

IMMUNIZATION AND RESPIRATORY DISEASES

(dollars in millions)	FY 2012 Enacted ¹	FY 2013 CR ^{1,2}	FY 2014 President's Budget	FY 2014 +/- FY 2012
Budget Authority	\$611.998	\$615.908	\$668.696	+\$56.698
PHS Evaluation Transfer	\$12.864	\$12.943	\$12.864	\$0.000
ACA/PPHF	\$190.000	N/A	\$72.460	-\$117.540
Total	\$814.862	\$628.851	\$754.020	-\$60.842
FTEs	673	669	669	-4

¹FY 2012 and FY 2013 are comparable to FY 2014 to reflect BSS realignment estimates. Refer to the Working Capital Fund narrative for FY 2012 detailed realignment data.

²The FY 2013 Prevention Fund resources are reflected in the Office of the Secretary.

Enabling Legislation Citation: PHSA Title II §§ 301, 307, 310, 311, 317, 317N, 317S, 319, 319C, 319E, 319F, 322, 325, 327, 340C, 352, Title XVII*, 2102(a)(6), 2102(a)(7), 2125, 2126, 2127, 2821; Immigration and Nationality Act §§ 212 (8 U.S.C. 1182), 232 (8 U.S.C. 1222); Social Security Act § 1928 (42 U.S.C. 1396s)

Enabling Legislation Status: Permanent

Authorization of Appropriations for FY 2014: Indefinite; Expired/Expiring noted with *

Allocation Methods: Direct Federal/Intramural; Competitive Cooperative Agreements/Grants, including Formula Grants; Contracts; and Other

SUMMARY

CDC's FY 2014 request of \$754,020,000 for immunization and respiratory diseases, including \$72,460,000 from the Affordable Care Act Prevention and Public Health Fund and \$12,864,000 in PHS Evaluation funding, is a decrease of \$60,842,000 below the FY 2012 level because of increased coverage through healthcare expansion.

(dollars in millions)	FY 2012 Enacted ¹	FY 2013 CR ^{1,2}	FY 2014 President's Budget	FY 2014 +/- FY 2012
Section 317 Immunization	\$379.310	\$381.737	\$391.549	+\$12.239
Program Implementation and Accountability	\$72.905	\$73.365	\$116.950	+\$44.045
PHS Evaluation Transfer (non-add)	\$12.864	\$12.943	\$12.864	\$0.000
Influenza Planning and Response	\$172.647	\$173.749	\$173.061	+\$0.414
ACA/PPHF	\$190.000	N/A	\$72.460	-\$117.540
Total	\$814.862	\$628.851	\$754.020	-\$60.842

¹FY 2012 and FY 2013 are comparable to FY 2014 to reflect BSS realignment estimates. Refer to the Working Capital Fund narrative for FY 2012 detailed realignment data.

²The FY 2013 Prevention Fund resources are reflected in the Office of the Secretary.

CDC focuses on the prevention of disease, disability, and death of children, adolescents, and adults through immunization and by control of respiratory and related diseases. These activities contribute to CDC's goal of protecting Americans from infectious diseases. CDC administers the two primary federal programs that support immunization for underinsured and uninsured populations in the United States—the discretionary Section 317 Immunization Program and the mandatory Vaccines for Children (VFC) Program. Through these two programs, CDC improves access to immunization services for vulnerable populations and supports the scientific evidence-base for vaccine policy and practices. CDC also provides critical epidemiology and laboratory capacity to detect, prevent, and respond to vaccine-preventable,

respiratory, and related infectious disease threats as well as preparedness planning for pandemic influenza.

FUNDING HISTORY

Section 317 Immunization¹	
Fiscal Year	Dollars (in millions)
2004	\$468.789
2005	\$493.032
2006	\$517.199
2007	\$512.804
2008	\$527.359
2009	\$557.359
2009 (ARRA)	\$300.000
2010	\$561.459
2011	\$488.576
2011 (ACA/PPHF)	\$100.000
2012	\$452.215
2012 (ACA/PPHF)	\$190.000
2013	\$455.102
2013 (ACA/PPHF) ³	N/A

Immunization and Respiratory Diseases¹	
Fiscal Year	Dollars (in millions)
2009 ²	\$716.048
2010	\$721.180
2011	\$648.257
2011 (ACA/PPHF)	\$100.000
2012	\$624.862
2012 (ACA/PPHF)	\$190.000
2013	\$628.851
2013 (ACA/PPHF) ³	N/A

¹Funding level for FY 2009 has not been made comparable to reflect the FY 2010 budget realignment. The FY 2012 and FY 2013 amounts are comparable to FY 2014 to reflect BSS realignment estimates.

²Amount does not include \$200,000,000 for Pandemic Influenza from the Public Health and Social Services Emergency Fund.

³The FY 2013 Prevention Fund resources are reflected in the Office of the Secretary.

The table below reflects the sources of VFC funding and estimates of total VFC obligations. The FY 2014 estimate is a net increase of \$287,442,000 above the FY 2012 estimate. The FY 2014 estimate includes an increase for vaccine purchase which is based on price and forecast changes for vaccines.

