Focus of Presentation

• A high-level summary of the methodology to forecast demand for personal protective equipment (PPE) and cleaning supplies for the economic sectors ("consumption segments") in British Columbia in support of government’s Re-Start plan
• Provide an illustrative example
• Link to more details in supporting documentation and contact details
Objectives of the Demand Model

• Estimate and forecast demand for PPE and cleaning products
• Covers the entire province including all sectors of the economy
• Only exception it does not include the direct health care sector (such as hospitals and extended care facilities) as supplies are provided to this sector by the Provincial Health Services Authority (PHSA)
• As with all future focussed models, there are imprecisions and uncertainties in this model but a tool to provide estimates for decision makers
Principles

• Rely on recommendations on use and protocols from WorkSafeBC, Ministry of Health, etc.

• Use conservative estimates where necessary
  • In cases where existing data sources have uncertainty or are imprecise, the assumption is made that yields a higher value (it’s better to have a surplus than a shortage)

• Use existing data sources
  • Given the time constraints, no original data was collected

• Update the model daily/as required
  • Updates to recommendations as they are announced
  • Course correction based on experience and feedback
  • Additional sectors and products as the Re-Start plan evolves
Assumptions / sources

Wherever possible, the model uses existing data directly related to the use of these products:

• Number of facilities and staff
  • BC Open Data Catalogue
  • Statistics Canada

• Usage
  • Recommendations and guidelines
  • Provincial Health Office, WorkSafeBC

• Proportion of sector that is operational
  • Data from licensing agencies
  • BC’s Restart Plan
  • Statistics Canada
Demand Model Visual

Demand projections = # of staff × # locations × Use rate × % active
Example – Child Care Centre vinyl glove usage

• An example of the demand for vinyl PF gloves at child care centres
• There are 4,237 registered day care & child care facilities in B.C.
• It is estimated that at any one time, there are an average of 5 staff on site.
• Of the staff, 2% will use vinyl PF gloves once per day (most will use other types of hand covering, such as reusable gloves)
• It is assumed that child care facilities are open 5 days a week
• It is assumed that 5% of gloves will be defective
• The proportion of child care facilities that are open will increase through the Restart phases
• For Phase 1, the equation to calculate weekly demand is:
  4237 locations * 5 staff * 2% users * 5 days + 5%
Demand Model Visual: Child Care centres

Weekly Demand

<table>
<thead>
<tr>
<th>Group</th>
<th>Consumption Segment</th>
<th>Status</th>
<th>Product Category</th>
<th>G3 uom</th>
<th>L1.Product</th>
<th>L2.Product</th>
<th>Demand Base</th>
<th>Phases</th>
<th>Values</th>
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<tbody>
<tr>
<td>Non-Consumer</td>
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<td>Pandemic</td>
<td>PPE</td>
<td>pair</td>
<td>Gloves</td>
<td>Vinyl PF gloves</td>
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