

Chart of Refrigerated/Frozen Pack Needs for Different Climates

Outside Temperature	Number of Faces* Covered with Packs	Temperature of Packs	Comment**
Greater than 75°F to 110°F (greater than 24°C to 43°C)	2***	23°F (-5°C)	Up to 48 hours delivery with 10 hours at 110°F (43°C)
32°F to 75°F (0°C to 24°C)	2***	23°F (-5°C)	Up to 48 hours delivery
	4	41°F (+5°C)	Up to 24 hours delivery
Colder than 32°F (°C)	4 to 6****	50°F (+10°C)	About 24 hours exposure to mix of outdoors and heated areas
0°F (-18°C) or colder	6****	68°F (+20°C)	Prolonged, 24 to 48 hours continuous exposure to 0°F (-18°C)

* Faces would include the interior surfaces of the box, including the walls, floor and lid (above the vaccines and insulating material).

** Applies when high quality insulated boxes with walls of 1¼ inches to 2¼ inches expanded polystyrene, 1 inch isocyanurate, or 3 inches polyurethane insulation were used.

*** 3 for the medium-sized box tested by CDC (10x10x7 inches—interior dimensions).

**** Essentially the entire surface area is covered with packs.



Refrigerated/Frozen Packs.