

## Raw Product Critical Limit Table

**Intended use:** This table is to be used for setting Critical Limits at Critical Control Points (CCPs) for the **raw, ground, and raw, not ground** HACCP plans. The CCP in these plans is usually a step(s) at which the product reaches its warmest temperature. Examples include stuffing or packaging for sausage products, cooling for hot-boned pork, cutting for chicken parts. The hazards controlled by employing these Critical Limits are *Salmonella* and *Staphylococcus aureus* for pork; *Salmonella*, *Escherichia coli* O157:H7, and *Staphylococcus aureus* for beef, seasoned beef (contains phosphate, salt, and spices, but no nitrite), and sausage (contains added salt, but does not contain nitrite); and *Salmonella* and *Staphylococcus aureus* for poultry.

### How to use the table:

- 1) Determine which column to use: pork, beef, poultry, seasoned beef (contains phosphate, salt, and spices, but no nitrite) or sausage (contains added salt, but does not contain nitrite).
- 2) Determine the temperature you would like to set as your Critical Limit. This should be the warmest temperature you expect product to ever reach if it is handled properly.
- 3) Determine the time limit for the temperature you picked in 2). For products that start out cold and warm up, this is the time you have starting with the product leaving refrigeration until the product is chilled back to 41°F or lower. For hot-boned meat, this is time from the completion of slaughter and dressing until the product is chilled to 41°F or lower.

### Critical Limit (hours : minutes)

Temperature (°F)	Pork	Beef	Poultry	Seasoned Beef	Sausage
50	54:45	27:00	22:30	13:15 <sup>^</sup>	8:30 <sup>*</sup>
55	17:00	9:00	14:45	13:15 <sup>^</sup>	8:30 <sup>*</sup>
60	8:30	6:00	13:45	13:15	8:30 <sup>*</sup>
65	8:15	3:45	8:15	5:00	8:30
70	5:45	3:30	4:45	5:00	6:00
75	4:15	2:30	3:00	3:00	5:15
80	4:15	2:00	3:00	3:00	3:15
85	1:30	1:30	2:00	2:00	2:30
90	1:30	1:30	2:00	2:00	2:30
95	1:30	1:15	2:00	1:30	1:45
100	1:30	1:15	1:30	1:30	1:45
105	1:00	1:00	0:45	1:00	1:45
110	1:00	1:00	0:45	1:00	2:15

<sup>^</sup>No experiments done at this temperature. Must use Critical Limit for 60°F.

<sup>\*</sup>No experiments done at this temperature. Must use Critical Limit for 65°F.

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