VFC	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate
Unobligated Balances Brought Forward/Recoveries	\$3M ²	\$0.656M ²	N/A
Non-expenditure Transfer from CMS	\$4,006M	\$3,607M	\$4,293M
Total VFC Obligations ¹	\$4,009M	\$3,607M	\$4,293M

¹In FY 2012, total VFC actual obligations of \$4,000,453,162 did not equal total available resources. The FY 2014 estimate is an increase of \$287,442,000 above the FY 2012 estimate, exclusive of unobligated balances brought forward.

²Unobligated balances from 2011 and 2012 fund segments, which represented indefinite budgetary resource authority, were returned to the Centers for Medicare & Medicaid Services (CMS). Amount reflects prior year recoveries and refunds.

SECTION 317 IMMUNIZATION PROGRAM AND PROGRAM IMPLEMENTATION AND ACCOUNTABILITY BUDGET REQUEST

(dollars in millions)	FY 2012 Enacted ¹	FY 2013 CR ^{1,2}	FY 2014 President's Budget	FY 2014 +/- FY 2012
Budget Authority	\$439.351	\$442.159	\$495.635	+\$56.284
PHS Evaluation Transfer	\$12.864	\$12.943	\$12.864	\$0.000
ACA/PPHF	\$190.000	N/A	\$72.460	-\$117.540
Total	\$642.215	\$455.102	\$580.959	-\$61.256

¹FY 2012 and FY 2013 are comparable to FY 2014 to reflect proposed BSS realignment. Refer to the Working Capital Fund narrative for FY 2012 detailed realignment data.

²The FY 2013 Prevention Fund resources are reflected in the Office of the Secretary.

Program Overview: CDC's national immunization recommendations currently provide guidance for the prevention of 17 vaccine-preventable diseases (VPDs) across the lifespan. In the United States, most VPDs are at or near record lows, with a majority showing a 90 percent or greater decline in reported cases when compared with the pre-vaccine era.

Section 317 of the Public Health Service Act authorizes the implementation of immunization programs for children, adolescents, and adults. Enacted in 1962, the Section 317 Program plays a fundamental role in the achievement of national immunization goals. The Section 317 Immunization Program aims to achieve and sustain high vaccination coverage rates to prevent death and disability from VPDs. CDC provides direct assistance to implement the Section 317 Program through cooperative agreements to 64 awardees, including all 50 states, the District of Columbia, five large cities, five territories, and three Pacific Freely Associated States. CDC provides the national public health expertise in VPDs that supports the 64 awardees, including expertise in epidemiology and surveillance, laboratory methods and science, immunology, immunization policy, health communications science, vaccine management, and program implementation.

The Section 317 Program provides the majority of federal support for essential public health functions to ensure program effectiveness and scientifically sound immunization policy. A strong public health infrastructure at the national, state, and local levels is vital to sustaining high vaccination coverage levels and low incidence of VPDs. Furthermore, the infrastructure aids in maintaining public health preparedness for a response to a vaccine-preventable national emergency, such as a pandemic or biologic attack. Regardless of whether a vaccine is purchased with public or private funds, the highly trained public health workforce and the investments in VPD surveillance systems, as well as the vaccine effectiveness studies, vaccine safety systems, and coverage assessments provide for a safe and effective national immunization system.

The Section 317 Program also purchases routinely recommended vaccines to protect at-risk and vulnerable populations not eligible for VFC, and to meet urgent public health needs such as controlling VPD outbreaks. A key strength of the Section 317 Program is its flexibility—allowing states to use their Section 317-purchased vaccine to meet their unique needs and priorities. This flexibility is also critical in responding to VPD outbreaks, such as the 2012 pertussis outbreaks. For example, Section 317 vaccine was a critical resource for the public health response to the 2012 pertussis outbreak in Washington State. Pertussis, or whooping cough, can transmit from unvaccinated adolescents and adults to infants too young to be vaccinated. Washington State was able to divert some of its Section 317 vaccine to targeted vaccination of pregnant women and adult caregivers of young infants—an important strategy to protect vulnerable infants from serious complications, and in some cases, death from a VPD.

Health reforms of the Affordable Care Act (ACA) will improve access to immunization services by requiring new private health plans and most public insurance to cover routinely recommended vaccines without co-payment. As a result, more Americans will have coverage for the costs of the vaccine itself and the clinical administration of the vaccine. However, these health insurance reforms do not address the

public health functions that must be in place to ensure safe and effective national immunization policies and programs. As more Americans have access to immunization services through public and private health insurance, the essential public health workforce and systems provided by the Section 317 Immunization infrastructure grants are just as critical in FY 2014 and beyond as they were before the health insurance reforms.

Budget Proposal: CDC's FY 2014 request of \$580,959,000 for the Section 317 Immunization Program and immunization program implementation and accountability, including \$72,460,000 from the Affordable Care Act Prevention and Public Health Fund and \$12,864,000 in PHS Evaluation funding, is a decrease of \$61,256,000 below the FY 2012 level. This request includes \$25,000,000 to expand the capacity of public health departments to bill health insurers for immunization services.

For FY 2014, CDC's priorities for the Section 317 Immunization Program are to:

- Preserve core public health immunization infrastructure at the local, state, and federal levels;
- Maintain an adequate amount of vaccine purchase to provide a vaccination safety net for uninsured adults, and for response to VPD outbreaks and other vaccine urgent needs; and
- Make strategic investments to enhance the immunization infrastructure and evidence base and improve efficiency.

