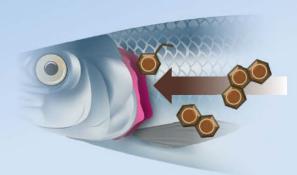
## MANY MECHANISMS OF OIL TOXICITY

## Many biological targets for PAH

- Cell membranes, cells, DNA, tissues,
- whole organism



## Acute Narcosis Toxicity

- Rapid impact
- Whole organism impacts: respiratory, neural effects

## Chronic Toxicity

- Slow impacts through cells, tissues, DNA, etc.
- Whole organism impacts: growth, lesions, deformities, cancers, edema
- Results of exposure not necessarily sublethal: reduced survival, reproduction, genetic mutations, etc.