



The Challenge of >12,000 PFAS

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The PFAS in ski wax helps athletes slide faster down the hill. Dmitry Molchanov/Shutterstock

How are we exposed?

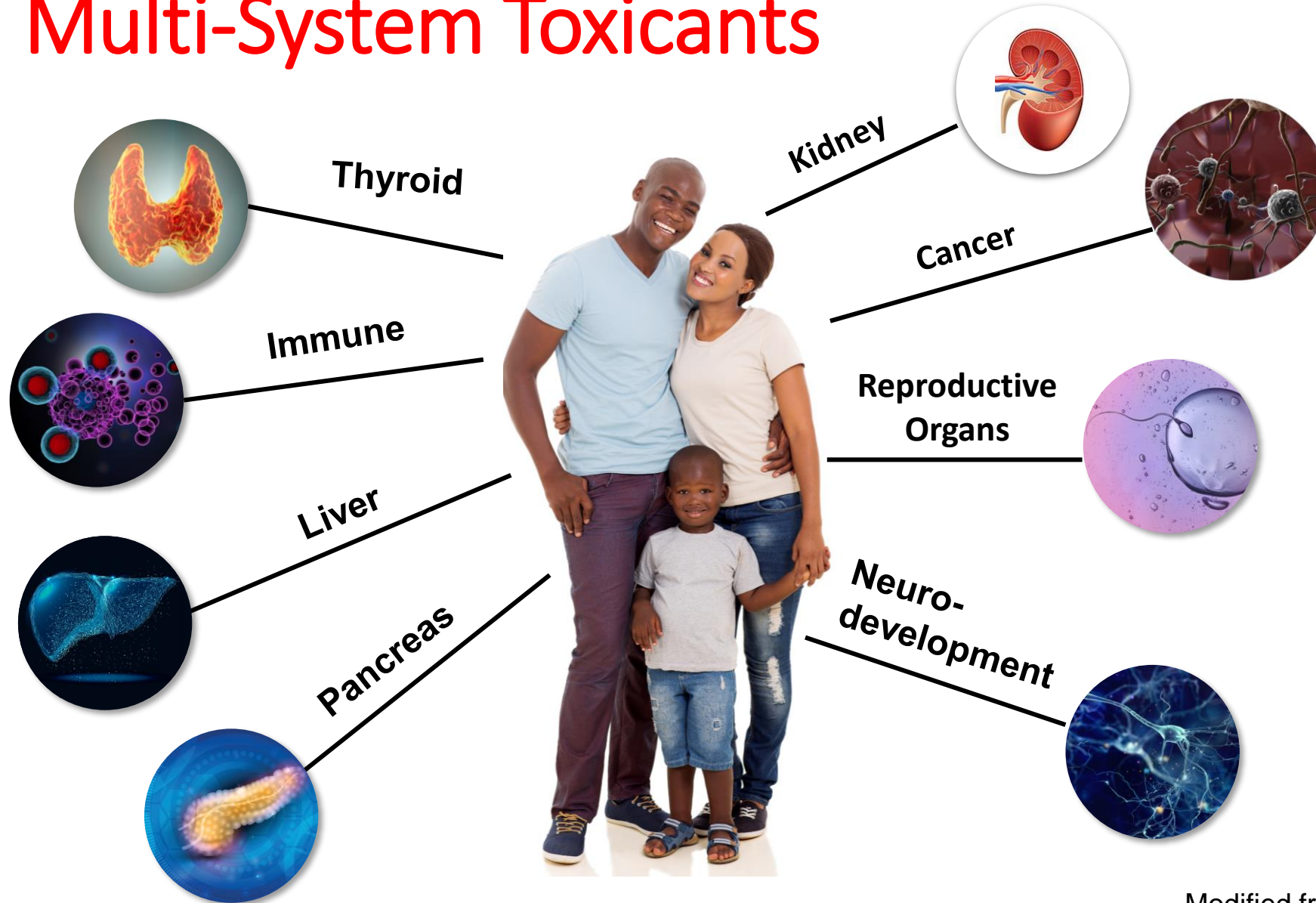
>200 Use Categories
[Glüge et al., Environ
Sci: Processes&Impacts,
2020]

- Diverse group of chemical compounds used in industry and consumer products worldwide since 1950s
- Contaminant in Drinking water
- Found in various products:
 - Carpet and Fabric
 - Food Packaging and Food
 - Pots and Pans
 - Clothing
 - Cardboard packaging
 - Firefighting foams (AFFF)
 - Cosmetics



