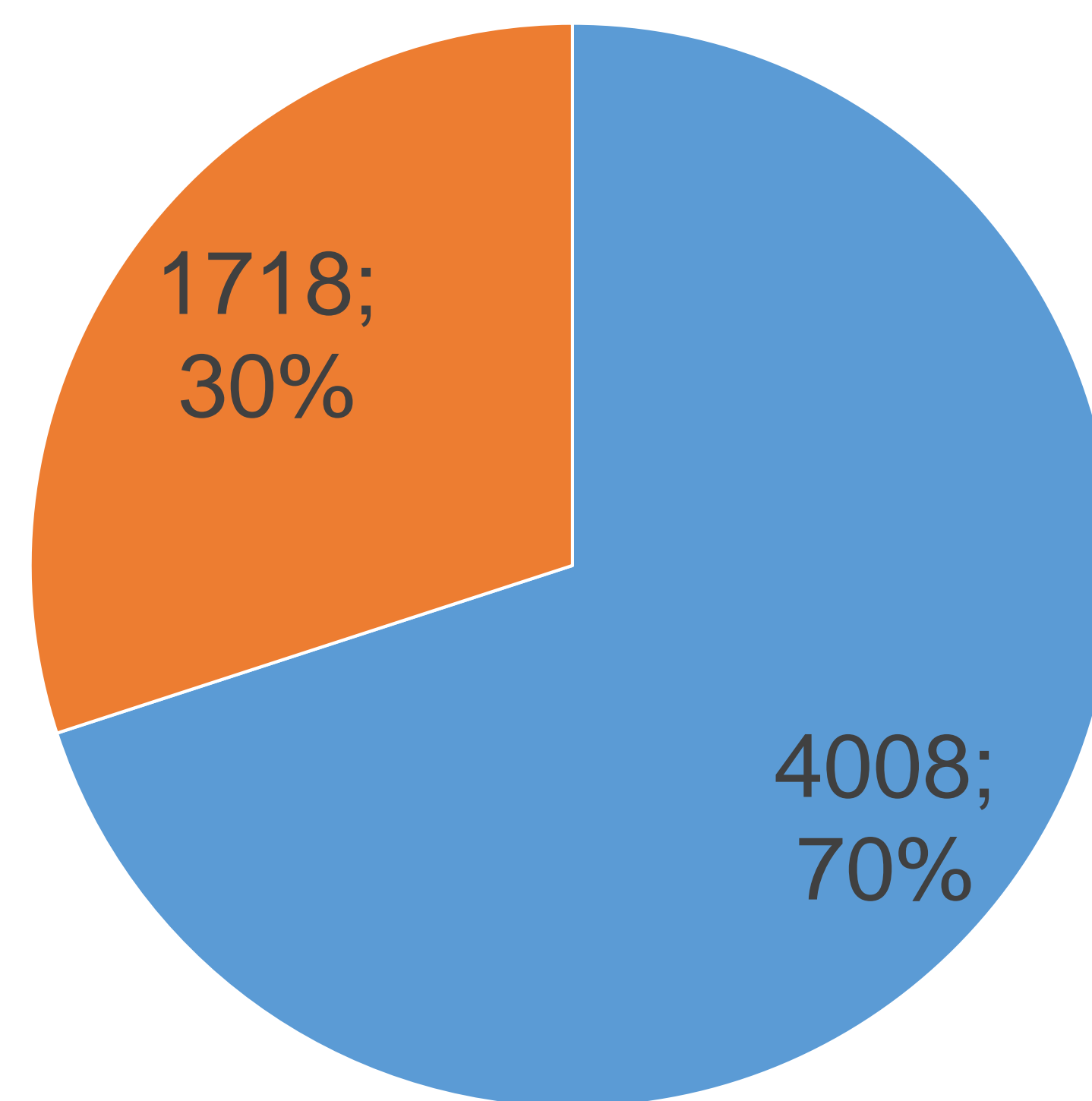
**Introduction:** Pesticide poisoning is included among occupational diseases and as a public health problem. According to national data, occupational cases account for 50% of total cases of pesticide poisoning. Occupational exposures occur mainly in field workers. In Chile, information available on this subject is scarce. To decrease occupational pesticide exposure is essential to develop safer work environments and better policies preventing permanent damage to workers.

**Objective:** The aim of this work was to characterize occupational poisoning due to pesticide use from cases received by our poison information center between 2006 and 2013.

