## Pharmaceuticals in the environment

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#### **Evaluating our impacts**

We aim to lead our industry in understanding and mitigating the environmental fate and effects of PIE. As a minimum, we are committed to ensuring effective environmental management of our products from pre-launch through to product end-of-life. To do this we:









Conduct

(EPV) to review emerging

science, looking for new

information that might

the environmental risks

associated with our APIs

## Revise our safe discharge limits and

justifies a change in our environmental protection goals. This helps to ensure that we have upto-date, science-based targets to help ensure the environmental safety of our products

#### Form effective partnerships and co-sponsor research to fill scientific gaps to understand and mitigate the risks of PIE

Collaborate with industry, government and other stakeholders to manage environmental risk across the product life cycle, including efforts to improve medicine disposal programmes and education

Assess the environmental risk of our medicines to support drug marketing authorisations

Make our ERA data and safe discharge standard concentrations visible on our web pages

Set safe discharge standards and actively manage the environmental risks associated with the APIs discharged from our manufacturing operations and supply chain

# ecopharmacovigilance

ERAs if reliable data change the way we assess

### 20 years of PIE leadership

1998	2003	2004	2011	2012	2013	2015	2018
AstraZeneca publishes its first paper on PIE, describing reproductive effects in fish	AstraZeneca reviews the environmental risks of its APIs	AstraZeneca Operations supports the development and roll-out of a safe discharge programme	AstraZeneca rolls out its safe discharge programme to suppliers	AstraZeneca is the first company to publish (i) its ERA data on its webpage and (ii) its approach to safe discharges and associated safe limits	AstraZeneca launches and publishes its approach to EPV	AstraZeneca partners in the IMI iPiE project, to develop predictive tools to identify environmental risks of medicines	AstraZeneca leads calls for innovation, using artificial intelligence approaches in environmental toxicology