Ingestion (Drinking Water, Food, Dust), Inhalation, Dermal

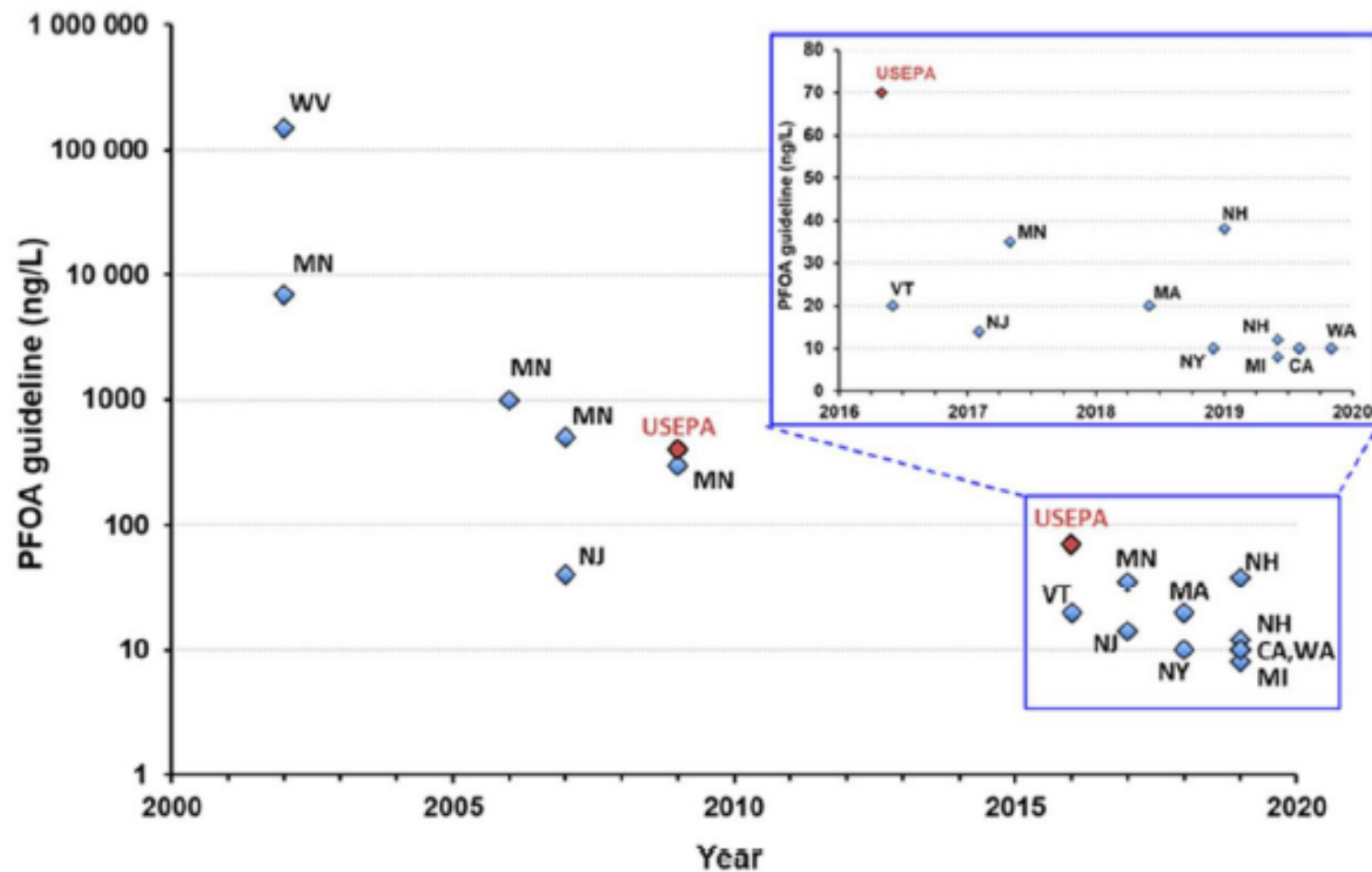
PFAS: Multi-System Toxicants



EPA's PFAS Strategic Roadmap (October 18,2021)

- PFAS Contamination poses unique challenges
 - Lifecycle Approach; Get Upstream of the Problem; Hold Polluters Accountable: Ensure Science-based Decision Making; Prioritize Protection of Disadvantaged Communities
- Strategic Roadmap Goals
 - Research/Restrict/Remediate
- Next Steps
 - Work with ALL stakeholders
 - Initiate National Engagement and partnerships
 - Stakeholder Listening Sessions
 - Harness the collective resources and authorities across federal, tribal, state, and local governments-→meaningful action
 - Initiate Testing Strategy involving 24 PFAS categories

***USGS: Integrated Science for the Study of PFAS in the Environment:
A Strategic Science Vision (2021)***



Post GB. Recent US State and Federal Drinking Water Guidelines for Per- and Polyfluoroalkyl Substances. *Environ. Toxicol. Chem.* 2021;40:560563. DOI: 10.1002/etc.4863

New EPA/OW Risk Assessments for 5 PFAS

PFAS Compound	Chronic RfD (mg/kg-day)	Drinking Water (ppt)*
PFOS (Proposed 2021)	0.0000000079	~1
PFOA (Proposed 2021)**	0.0000000015	~0.2
PFOA/PFOS (2016***)	0.0002	70
GenX (2021)	0.000003	420
PFBS (2021)	0.00003	4200
PFBA (Proposed 2021)	0.01	14000000

*Assume 70 kg adult drinks 2 liters of water/day

** MCLG = 0 based on cancer

***Lifetime Health Advisory for the Σ PFOA+PFOS