PPE Preservation Planning Toolkit

This toolkit is designed to aid any PPE-using organization to plan and implement preservation strategies. It provides estimates of the value of implementing preservation actions to reduce (use of), to reuse, or to repurpose PPE, as described in the Coronavirus (COVID-19) Pandemic: Personal Protective Equipment Preservation Best Practices[1] fact sheet, in conventional, contingency, or crisis capacity conditions (as defined in the Centers for Disease Control and Prevention's Optimizing Supply of PPE and Other Equipment during Shortages[2]). Users enter data on their current or prospective PPE use practices. The toolkit assists users to understand types of preservation strategies their organizations may implement and provides estimates of positive impacts of using those strategies in increasing the duration of a specified PPE supply.

What is included?

1. The *Guide* (PDF): step-by-step instructions
2. The *Tool* (spreadsheet): dynamic tool to enter and analyze data and interpret output

How does it work?

Users enter data based on their uses of PPE (gloves, N95 respirators, surgical masks, face shields/eye protection, gowns) and factors reflective of their current or prospective operating environment and practices. This includes the following elements:

- Identification of staff categories requiring PPE, the numbers of employees using PPE, and estimation of the daily PPE consumed per staff member by staff category.
- Practices of PPE use for patients or work cycles, and the proportion of patients or facility staff to whom the practices apply.

Analysis and output include the following elements:

- Estimation of reduction factors associated with each PPE preservation strategy for each PPE type.
- Estimation of overall reduction factors when preservation strategies are implemented.
- Estimation of duration of specified supply amounts, displayed in tables and graphs.

How long will it take?

The following estimates are based on initial testing:

1. Thirty minutes for orientation and preparation for using the tool
2. One to three hours for entering information to enable preparation for use of the preservation strategies and estimation of the use (burn) rate and impact of preservation strategies on duration of supplies

[1] https://files.asprtracie.hhs.gov/documents/fema-fact-sheet-ppe-preservation-best-practices-update---14-july-2020.pdf, accessed 30 Sep 2020

[2] https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/index.html, accessed 30 Sep 2020

Time for using the tool will vary based on the size and complexity of the organization and the familiarity of the user with the organization and the concepts.

How is this tool different from related tools?

The *NIOSH PPE Tracker App*[3], the *CDC Burn Rate Calculator*[4], and the *EMS PPE Supply Estimator*[5] are additional tools developed for estimating burn (use) rate of PPE based on historical usage or on use practices for PPE supplies. The tools can be used complementarily with the PPE Preservation Planning Toolkit for estimation and planning purposes. They would not necessarily be expected to provide identical results, given the differences in purposes and methods as described in the table below.

Feature	NIOSH PPE Tracker App & CDC Burn Rate Calculator	EMS PPE Supply Estimator	PPE Preservation Planning Tool
Estimates use rate and PPE supply duration.	Yes[6]	Yes[7]	Yes[8]
Accounts for resupply deliveries in estimating use rate and supply duration.	Yes	No	No
Accounts for use-reduction factors when implementing preservation strategies.	No	No	Yes
Allows user to adjust reduction factors to reflect unique preservation practices.	No	No	Yes
Estimates changes in PPE use rate and supply duration based on preservation strategies.	No	No	Yes
Facilitates user's expansion of use of preservation strategies.	No	No	Yes
Provides user a compilation of preservation information.	No	No	Yes
Provides a step-by-step process to guide users in practices for PPE supply and preservation in the COVID-19 environment (e.g., when to report to state, when to work with vendor).	No	No	Yes

Questions or comments?

Please submit to the Healthcare Resilience Working Group at HCSRTF-COVID-19@hhs.gov.

[3] https://www.cdc.gov/niosh/ppe/ppeapp.html, accessed 30 Sep 2020
[4] https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/burn-calculator.html, accessed 30 Sep 2020
[5] https://www.ems.gov/files/EMS_PPE_Supply_Estimator.xlsx, accessed 30 Sep 2020
[6] Based on historical record of supply levels
[7] Based on user input of supply use practices
[8] Based on user input of use rate for staff categories or user-supplied staff activity assumptions