Since September 2010, new health plans are required to cover Advisory Committee on Immunization Practices (ACIP) recommended vaccines without charging a deductible, copayment, or coinsurance when the vaccines are administered by an in-network provider. In FY 2014, expansion of immunization coverage through health reform will further decrease the number of uninsured and underinsured individuals served by the 317 Program. However, in FY 2014, the Section 317 Immunization Program will continue to be responsible for providing federally purchased vaccines to protect uninsured and underinsured Americans from preventable diseases and thus protecting communities from the dangers of low vaccination rates. CDC estimates that although it is expected that these populations will begin to decrease as implementation of expanded health insurance coverage provisions begin, there will continue to be a need for Section 317-purchased vaccines to serve uninsured adults and to provide rapid vaccination response to disease outbreaks and other urgent public health needs. It will be important to maintain a safety net for immunization services. And, unlike the federal VFC Program which has very specific eligibility requirements, Section 317 vaccine can be used to vaccinate non-VFC eligible populations, such as adults or the fully-insured, in a public health emergency. This includes responding to VPD outbreaks such as the 2012 pertussis outbreaks, where vaccination of parents and other adult caregivers of infants was an important public health strategy in controlling these outbreaks; failure to vaccinate these adults because of health insurance status would have caused unacceptable delays in protecting vulnerable infants. Other recent public health urgent needs include responding to the 2012-2013 pediatric influenza vaccine supply issues, where it became necessary to use Section 317 vaccine to vaccinate some privately insured children because their pediatricians did not have an adequate supply of privately-purchased pediatric flu vaccines.

As part of the new five-year funding cycle that began in FY 2013, CDC adopted a vaccine use policy that Section 317-purchased vaccines cannot be used for routine vaccination of fully insured individuals. Assuring that public funds are not subsidizing insured benefits allows CDC to target its resources more effectively to meet public health priorities. Consistent with CDC's new vaccine policy issued in 2012, awardees can no longer use 317-purchased vaccine to provide routine vaccination for fully insured individuals. In alignment with the vaccine use policy and to assure that public funds are not subsidizing insured benefits, the FY 2014 budget request revises the 317 vaccine allocation formula by allocating vaccine direct assistance based on the estimated number of uninsured adults within each awardee's jurisdiction. This budget request also addresses immunization program priorities to provide Section 317

vaccine for response to urgent vaccine needs, which will be allocated to awardees for responding to VPD outbreaks and other urgent public health needs as required.

- CDC determines the total amount of vaccine direct assistance to be allocated based on immunization program priorities. It is essential that CDC maintain core public health infrastructure and this is taken into consideration when determining the amount of Section 317 vaccine purchase.
 - In order to address immunization program priorities, in FY 2014 CDC allocates approximately 60 percent of the Section 317 Immunization resources towards sustaining critical immunization infrastructure, and approximately 40 percent for vaccine direct assistance.
 - Of the vaccine direct assistance, CDC will allocate approximately \$18.6 million for outbreak response and other urgent needs.
 - Beginning in FY 2014, the remaining vaccine direct assistance will be allocated to the 64 Section 317 Immunization Programs based on the percentage of uninsured adults, ages 19 to 64 years in their jurisdictions. The final allocation to awardees was then adjusted as necessary to minimize large fluctuations. This will support an orderly transition to the new vaccine allocation formula and limit disruption to the Section 317 Immunization Program.
- For FY 2014 allocation of vaccine direct assistance to U.S. state and city awardees, CDC used the 2012 U.S. Census data for uninsured adults ages 19 through 64 years as its base population and allocated vaccine to each awardee based on their proportion of the uninsured adult population. The allocation of vaccine to the five U.S. Territories and three Pacific Freely Associated States was not changed.

In FY 2014, the Section 317 Immunization Program will remain responsible for the essential public health workforce and systems at the national, state, and local levels that protect all Americans, regardless of health insurance status, from disability and death from VPDs. Maintaining this public health infrastructure is an immunization program priority. Behind every vaccine given to a child, adolescent, or adult in the United States are the public health experts and systems that:

- Conduct the science that provides the evidence-base for national immunization policy, including burden of disease, vaccine effectiveness and safety, economic analyses, and program feasibility. CDC's vaccine effectiveness research provided critical scientific evidence of waning immunity that informed the ACIP's new recommendation for a booster dose of meningococcal conjugate vaccine at age 16 to assure protection through the high-risk college years.
- Collect, analyze, and report scientific data about the effectiveness and safety of vaccines as they are used in the real-world setting and with larger populations to ensure the effectiveness and safety of our national vaccine programs and policies, and inform changes.
- Monitor immunization coverage rates to identify and reach populations at greater risk for VPDs. The National Immunization Survey (NIS) is essential to document programmatic achievements and to identify disparities in immunization coverage rates. The NIS documented increases in adolescent vaccination rates from 2009 to 2010 for all three routinely recommended adolescent vaccines, and also identified the need for targeted efforts to improve human papillomavirus (HPV) vaccination coverage among adolescent girls.
- Communicate the benefits of vaccine to the public—through science-based communications campaigns and tools—to aid them in making informed vaccine decisions to protect themselves and their loved ones.

