

2010-2011 Influenza Virus Vaccine

The U.S. Food and Drug Administration has approved the influenza virus vaccines for the 2010-2011 flu season. The information below outlines the products that will be available and dosing recommendations. Some general points to consider for the 2010-2011 influenza season include:

- Influenza Vaccine is now recommended for all patients \geq 6 months of age.¹
- The 2010-2011 Seasonal influenza vaccine will include the 2009 H1N1 pandemic virus antigen. Two separate vaccines will not be required.¹
- All children aged 6 months through 8 years receiving influenza vaccine for the first time should receive 2 doses at least 4 weeks apart.
 - Children who received only 1 dose of influenza vaccine the first year they were vaccinated should receive 2 doses of vaccine the following season.
 - Children who did not receive at least 1 dose of 2009 H1N1 vaccine in the 2009-2010 influenza season should receive 2 doses of 2010-2011 seasonal influenza vaccine regardless of previous vaccination history.¹
- Fluzone® HD (high dose flu vaccine) contains 60mcg antigen per virus strain as opposed to 15mcg antigen per virus strain in standard influenza vaccine. Fluzone® HD is indicated in patients \geq 65 years old. It has been shown to increase immunogenicity in this population but has not yet been proven to be more effective at preventing influenza.^{1,3} These studies are in progress. Patients \geq 65 years old can receive either the high dose preparation or standard trivalent inactivated influenza vaccine.¹
- FluMist® is an intranasal attenuated live virus vaccine and should not be administered to :
 - Patients with asthma
 - Children under 5 years with recurrent wheezing
 - Patients with underlying medical conditions that confer a high risk of influenza complications (Safety has not been established).^{1,9}
 - Immunocompromised patients (potential benefit versus risk must be assessed)

Afluria® Update

- Afluria® (manufactured by CSL, marketed and distributed by Merck) had been approved in a 0.25ml prefilled syringe for patients aged 6-35 months, however reports of fever and febrile seizures in children administered Afluria® in southern hemisphere countries have prompted Merck to withhold the 0.25ml presentation from the U.S. market.²
- Afluria® had also been approved in a 5ml multidose vial, but due to manufacturing issues, that presentation will not be available this season.¹¹

- Afluria® had originally been approved in patients 6 months and older, however due to the issues discussed above, the CDC’s Advisory Committee on Immunization Practices (**ACIP**) recommends the following:¹²
 - Afluria® should not be used in patients 6 months through 8 years. Use other age appropriate licensed flu vaccines in this population.
 - If no other age-appropriate, licensed seasonal influenza vaccine is available for a child aged 5 years through 8 years old who has a medical condition that increases their risk for influenza complications, Afluria® may be given, and providers should discuss the benefits and risks of influenza vaccination with the parents or caregivers before administering Afluria®.

	Age/Immunization Status	Dose
Trivalent Inactivated Influenza Vaccine Intramuscular Injection ³⁻⁸ (Choose vaccine product according to patient’s age as described in above product table.)	Ages 6-35 months who have not been previously vaccinated against influenza or who did not complete a two dose series in the previous year	2 doses of 0.25mls IM administered at least 4 weeks apart
	Ages 6-35 months who were previously fully vaccinated against influenza	1 dose 0.25ml IM
	Ages 36 months-8 years who have not been previously vaccinated against influenza or who did not receive a two dose series in the previous year	2 doses of 0.5mls IM administered at least 4 weeks apart
	Ages 36 months-8 years who were previously fully vaccinated against influenza	1 dose of 0.5mls IM
	Ages 9 and older regardless of previous immunization status	1 dose of 0.5mls IM
Live Attenuated Influenza Virus Vaccine Intranasal ⁹	Ages 24 months-8 years who have not been previously vaccinated against influenza or who did not complete a two dose series the previous year	2 doses of 0.2mls intranasally administered at least 4 weeks apart (administer as 0.1ml into each nostril)
	Ages 24 months-8 years who were previously fully vaccinated against influenza	1 dose of 0.2mls intranasally (administer as 0.1ml into each nostril)
	Ages 9 years-49 years regardless of previous immunization status	1 dose of 0.2mls intranasally (administered as 0.1ml into each nostril)

	Product	Approved Dosage Forms	Approved Age ranges	Contains Thimerosal (Y/N)	Contains Latex (Y/N)	QTY per package
Trivalent Inactivated Influenza Virus Vaccine	AFLURIA®⁴ (Manufactured by CSL Limited, Marketed and distributed by Merck)	0.5ml prefilled syringes	SEE ACIP GUIDELINES ABOVE	No	No	10 syringes /carton
	AGRIFLU®⁵ (Novartis Vaccines)	0.5ml prefilled syringes	18 years and older	No	Yes ¹⁰ (tip cap)	10 syringes/carton
	FLUARIX®⁶ (GSK Biologicals)	0.5ml prefilled syringes	36 months and older	No	Yes (tip cap)	5 syringes /carton
	FLULAVAL®⁷ (GSK Biologicals)	5ml multidose vial	18 years and older	Yes 25mcg Hg/0.5ml dose	No	1 vial/carton 10 x 0.5ml doses/vial
	FLUVIRIN®⁸ (Novartis Vaccines)	0.5ml syringe	4 years and older	Used in manufacturing but removed during purification to a trace amount (≤1mcg mercury/0.5ml)	Yes ¹⁰ (tip cap)	10 syringes /carton
		5ml MDV	4 years and older	Yes 25mcg Hg/0.5ml dose	No	1 vial/carton 10 x 0.5ml doses/vial
	FLUZONE®³ (sanofi pasteur)	0.5ml SDV	36 months and older	No	No	10 vials /carton
		0.5ml syringe	36 months and older	No	Yes (tip caps)	10 syringes /carton
		0.25ml syringe	6months-35 months	No	Yes (tip caps)	10 syringes /carton
		5ml MDV	6 months and older	Yes 25mcg Hg/0.5ml dose	No	1 vial/carton 10 x 0.5ml doses per vial
FLUZONE High Dose®³ (sanofi pasteur)	0.5ml syringe	65 years and older	No	Yes (tip caps)	10 syringes /carton	
Live Attenuated Influenza Virus Vaccine Intranasal	FLUMIST®⁹ (MedImmune)	0.2ml prefilled single use sprayer	24 months-49 years	No	No	10 sprayers /carton

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Sources:

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