Any possible risk to users during and after spraying plant protection products needs to be evaluated before authorisation of plant protection products. After having applied plant protection products it might be necessary to re-enter treated areas due to maintenance or harvest activities, for example. Therefore, workers may also be exposed to the plant protection products during re-entry through contact with the spray deposit. This possibility of exposure has to be evaluated during the authorisation procedure of the products.

Since specific instructions to operators applying plant protection products which had been derived by an appropriate risk assessment (cf. safeguarding the health of operators) cannot easily be transferred to workers completing re-entry tasks, a separate risk assessment has to be carried out according to Krebs et al. (2000) and Hoernicke et al. (1998), respectively. Concerning worker exposure several parameters – unlike those used in the context of operator risk assessment - have to be considered, e.g. crop-specific dislodgeable foliar residues on the plants’ leaves or crop-specific transfer factors (see EXCEL-spreadsheet for more details).

Depending on whether or not the relevant reference value (Acceptable Operator Exposure Level, AOEL) is exceeded by the predicted worker exposure additional personal protective measures can be allocated to reduce potential exposure. Specific worker instructions are included into “instructions of use” where required, thus determining respective personal protective equipment (PPE) and appropriate behaviour. In any case, recently treated areas should not be entered before the spray deposit had dried on the plants’ surfaces in accordance with good occupational hygiene practice.