- Educate healthcare providers about current immunization policy and clinical best practices to help them protect their patients and communities from VPDs. CDC developed and will maintain a dynamic provider toolkit for conversations with parents about vaccination. These resources include evidence-based strategies, print materials, and web-based tools.
- Implement health information technologies to give healthcare providers the necessary immunization information to make sure their patients get the vaccines they need, when they need them.
- Respond to disease outbreaks by rapidly identifying and investigating cases, conducting surveillance and laboratory testing, and implementing targeted vaccination efforts and other measures to control the spread of disease and prevent future outbreaks.
- Manage vaccine supply disruptions and shortages to ensure the best public health outcomes until restoration of vaccine supply.

In FY 2014, CDC will work collaboratively with its awardees and partners to sustain record-high childhood immunization coverage rates and increase immunization coverage rates for children and adults by improving access to immunizations. Specifically, CDC will work to establish access points at complementary venues such as schools, pharmacies, and retail-based clinics; expand the network of VFC providers through recruitment efforts; purchase and deliver vaccine for at-risk populations; and ensure those with insurance have access to immunization services through an in-network provider.

In FY 2014, CDC will use Section 317 funds to support intramural and extramural immunization activities to promote access to high quality vaccination, and respond to urgent public health needs. CDC will invest in VPD surveillance, laboratory capacity, outbreak response, and scientific studies to evaluate vaccine effectiveness and program impact to strengthen the scientific evidence-base for immunization policy and practice decisions. CDC will also ensure a safe national immunization program through the implementation of CDC's vaccine safety priority studies by strengthening vaccine safety surveillance for rare vaccine adverse events; improving adverse-event reporting through electronic reporting; and developing vaccine safety profiles for each newly licensed vaccine in collaboration with other federal agencies. In FY 2014, CDC will increase national public awareness and provider knowledge about VPDs and immunization recommendations, using an array of media and culturally appropriate tools and resources to support informed decision-making about vaccination.

Anticipating the evolving role of public health, CDC has strategically directed immunization resources to prepare for the new healthcare environment. CDC has made investments in Immunization Information Systems (IIS) that inform and support clinical decision-making and allow interfacing with electronic health records (EHRs) and vaccine ordering systems—allowing more than 95 percent of 56 awardees to reach full compliance with Health Level Seven (HL7) messaging standards for immunization data transactions. In FY 2014, Section 317 will provide funding to immunization awardees and support scientific and programmatic expertise to further develop, enhance, and maintain IIS capable of identifying individuals in need of immunization, measuring vaccination coverage rates, producing reminder and recall notices, and interfacing with EHRs. CDC's immunization services program and the public health informatics program (refer to the public health scientific services section) collaborate to support Section 317 awardees in enhancing their IIS to be compliant with standards and requirements set by the national Electronic Health Records – Meaningful Use (EHR-MU) program.

Since 2009, CDC has invested funding to expand immunization infrastructure to assist public health clinics that serve fully insured patients with billing for immunization services in order to preserve access to life-saving immunizations for fully-insured populations. In some communities, such as rural areas, health departments serve as a critical access point. The purpose of billing is to expand access to fully insured individuals in areas where there is not adequate in-network provider coverage. Implementation grantees funded in 2011 and 2012 are working on developing contracts with payers and conducting

assessments and training to local health departments. In FY 2014, CDC will continue to support its awardees in this area. As of FY 2013, 35 awardees are developing and/or implementing billing systems in targeted areas of their jurisdictions. However, while expanded billing capacity in public health clinics may help to maintain and improve access to immunization services for the fully-insured, it does not replace the need for Section 317 vaccine that provides a critical public health safety net for vaccinating the uninsured and responding to VPD outbreaks and other public health emergencies.

Section 317 Immunization Budget Authority Summary Table¹

(dollars in millions)	FY 2012 Enacted	FY 2013 CR	FY 2014 President's Budget
Immunization Infrastructure Grants ²	\$223.418	\$221.759	\$235.211
Vaccine Purchase ²	\$74.793	\$76.700	\$72.540
Extramural Program Operations ²	\$42.599	\$44.436	\$44.070
Intramural Program Operations	\$27.060	\$27.332	\$28.120
Total	\$367.870	\$370.227	\$379.941

¹The FY 2012 and FY 2013 amounts have not been made comparable for the BSS realignment and FY 2014 does not include the BSS amount.

² See 317 Immunization Grant Table for more information.

In FY 2014, Section 317 funds will be used to advance public health immunization priorities through the following activities:

- Immunization infrastructure funding will be awarded to support essential public health immunization workforce and systems at the state and local levels to recruit and educate networks of immunization providers, provide continual quality assurance, promote public awareness of new and expanded vaccine recommendations, manage vaccine shortages, and respond to vaccine-preventable disease outbreaks.
- Vaccine purchase direct assistance will be allocated to provide federally purchased vaccines to vaccinate non-VFC eligible uninsured populations and to meet urgent public health needs such as VPD outbreaks.
- Extramural program operations funds will support national immunization policies and programs, including disease surveillance, vaccine coverage assessment, post-marketing evaluation of vaccine effectiveness and safety, immunization information technologies, centralized vaccine ordering and distribution systems, payor of last resort, public awareness campaigns and resources, and provider education and tools.
- Intramural program operations support will provide national public health expertise in immunization and VPDs that supports national, state, and local vaccination program efforts, including expertise in epidemiology and surveillance, laboratory methods and science, immunology, immunization policy, health communications science, vaccine management, and program implementation.

