Summary of results from survey: Competitive skiing and fluorinated ski waxes 190826

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Project Webpage POPFREE Ski Goes Global
Survey responses

- Distribution of survey using project network
- 266 responses where 212 stayed to the last question (79% completion rate)
- Possible to extend the survey after this workshop
Norway, Sweden and others...

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO - Norway</td>
<td>43.61%</td>
<td>116</td>
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<tr>
<td>SE - Sweden</td>
<td>31.95%</td>
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<td>US - United States</td>
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<td>DE - Germany</td>
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<td>AT - Austria</td>
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<td>EE - Estonia</td>
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<td>CH - Switzerland</td>
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<td>IT - Italy</td>
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<td>CZ - Czech Republic</td>
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<td>FX - France, Metropolitan</td>
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<td>GH - Ghana</td>
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<tr>
<td>MZ - Mozambique</td>
<td>0.38%</td>
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</tr>
</tbody>
</table>
The middle-aged male in majority
Cross-Country in majority

- Cross-country: 93%
- Biathlon: 9%
- Alpine: 9%
- Freeski/freestyle: 9%
All types of roles in ski sports

Other:

- Elite skier: 21%
- Semi-elite skier: 17%
- Professional ski technician: 13%
- Coach: 24%
- Leader/Manager: 16%
- Other: 10%
A couple of really serious waxers...

Comments about waxing 300 pairs in a high-season week!
95% are aware of PFAS risks

Are you aware of health and environmental risks associated with fluorinated substances (PFAS)?
75% think that PFAS in skiing is a concern

Do you think use of these substances in fluorinated ski waxes is a concern?

- Yes: 75%
- No: 13%
- I don't know: 12%
Main concerns with fluorinated ski waxes
Ways to protect environment and health during ski waxing

Multiple actions could be chosen

78% use some kind of airways protection

44% try to minimize PFAS use
Have you ever experienced any health problems after being exposed to fluorinated ski waxes, e.g. "fluorine fever", a flu-like condition with fever, dyspnea and aching?

16% have experienced health problems from ski waxes

35% of them more than 10 times
Approximately how many times have you experienced health problems caused by fluorinated ski waxes?

![Graph showing the number of times health problems were experienced by respondents. The x-axis represents respondents, and the y-axis represents the number of times. The graph shows a decreasing trend as the number of respondents increases.]
38% know someone who has had health problems from ski waxes

Do you know someone else who has experienced health problems after exposure to fluorinated ski waxes?

- Yes: 53%
- No: 38%
- I don't know: 9%

POPFREE
41% have chosen fluorine-free competition glide

Have you deliberately chosen to use fluorine-free glide wax during a competition?
Glide impressions from PFAS-free
84% would consider fluorine-free if competitors played by the same rules

Would you consider using only fluorine-free ski wax in competitions, if your competitors played by the same rules?
55% Would like a general regulation of fluorinated ski waxes in competitions

Would you like to see a general regulation/ban of fluorinated ski waxes in competitive skiing?
All levels of competitions are relevant for regulations

On which levels would you like to see a general regulation/ban of fluorinated ski waxes in competitive skiing? You can select more than one answer.
All athlete groups are relevant for regulations
Voluntary bans by clubs and competition organisers may be a first step forward...

Could voluntary regulations/bans by clubs and competition organisers at specific competitions be a first step forward?
First steps are better taken on national or lower levels
Young skiers are favoured for first steps
Measures and actions for successful enforcement?
Ski associations and Industry should lead the way
Knowledge gap:
55% do not know of other uses for PFAS.