



Poisoning severity score – uses and limitations

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The Poisoning Severity Score (PSS) was developed by the European Association of Poisons Centres and Clinical Toxicologists (EAPCCT), the International Programme on Chemical Safety, and the European Commission in the 1990s. It was developed to allow comparison between poisoning exposures, has been used in hundreds of studies, and cited over 450 times.

The PSS has a wide range of applications; is particularly useful to compare outcomes between substances/classes, dose, and exposure types; and allows quantitative evaluation of poisoning morbidity. Additionally, it allows evaluation of risks from emerging poisonings. Importantly, if many sites/countries use the PSS, this allows aggregation and comparison of data. Thus, the PSS is useful for clinical and epidemiological studies. The PSS has been implemented in many poisons centres, particularly in Europe and Asia.

The PSS is a five-point scoring system, ranging from “none” (no signs or symptoms relating to the poisoning) to “fatal”. Tables categorising effects in different organ systems are used to increase inter-rater reliability. The PSS was not designed as a prognosticator.

This presentation will briefly describe the PSS grading system, as well as the American Association of Poison Control Centers' (AAPCC) National Poison Data System (NPDS) severity grading system. Examples of studies that have used the PSS will be discussed. Strengths and limitations of the PSS will be reviewed.

In conclusion, the PSS is currently the best way to compare poisoning severity across different agents, patient groups, geographic locations, and countries. However, it is important to recognise the limitations of the PSS.