Grant Table:

Section 317 Immunization Grant Table^{1,2}

(dollars in millions)	FY 2012 Enacted	FY 2013 CR	FY 2014 President's Budget
Number of Awards	64	64	64
Average Award	\$7.745	\$5.484	\$6.141
Range of Awards	\$0.417–\$55.710	\$0.362–\$38.817	\$0.506–\$45.817
Number of New Awards	0	0	0
Number of Continuing Awards	64	64	64
Total Grant Award	\$557.870	\$370.227	\$452.401

¹This table includes Section 317 budget authority and Prevention and Public Health Funds, except for FY 2013. The FY 2013 Prevention Fund resources are reflected in the Office of the Secretary.

²Immunization operations grants and vaccine direct assistance are included in the table. In FY 2013, CDC will award a new five-year cooperative agreement for Section 317 immunization funding.

In FY 2014, CDC will provide infrastructure funding to 64 awardees through a non-competitive, formula-based, discretionary cooperative agreement program that provides financial assistance for state and local immunization operations. Through these population-based awards and this collaboration, the Section 317 Program has established a comprehensive immunization system that provides public sector vaccine ordering and distribution, continual quality assurance, provider recruitment and enrollment in the VFC Program, provider education and public awareness focused on new and expanded vaccine recommendations, and management of vaccine shortages. In addition, CDC will provide its 64 awardees with direct assistance for vaccine purchased from the federal contracts. This vaccine direct assistance will be allocated using the new formula described in the budget proposal section above.

INFLUENZA PLANNING AND RESPONSE BUDGET REQUEST

(dollars in millions)	FY 2012 Enacted ¹	FY 2013 CR ¹	FY 2014 President's Budget	FY 2014 +/- FY 2012
Budget Authority	\$172.647	\$173.749	\$173.061	+\$0.414

¹FY 2012 and FY 2013 are comparable to FY 2014 to reflect proposed BSS realignment. Refer to the Working Capital Fund narrative for FY 2012 detailed realignment data.

Program Overview: CDC's influenza planning and response activities ensure a comprehensive response for seasonal influenza as well as the ability to respond to an influenza pandemic. Seasonal influenza remains a formidable public health challenge due to the substantial health and economic burden throughout the world. Influenza seasons are unpredictable in timing and severity. From 1976 to 2006, annual estimates of influenza-associated deaths in the United States range from a low of about 3,000 to a high of about 49,000 people. A study published in 2007 estimated that seasonal influenza contributed an estimated \$10.4 billion annually in direct medical costs in the United States.¹

In 2011, CDC assessed the response to the 2009 H1N1 influenza pandemic and identified priorities to ensure the agency, state and local health departments, and the public are better prepared for subsequent influenza pandemics. The key drivers of the strategy are Prevention, Detection and Monitoring, and Response.

Prevention of seasonal influenza requires an annual reassessment of the virus strains contained in the vaccine; the assessment is based on data collected by CDC. The vaccine must be produced and administered annually. Since 2010, the Advisory Committee on Immunization Practices (ACIP) has

¹Molinari NA, Ortega-Sanchez IR, Messonnier ML, Thompson WW, Wortley PM, Weintraub E, et al. "The Annual Impact of Seasonal Influenza in the US: Measuring Disease Burden and Costs". Vaccine 2007 Jun 28;25(27):5086–96. Epub 2007 Apr 20.

recommended influenza vaccine for all Americans six months and older. To implement this recommendation, CDC works to educate providers and raise public awareness. CDC makes special efforts to reach high-risk individuals, such as pregnant women, and provides further outreach to subspecialty medical providers to increase vaccination of persons at especially high risk of severe illness or death from influenza. CDC also promotes vaccination at non-traditional venues, such as retail pharmacies, to increase access to vaccine services outside of clinic settings and hours.

Detection and monitoring of influenza involves a network of laboratories at the state level and internationally that are routinely testing samples to: determine severity of the influenza season; identify viruses that are causing disease and may pose a pandemic threat; as well as determine the effectiveness of the influenza vaccine and other interventions. Ongoing work to improve laboratory and surveillance methods ensures that CDC can adequately respond to unusual cases. To build capacity for influenza surveillance, CDC has trained workers in the same state laboratories that have similar responsibilities during foodborne outbreaks.

CDC trains to be able to respond quickly and effectively to an influenza pandemic. Within the United States, CDC provides scientific and programmatic expertise to state and territorial health departments to develop operational plans for an influenza pandemic through CDC's Public Health Emergency Preparedness (PHEP) cooperative agreement with funding from the PHEP budget line. The health departments improve and update the plans based upon their response experiences. CDC works to coordinate emergency response plans between health departments, hospitals, and emergency responders to ensure a rapid, efficient, and effective response at the local level.

Budget Proposal: CDC's FY 2014 request of \$173,061,000 for influenza planning and response is an increase of \$414,000 above the FY 2012 level.