**Materials and Methods:** A descriptive, observational retrospective study was conducted. Variables analyzed were agent family, route of exposure and sex. Analysis was carried out through frequency distribution and statistical association was assessed by calculating odds ratios with 95% confidence. Data were analyzed using SPSS 21.0 statistical software.

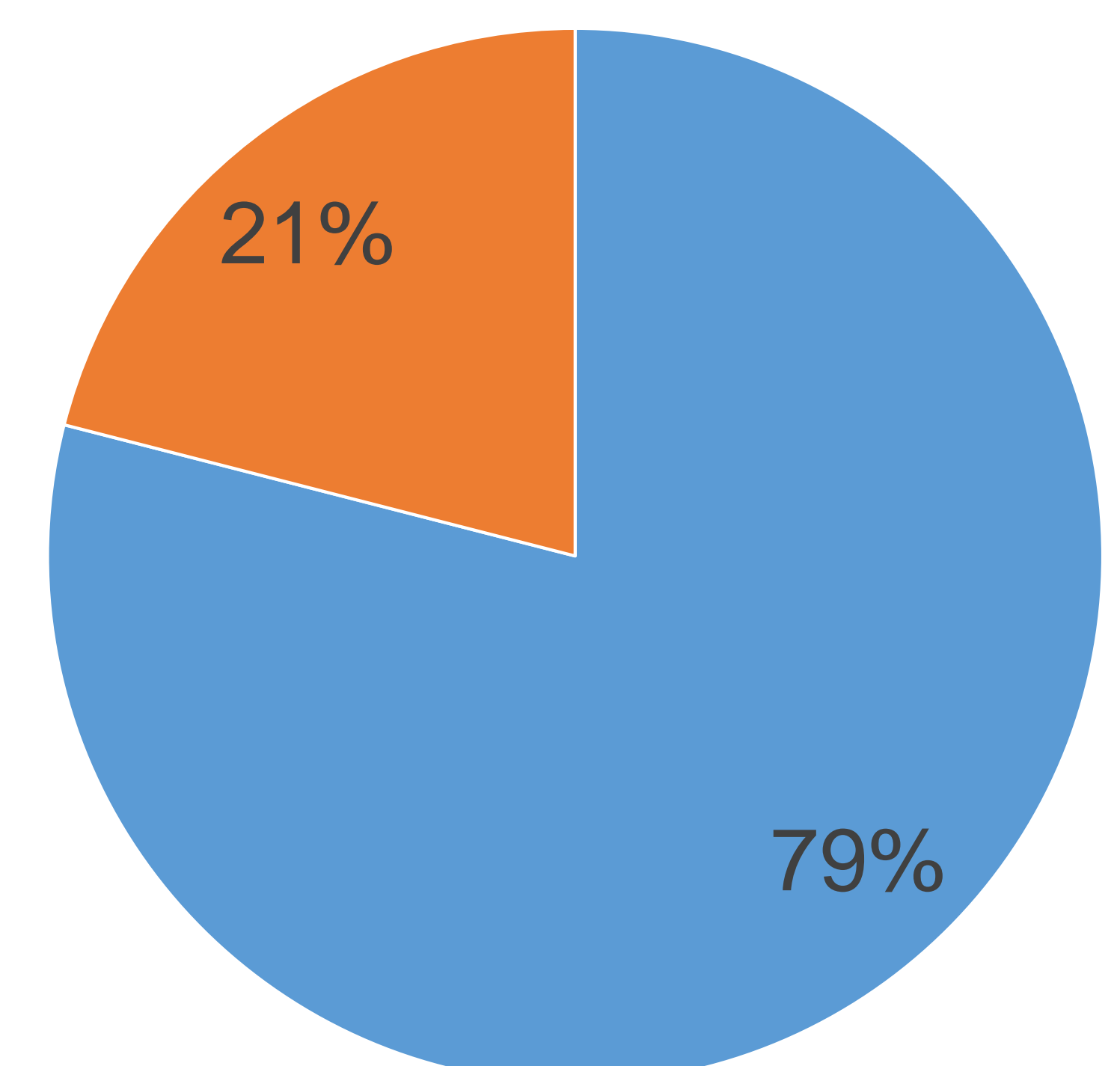
### Results:

