

Breakout Session III: Knowledge Gaps About Fit



What wearer characteristics contribute to good and poor fit of a respirator?

- Symmetry
- chin characteristics
- Sweat
- Nose dimension
- Head dimensions for head straps and harnesses

What is the role of facial features? What remains to be discovered?

- Demographics for workforce subgroups (industry, health care workers, construction, etc)
- Large amount of variation
- Nasal dimensions
- Lip width?
- Need data for all groups (race, ethnicity, gender, age)

What is the role of other characteristics (race, gender, age, ethnicity)?

- Accommodation for women
- Elasticity of face/skin, weight, how these correlate to fit
- The effect of aging on respirator fit?

Are there are other knowledge gaps that should be considered/explored?

- Research on association of facial dimensions and fit of full face piece respirators
- Identify leak sites and association with facial & respirator dimensions
- What happens to the outliers who can't get a fit?
 - Who are these people?
 - Why can't they be accomodated?

Are there are other knowledge gaps that should be considered/explored?

- 3D description of the face
- interface with other PPE