Influenza Prevention

In FY 2014, CDC will support efforts to prevent influenza through vaccination. CDC focuses on increasing demand for influenza vaccination each season through investments in health communication with providers and the general public, targeted outreach to high-risk populations, and partnerships with non-traditional providers as a means to extend the reach of influenza vaccination. Annual vaccination campaigns serve to assist with reaching the Healthy People 2020 influenza vaccination goals for minority and high-risk populations, and help to build capacity for vaccination campaigns in the event of an influenza pandemic.

To complement national efforts, resources will be available to all 64 immunization awardees to increase demand for seasonal influenza, including school-located vaccination clinics, and to improve influenza coverage rates among priority populations (school-aged children, high-risk adults, and racial and ethnic groups). CDC will measure vaccination coverage, with particular attention to racial and ethnic minority populations with historically low coverage rates. These surveys guide outreach efforts that result in improvement of influenza vaccination rates, particularly among children.

Detection and Monitoring of Influenza

In FY 2014, CDC will serve as a World Health Organization (WHO) Collaborating Center to rapidly detect, identify, and characterize emerging influenza viruses so that vaccine-candidate viruses used to produce vaccines for seasonal and novel viruses are rapidly selected. A crucial ingredient of effective influenza control is to shorten the interval between the identification of novel influenza viruses and the delivery of effective vaccines.

CDC will work with domestic and international partners in the intersection of human and animal health to improve surveillance, conduct swift outbreak responses, and complete threat assessments for emerging influenza viruses with pandemic potential. Pandemics emerge when a virus that is predominantly transmitted among animals develops the ability to be transmitted among humans. Each human case of

infection with an animal influenza virus represents the potential for a pandemic. CDC will conduct research to understand better the complex factors that determine how and when these novel influenza viruses develop the ability to be transmitted from person to person. In 2012, to assist decision-makers in understanding the impact of a novel virus, CDC introduced the Influenza Risk Assessment Tool (IRAT). The IRAT is an evaluation tool developed by CDC and external influenza experts that measures the potential pandemic risk posed by influenza A viruses that currently circulate in animals but not in humans. The IRAT makes an assessment of potential pandemic risk based on calculations of 10 scientific criteria.

CDC will support the international monitoring of influenza and evaluate countries' core capacities to conduct surveillance, perform laboratory testing, and prepare to respond to influenza pandemics. CDC will provide this support through continuing cooperative agreement funding with 36 countries, with emphasis on countries that continue to experience animal outbreaks and human cases of H5N1 influenza. CDC's international support has resulted in twice as many countries reporting to WHO FluNet since 2005. Also, the number of countries sharing influenza isolates, a key term of reference to quickly detect novel viruses, has increased by over 75 percent since support began. CDC will work on expanding virus sample sharing among countries so that vaccines and diagnostic tests for viruses with pandemic potential can be produced.

CDC will support the capability of state and local health departments to conduct influenza laboratory testing by maintaining the number of public health laboratories able to perform testing for resistance to antiviral medications and to participate in CDC evaluations of new influenza diagnostic tests.

Grant Table:

Influenza Planning and Response ELC Grant Table¹

(dollars in millions)	FY 2012 Enacted	FY 2013 CR	FY 2014 President's Budget
Number of Awards	56	56	56
Average Award	\$0.117	\$0.107	\$0.107
Range of Awards	\$0.016–\$0.232	\$0.016–\$0.232	\$0.016–\$0.232
Number of New Awards	0	0	0
Number of Continuing Awards	56	56	56
Total Grant Award	\$6.526	\$6.000	\$6.000

¹This table only reflects Influenza Planning and Response funding that goes out through the ELC, which also funds other infectious disease activities.

The Epidemiology and Laboratory Capacity for Infectious Diseases Program (ELC) assists states and eligible local public health agencies to strengthen their basic epidemiologic and laboratory capacity to address infectious disease threats. CDC funds 50 states, five municipalities, and one territory through the ELC to conduct influenza surveillance and diagnostic activities with funding from the Influenza Planning and Response budget line.

In FY 2014, public health departments will be funded to improve detection of novel human influenza virus infections, such as the H3N2v influenza virus. Rapid and thorough investigations determined that this virus caused 308 human cases in 2012. Collaboration between the state and local health authorities and CDC is essential for risk assessment and response to similar novel viruses. In addition, these funds support seasonal influenza surveillance consisting of nine different systems. This network of systems provides data on influenza viruses, outpatient influenza-like illness, influenza-associated hospitalizations, influenza-associated deaths, and the geographic distribution of the viruses. The network also forms the foundation for pandemic influenza surveillance.

CDC provides ELC awardees with the reporting websites and other materials necessary to report influenza surveillance data throughout the year from public health laboratories, outpatient influenza-like illness surveillance sites, and vital statistics offices. CDC updates awardees on the current influenza

season and any pertinent developments in influenza surveillance during monthly conference calls, yearly in-person meetings, and individually as needed. Awardees also rely on CDC for scientific and programmatic expertise during investigations of outbreaks or unusual cases of influenza (e.g., pediatric deaths, human infections with novel influenza A viruses, and antiviral resistant influenza infections or outbreaks).

