

Your Complete **Insulin** Reference Guide From *Diabetes Health*

	Insulin	Manufacturer	Onset (approximately)	Peak (approximately)	Duration (approximately)
RAPID ACTING	Apidra (insulin glulisine)	sanofi aventis	15–30 minutes	0.5–2.5 hours	5 hours or less
	Humalog Vial (insulin lispro)				
	Humalog Cartridge	Eli Lilly & Company	15–30 minutes	0.5–2.5 hours	5 hours or less
	Humalog Pen (prefilled)	Eli Lilly & Company	15–30 minutes	0.5–2.5 hours	5 hours or less
	NovoLog Vial (insulin aspart)	Novo Nordisk	10–20 minutes	1–3 hours	3–5 hours
	NovoLog PenFill				
	NovoLog FlexPen (prefilled)				
SHORT ACTING	Humulin R (Regular) Vial ^a	Eli Lilly & Company	30–60 minutes	2–4 hours	5–8 hours
	Novolin R (Regular) InnoLet	Novo Nordisk	30 minutes	2.5–5 hours	8 hours
	Novolin R (Regular) PenFill				
	Novolin R Vial (Regular human insulin)				
	ReliOn/Novolin R Vial				
Humulin N (NPH) Vial	Eli Lilly & Company	1–2 hours	2–8 hours	14–24 hours	
Humulin N (NPH) Pen (prefilled)					
INTERMEDIATE ACTING	Novolin N PenFill (NPH human insulin isophane)	Novo Nordisk	1.5 hours	4–12 hours	24 hours
	Novolin N Vial (NPH human insulin isophane)	Novo Nordisk	1.5 hours	4–12 hours	24 hours



Apidra



NovoLog



Novolin R InnoLet



Humulin N Pen

All insulins listed are U-100 strength. All insulins should be refrigerated at 36°–46° F.

a: Also available in U-500 by prescription only.

b: Lantus and Levemir release at a relatively constant rate over a 24-hour period.

c: Pens in use (open) should not be stored in the refrigerator.

d: Eli Lilly 3-ml cartridges fit the Owen Mumford Auto Pen.

e: Prices for Eli Lilly insulins are average wholesale price as reported by First Data Bank.







f: Prices for Novo Nordisk insulins are average wholesale price as reported by First Data Bank.

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Insulin	Room Temperature Storage Range (59°–86° F)	Need to Roll Briskly 10+ Times?	Cartridge Sizes	Pens That Fit the Cartridges	Suggested Retail Price ^{e/f}
Apidra (insulin glulisine)	Up to 28 days	No	N/A	N/A	Pending
Humalog Vial (insulin lispro)	Up to 28 days	No	N/A	N/A	10-ml vial: \$80.86
Humalog Cartridge	Up to 28 days	No	3-ml	Autopen	Five 3-ml cartridges: \$162.69
Humalog Pen (prefilled)	Up to 28 days ^c	No	N/A	N/A	Five 3-ml pens: \$156.25
NovoLog Vial (insulin aspart)	Up to 28 days	No	N/A	N/A	10-ml vial: \$83.70
NovoLog PenFill	Up to 28 days	No	3-ml	NovoPen 3, NovoPen Junior	Five 3-ml cartridges: \$155.50
NovoLog FlexPen (prefilled)	Up to 28 days	No	3-ml	N/A	Five 3-ml pens: \$161.69
Humulin R (Regular) Vial^a	Up to 28 days	No	N/A	N/A	10-ml vial: \$34.59
Novolin R (Regular) InnoLet	Up to 28 days	No	3-ml	N/A	Five 3-ml dosers: \$73.64
Novolin R (Regular) PenFill	Up to 28 days	No	3-ml	NovoPen 3, NovoPen Junior	Five 3-ml cartridges: \$109.55
Novolin R Vial (Regular human insulin)	Up to 30 days	No	N/A	N/A	10-ml vial: \$34.59
ReliOn/Novolin R Vial	Up to 30 days	No	N/A	N/A	10 mL vial: \$19.96
Humulin N (NPH) Vial	Up to 28 days	Yes	N/A	N/A	10-ml vial: \$34.59
Humulin N (NPH) Pen (prefilled)	Up to 14 days ^c	Yes	N/A	N/A	Five 3-ml pens: \$109.56
Novolin N PenFill (NPH human insulin isophane)	14 days	Yes	3-ml	NovoPen3, NovoPen Junior	Five 3-ml cartridges: \$109.55
Novolin N Vial (NPH human insulin isophane)	Up to 30 days	Yes	N/A	N/A	10-ml vial: \$34.59

Customer Support: Eli Lilly & Co. (800) 545-5979
 Novo Nordisk (800) 727-6500
 sanofi-aventis (800) 633-1610

