

EAHP Opinion on Pharmaceuticals in the Environment

- **EAHP is concerned about the negative effects that pharmaceuticals in the environment have on agriculture, aquaculture, livestock and, ultimately, humans and patients.**
- **Measures to better address pharmaceutical contamination put forward by the EC should be implemented in a timely and transparent manner.**
- **Interdisciplinary education, infection prevention and training programmes for healthcare professionals should be developed and implemented with the utmost urgency.**

Hospital pharmacists are concerned about the negative effects of pharmaceuticals both on the environment itself as well as on animals, humans and patients. Consequently, the European Association of Hospital Pharmacists (EAHP) welcomes the adoption of the Communication on a European Union Strategic Approach to Pharmaceuticals in the Environment.¹

It is noted that standards to prevent environmental contamination are not complied with at all production sites, especially those that are situated beyond Europe's borders. Responsibility has to be taken to ensure that drugs and their components distributed and used in the European Union (EU) are produced without avoidable environmental pollution. Measures supporting the uptake of greener manufacturing and the improvement in the design and implementation of environmental risk assessment are a good step in the right direction and should be pursued in a timely and transparent manner by the European Commission (EC).

Some drugs are not metabolised and degraded into inactive substances by patients or animals treated with these drugs. For example some antimicrobials, hormones, cytotoxic agents or non-steroidal anti-inflammatory drugs (NSAIDs) may be partly excreted unchanged and remain pharmacologically active. The consequences of environmental contamination may be significant, e.g. active antimicrobials may induce and trigger antimicrobial resistance in patients and/or animals, thus impeding the national, European and global investments underway in the field of antimicrobial resistance. The need to minimise these negative consequences is of utmost importance and EAHP fully supports the measures put forward by the EC on the reduction and management of waste. A multi-stakeholder approach addressing, on the one hand, the design and manufacturing of pharmaceuticals and, on the other hand, best practice sharing among healthcare professionals is a sensible endeavour. The concentration of pharmaceuticals in the environment can be decreased only through meaningful and constant cooperation of all relevant actors.

The Communication, however, lacks acknowledgement of the fact that pharmaceuticals in the environment are also detrimental to patient safety. As healthcare professionals in direct contact with patients, hospital pharmacists as well as doctors and community pharmacists should be encouraged and enabled to educate other healthcare professionals as well as patients about the impact of antimicrobials, hormones, cytotoxic agents and NSAIDs on the environment. Consequently, EAHP is calling on the EC and national governments to ensure continued training of healthcare professionals in best practices in relation to the prevention of pharmaceutical contamination. Such training should be provided both at undergraduate and post graduate level, as well as through lifelong learning modules.

¹ COM(2019) 128 final. Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee: "European Union Strategic Approach to Pharmaceuticals in the Environment". Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1553078480901&uri=CELEX:52019DC0128>