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## Hierarchy of general principles of prevention: an analytical framework for linking occupational health and technical choice in agriculture

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**Abstract:** The recognition of the dangers associated with the work process has gradually led to forms of collective action aimed at reducing occupational accidents and diseases (Commons 1950). The institutionalization of this field of action was accompanied by in-depth debates and production of evidence regarding the level of effectiveness of various types of interventions. This resulted in a broad agreement on how to prioritise risk control measures. This prioritisation is one of the pivotal points of occupational health and safety regulation (e.g. EU Directive 89/391, FAO 2010). It structures professional practice in the field of prevention. However, in agriculture, the institutionalisation of the area of occupational health and safety has often been weak. Occupational safety is not a central driver of technical change. In many countries, there is a very tight institutional compartmentalisation between two areas of advisory services between occupational safety and production.

The aim of this communication is to help reduce this divide. We will thus see how the hierarchy of occupational risk control measures can be an instrument guiding jointly technical choices and occupational safety improvement. The mechanisms of this articulation will be presented starting from a particular type of risk, the chemical risk. The analysis is based on a set of pre-existing works (Laurent et al 2016, Laurent 2019, Garrigou et al. 2020). We will discuss the technical trade-offs that correspond to different strata of the hierarchy of occupational risk prevention measures.

**Keywords:** Hierarchy of occupational risk prevention measures; technical choices; pesticides; advisory services; institutions

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