Occupational Exposures



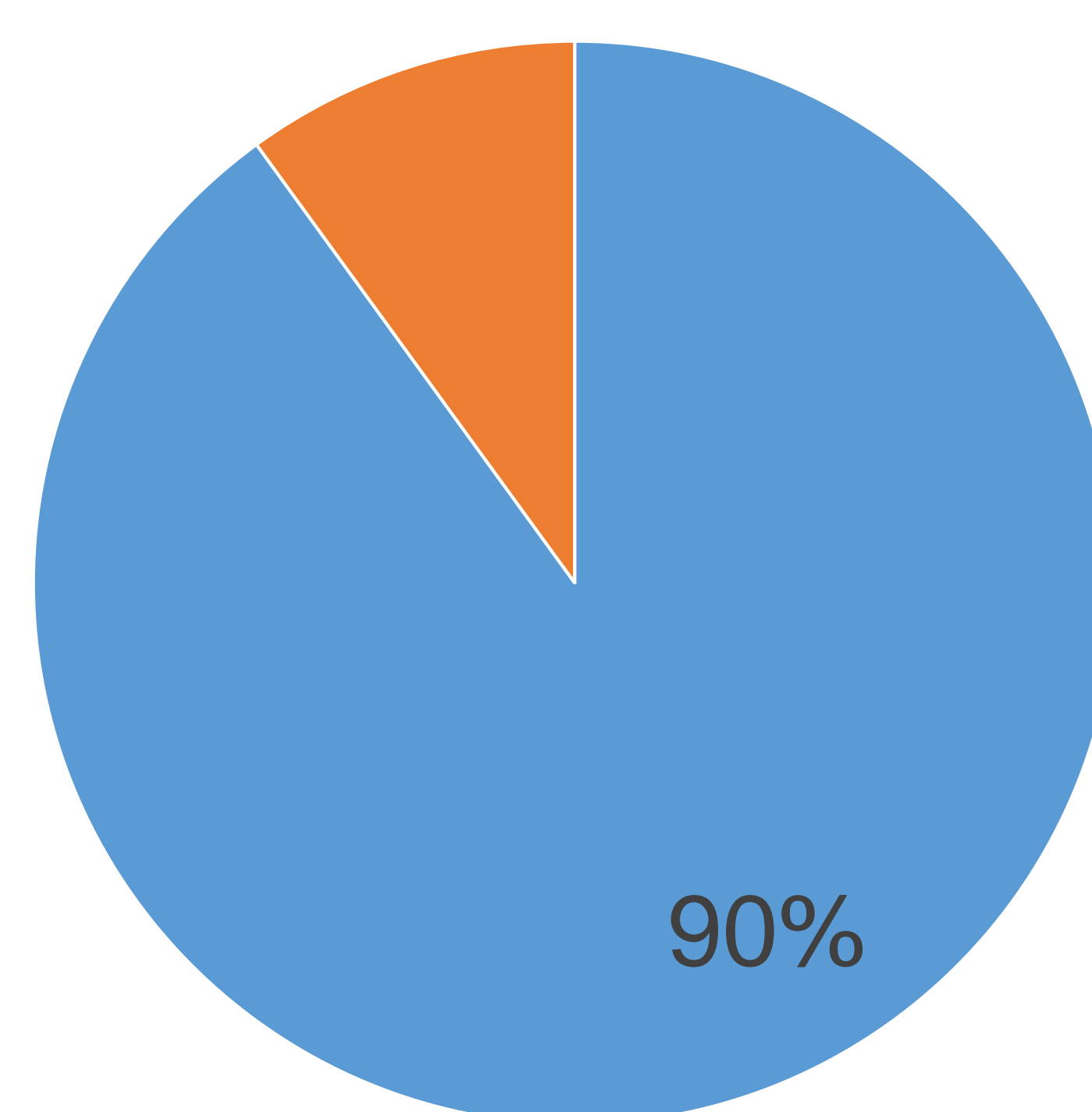
■ By other agents  
■ By pesticides

Sex of occupational exposed to pesticide



■ Men ■ Women

Agents



■ Organophosphates  
■ Other pesticides

Males showed a doubled risk of exposure to a pesticide through dermal route (OR 2.0; 95% CI: 1.28 to 3.13;  $p < 0.05$ ) when compared to females and other routes of exposure

**Conclusions:** From all pesticide occupational cases, organophosphates were the most prevalent. Exposures by dermal route in men is a preventable risk factor for handling pesticides. Due to intrinsic toxicity of organophosphates, importance of hazard communication and use of personal protective equipment are key elements to prevent pesticide poisoning.