Response to Influenza Pandemics

In FY 2014, CDC will work to ensure the availability and effectiveness of medical countermeasures and equipment in the event of an influenza pandemic; such countermeasures include antiviral drugs, respirators, and ventilators. To complement these product-based interventions, CDC will develop and evaluate interventions to mitigate the impact of an influenza pandemic through strategies to reduce the likelihood that susceptible individuals have contact with contagious individuals. In addition, CDC is developing a nationwide system of nurse triage/call centers that would be activated during a pandemic to provide advice to ill individuals and thereby reduce the burden on hospitals, healthcare facilities, and public health facilities. CDC is also collaborating with the National Association of County and City Health Officials (NACCHO), the Association of State and Territorial Health Officials (ASTHO), and national associations that represent pharmacies, pharmacists, and pharmaceutical distributors on efforts to improve antiviral distribution and dispensing at the local level during a pandemic.

Domestically, CDC will sustain the nation’s ability to respond to influenza pandemics by ensuring well-trained staff are in place for pandemic response, and by providing scientific and programmatic expertise to help CDC’s PHEP Cooperative Agreement Program and HHS’ Hospital Preparedness Program (HPP) Cooperative Agreement awardees meet all hazard requirements of the Pandemic and All Hazards Preparedness Act. CDC will also support coordination efforts between health departments, hospitals, and emergency responders. Coordination will result in more integrated emergency response plans prior to a public health disaster to ensure a rapid, efficient, and effective response at the community level. Outside the United States, CDC will support countries to provide laboratory confirmation of influenza—the key to protecting the United States through early detection of novel influenza viruses with pandemic potential. CDC will test its response capabilities in FY 2014 with a 3-day functional exercise that engages the incident management system to test improvements made in response to gaps identified in past responses and exercises.

AFFORDABLE CARE ACT PREVENTION AND PUBLIC HEALTH FUND

(dollars in millions)	FY 2012 Enacted	FY 2013 CR ¹	FY 2014 President’s Budget	FY 2014 +/- FY 2012
ACA/PPHF	\$190.000	N/A	\$72.460	-\$117.540

¹The FY 2013 Prevention Fund resources are reflected in the Office of the Secretary.

The following activities are included:

- Immunization – \$72,460,000 (included in the Immunization narrative)

PERFORMANCE

Program: Section 317 Immunization Program and Program Implementation and Accountability

Performance Measure for Long Term Objective: Ensure that children and adolescents are appropriately vaccinated.

Measure	Most Recent Result	FY 2012 Target	FY 2014 Target	FY 2014 +/- FY 2012 Target
1.2.1c: Achieve and sustain immunization coverage in children 19 to 35 months of age for one dose of measles, mumps, and rubella (MMR) vaccine (Intermediate Outcome)	FY 2011: 92% (Target Exceeded)	90%	90%	Maintain
1.2.1h: Achieve and sustain immunization coverage of at least 90% in children 19-35 months of age for at least 4 doses pneumococcal conjugate vaccine (PCV) (Intermediate Outcome)	FY 2011: 84% (Target Not Met but Improved)	90%	90%	Maintain
1.2.1i: Achieve and sustain immunization coverage of at least 80% in children 19- to 35-months of age for 2-3 doses of rotavirus (Intermediate Outcome)	FY 2011: 67% (Target Exceeded)	60%	68%	+8
1.2.2a: Achieve and sustain immunization coverage of at least 80% in adolescents 13 to 15 years of age for 1 dose Tdap (tetanus and diphtheria toxoids and cellular pertussis) (Intermediate Outcome)	FY 2011: 81% (Target Exceeded)	70%	83%	+13
1.2.2b: Achieve and sustain immunization coverage of at least 80% in adolescents 13 to 15 years of age for 1 dose meningococcal conjugate vaccine (MCV4) (Intermediate Outcome)	FY 2011: 72% (Target Exceeded)	70%	78%	+8
1.C: Number of states (including the District of Columbia) achieving 65% coverage for 1 birth dose hepatitis B vaccine (19-35 months of age) (Output)	FY 2011: 49 (Target Exceeded)	40	45	+5
1.D: Number of states (including the District of Columbia) achieving 30% coverage for influenza vaccine (6-23 months of age) (Output)	FY 2011: 36 (Target Exceeded)	29	36	+7
1.E: Number of states (including the District of Columbia) achieving 25% coverage for ≥ 3 doses human papillomavirus vaccine (13-17 years of age) (Output)	FY 2011: 46 (Target Exceeded)	40	51	+11
1.F: Number of states (including the District of Columbia) achieving 45% coverage for ≥ 1 dose Tdap vaccine (13-17 years of age) (Output)	FY 2011: 50 (Target Exceeded)	46	51	+5

Measure	Most Recent Result	FY 2012 Target	FY 2014 Target	FY 2014 +/- FY 2012 Target
1.G: Number of states (including the District of Columbia) achieving 45% coverage for ≥ 1 dose meningococcal conjugate vaccine (13-17 years of age) (Output)	FY 2011: 42 (Target Exceeded)	40	50	+10
1.N: Percent of grantees that have met current milestones required for successful implementation of immunization billing systems for third-party payors (Output)	N/A	N/A	85%	N/A

Performance Measures for Long Term Objective: Increase the proportion of adults who are vaccinated annually against influenza and ever vaccinated against pneumococcal disease.