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	Novolin N InnoLet (NPH human insulin isophane)	Novo Nordisk	1.5 hours	4–12 hours	
	ReliOn/Novolin N Vial	Novo Nordisk	1.5 hours	4–12 hours	
LONG ACTING	Lantus Vial (insulin glargine)	sanofi-aventis	1.5 hours	None ^b	
	Lantus Cartridge				
			<i>Lantus Vial</i>		
	Levemir Vial (insulin detemir [rDNA origin] injection)	Novo Nordisk	0.8–2.0 hours	Relatively flat	
	Levemir FlexPen (insulin detemir [rDNA origin] injection)	Novo Nordisk	0.8–2.0 hours	Relatively flat	
		<i>Levemir FlexPen</i>			
INTERMEDIATE/RAPID ACTING	Humalog Mix 75/25 Vial	Eli Lilly & Company	15–30 minutes	0.5–2.5 hours	
	Humalog Mix 75/25 Pen (prefilled)	Eli Lilly & Company	15–30 minutes	0.5–2.5 hours	
			<i>Humalog Mix 75/25 Pen</i>		
	NovoLog Mix 70/30 Vial (70% insulin aspart protamine suspension/30% aspart)	Novo Nordisk	10–20 minutes	2.4 hours	
	NovoLog Mix 70/30 PenFill	Novo Nordisk	10–20 minutes	2.4 hours	
		<i>NovoLog Mix 70/30 FlexPen</i>			
	NovoLog Mix 70/30 FlexPen	Novo Nordisk	10–20 minutes	2.4 hours	
INTERMEDIATE/SHORT ACTING	Humulin 50/50 Vial (50% NPH/50% Regular)	Eli Lilly & Company	30–60 minutes	0.5–2.5 hours	
	Humulin 70/30 Vial (70% NPH/30% Regular)	Eli Lilly & Company	30–60 minutes	0.5–5 hours	
	Humulin 70/30 Pen (prefilled)	Eli Lilly & Company	30–60 minutes	2–4 hours	
			<i>Humulin 70/30 Pen</i>		
	Novolin 70/30 PenFill (70% NPH/30% Regular)	Novo Nordisk	30 minutes	2–12 hours	
	Novolin 70/30 InnoLet (70% NPH/30% Regular)	Novo Nordisk	30 minutes	2–12 hours	
	Novolin 70/30 Vial (70% NPH/30% Regular)	Novo Nordisk	30 minutes	2–12 hours	
		<i>Novolin 70/30 InnoLet</i>			
	ReliOn/Novolin 70/30 Vial	Novo Nordisk	30 minutes	2–12 hours	

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24 hours	Up to 14 days	Yes	N/A	N/A	Five 3-ml dosers: \$73.64
24 hours	Up to 30 days	Yes	N/A	N/A	10ml vial: \$19.96
20–24 hours	Up to 28 days	No	N/A	N/A	10-ml vial: \$53.99
20–24 hours	Up to 28 days	No	3-ml	sanofi-aventis OptiClik pen	Five 3-ml cartridges: \$142.79
Up to 24 hours	Up to 42 days	No	N/A	N/A	10-ml vial: \$83.70
Up to 24 hours	Up to 42 days	No	3-ml	N/A	Five 3-ml pens: \$161.69
Up to 24 hours	Up to 28 days	Yes	N/A	N/A	10-ml vial: \$80.86
Up to 24 hours	Up to 10 days ^c	Yes	N/A	N/A	Five 3-ml pens: \$156.25
Up to 24 hours	Up to 28 days	Yes	N/A	N/A	10-ml vial: \$83.70
Up to 24 hours	Up to 14 days ^c	Yes	3-ml	NovoPen 3, NovoPen Junior,	Five 3-ml cartridges: \$155.50
Up to 24 hours	Up to 14 days	Yes	3-ml	N/A	Five 3-ml pens: \$161.69
Up to 24 hours	Up to 28 days	Yes	N/A	N/A	10-ml vial: \$34.59
Up to 24 hours	Up to 28 days	Yes	N/A	N/A	10-ml vial: \$34.59
Up to 24 hours	Up to 10 days	Yes	N/A	N/A	Five 3-ml pens: \$109.56
24 hours	Up to 10 days	Yes	3-ml	NovoPen 3, NovoPen Junior	Five 3-ml cartridges: \$109.55
24 hours	Up to 10 days	Yes	3-ml	N/A	Five 3-ml dosers: \$73.64
24 hours	Up to 30 days	Yes	N/A	N/A	10-ml vial: \$34.59
24 hours	Up to 30 days	Yes	N/A	N/A	10ml vial: \$19.96

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