

## Total Cost Comparison of the TempArmour™ vs Other Vaccine Refrigerators

When comparing vaccine refrigerators, take into account the entire cost of your choice! The TempArmour™ Vaccine Refrigerator provides the most effective vaccine protection as well as significant COST SAVINGS.

|                                      | Typical vaccine refrigerator |                                  |
|--------------------------------------|------------------------------|----------------------------------|
| COST OF REFRIGERATOR                 |                              | \$3299                           |
| COLD CHAIN INCIDENTS - RELATED COSTS |                              | 0 per year                       |
| AVERAGE VACCINE LOSSES PER YEAR      |                              | 0 per year                       |
| NOTIFICATION SYSTEMS - CAPITAL COST  |                              | 0                                |
| NOTIFICATION SYSTEMS - ONGOING COST  |                              | 0 per year                       |
| MAINTENANCE COST                     |                              | \$100 per year                   |
| BACKUP POWER - CAPITAL COST          |                              | 0                                |
| BACKUP POWER - ONGOING COST          |                              | 0                                |
| ELECTRICITY CONSUMPTION - kW/year    |                              | 200 kW/year                      |
| ELECTRICITY COST 10¢/kWh x kW/year   |                              | \$20 per year                    |
| TOTAL COST FIRST YEAR                | Lower your<br>costs          | \$3,319                          |
| TOTAL COST OVER 10 YEARS             | by 84%                       | \$4,399 TempArmour™ Refrigerator |

## Vaccine Refrigerator Cost Comparison Table\* (US \$)

Do the above numbers differ from your situation? Plug in your own figures to estimate the costs for your vaccine refrigerator. \*NOTES/ASSUMPTIONS FOR OUR EXAMPLE: (assumes a 10 year lifespan for both refrigerators)

| Cost of refrigerator:     | The same cost as the <b>TempArmour™ Refrigerator</b> (\$3299) is used for the sake of simplicity. \$1500 - \$5000 is the typical cost of upright vaccine refrigerators (purpose built and comparable in the quantity of vaccines that it can hold)  |
|---------------------------|---|
| Cold chain incidents:     | This number comprises the human resource costs (time) incurred by staff managing cold chain incidents. <b>TempArmour™</b> customers typically don't experience refrigerator-related cold chain incidents.   |
| Vaccine losses:           | \$1000 per year average chosen as a typical scenario (e.g. one \$10000 loss in a 10 year period). Average vaccine losses of <b>TempArmour™</b> customers is \$0.  |
| Notification system costs | Remote monitoring/notification systems are available with varying costs and are important for standard vaccine refrigerators that can go out of temperature range quickly. The majority of TempArmour™customers opt not use monitoring systems as the <b>TempArmour™</b> typically maintains its temperature for 6 days during power outages, un plugged cords, etc.  |
| Maintenance cost:         | The <b>TempArmour™</b> does not require on-site maintenance by a technician. Costs include recalibration/replacement of thermometers and data loggers when required (Note: Vaccines for Children (VFC) Providers are typically required to do that yearly).   |
| Backup-Power costs:       | The <b>TempArmour™</b> does not require backup power as it typically maintains its temperature for 6 days during power outages, unplugged cords, etc.   |
|                           | \$2300 is the cost of a backup power system ( <b>PowerHub 1800-400</b> ) that would provide 8-16 hours of backup power for a standard upright vaccine refrigerator. The cost of battery replacement every 3 years for that system is \$1200 (\$400/year). (Tip: if your fridge is currently hooked up to a hospital generator, using the TempArmour™ will free up that generator capacity for another critical item in the hospital.) |
| Electricity costs:        | The power consumption of a typical full size upright vaccine refrigerator varies, however 400 W/hr is a reasonable estimate. The approximate power consumption of the TempArmour™ is 20 W/hr. Electricity costs vary therefore the average electricity cost of 10¢/kWh was used. The calculated numbers were also rounded off for clarity in the example.   |