Measure	Most Recent Result	FY 2012 Target	FY 2014 Target	FY 2014 +/- FY 2012 Target
1.3.1b: Increase the percentage of adults aged 65 and older who are vaccinated against pneumococcal disease (Intermediate Outcome)	FY 2011: 62.3% (Target Not Met)	67%	73%	+6
1.3.2b: Increase the percentage of pneumococcal vaccination among non-institutionalized high-risk adults ages 18 to 64 (Intermediate Outcome)	FY 2011: 30.5% (Target Exceeded)	31%	36%	+5
1.3.3a: Increase the percentage of adults aged 18 years and older who are vaccinated annually against seasonal influenza (Intermediate Outcome)	FY 2012: 38.8% (Baseline)	44%	50%	+6

Performance Trends: Immunization continues to be one of the most cost-effective public health interventions. CDC supports the implementation of state-based immunization programs making vaccines available to vulnerable children, adolescents, and adults. Since the adoption of this strategy in 1962, the United States has experienced record high childhood vaccination levels and record low levels of vaccine-preventable diseases (VPDs). In 2009, for each birth cohort vaccinated against 13 diseases (diphtheria, *haemophilus influenzae* type b, hepatitis A, hepatitis B, measles, mumps, pneumococcal, pertussis, polio, rotavirus, rubella, tetanus, and varicella) in accordance with the routine childhood immunization schedule, the United States saved 42,000 lives, \$13.6 billion in direct medical costs and prevented 20 million cases of disease. Overall, an estimated \$10.20 is saved in direct medical costs for every \$1 invested in vaccines for VPDs (Table 1).

Table 1: Cost-effectiveness of Childhood Vaccines

Vaccine:	Cost Savings: for every \$1 spent on an individual vaccine
Diphtheria-Tetanus-acellular Pertussis (DTaP)	saves \$47.80
Measles, Mumps, and Rubella (MMR)	saves \$23.30
Hepatitis B	saves \$2.40
Varicella	saves \$2.00
Inactivated Polio (IPV)	saves \$8.60
<i>Haemophilus influenzae</i> type b (Hib)	saves \$4.90

Vaccine:	Cost Savings: for every \$1 spent on an individual vaccine
Pneumococcal (PCV7)	saves \$1.50
Childhood series (9 vaccines) ¹	saves \$10.00

¹Includes DTaP, Hib, hepatitis A, hepatitis B, MMR, PCV7, IPV, rotavirus, and varicella vaccines; hepatitis A and rotavirus vaccines are cost-effective, but not cost saving.

In FY 2011, CDC continued to improve and sustain immunization coverage for children 19-35 months of age. CDC achieved levels near or above national (Healthy People 2020) targets for most of the routinely recommended childhood vaccinations. Since 2008, measles, mumps, and rubella (MMR) vaccinations have met or exceeded 90 percent coverage rates and CDC will maintain this performance target in FY 2014. Rotavirus vaccine coverage increased by eight percentage points from 59 percent in FY 2010 to 67 percent in FY 2011. Coverage of pneumococcal conjugate vaccine (PCV) increased from 83 percent in FY 2010 to 84 percent in FY 2011 (Measures 1.2.1). Although CDC did not meet targeted coverage rates for PCV strategies to improve the fourth dose of PCV coverage are in place and are similar to those used to improve the uptake of other vaccines. Strategies include provider assessment and feedback, use of reminder notifications, immunization information systems, and regular assessment of coverage levels in the National Immunization Survey.

CDC exceeded targets for both adolescent performance measures in FY 2011. Tetanus, diphtheria and pertussis (Tdap) vaccine coverage increased from 74 percent in FY 2010 to 81 percent in FY 2011, and meningococcal conjugate vaccine (MCV4) coverage increased from 65 percent in FY 2010 to 72 percent in FY 2011 (Measures 1.2.2). CDC's efforts to promote awareness of adolescent immunization recommendations, by providing education and training to both public and private providers, have helped bolster adolescent vaccination rates.

The number of states achieving targeted coverage levels for childhood and adolescent vaccinations continues to increase, contributing to overall sustained or improved vaccination coverage. For select adolescent vaccinations, almost every state achieved targeted coverage levels in FY 2011. CDC exceeded all targets and is on track to meet or exceed FY 2014 targets (Measures 1.C, 1.E-1.G).

In some communities, public health clinics are an important access point to health services and provide vaccinations to the full spectrum of uninsured, under-insured, and fully insured patients. To ensure life-saving immunizations are available to those who are not fully insured, clinics that serve fully insured patients must be able to bill for immunization services and recoup some of their costs. In FY 2011, CDC funded 21 grantees to plan and/or implement third-party payer billing systems in public health clinics, and all met their milestones. In FY 2012, CDC increased its funded grantees to 35 with Prevention and Public Health Funding (PPHF).

During the past decade, vaccination coverage levels among older adults increased slightly as CDC implemented national strategies and partnered with state and local public health departments to promote adult immunization among healthcare providers and state and local governments. CDC increased FY 2010 targets based on HP 2010 goals; however, CDC did not meet the coverage targets for adult pneumococcal adult vaccination. Vaccinations for adults 65 and older decreased from 61 percent in FY 2009 to 60 percent in FY 2010 but increased in FY 2011 to 62.3 percent (Measure 1.3.1b). The percentage of pneumococcal vaccinations among high-risk adults increased from 17 percent in FY 2009 to 28 percent in FY 2010 and to 30 percent in FY 2011, which exceeded the CDC target of 21 percent in FY 2011 (Measure 1.3.2b). Measure 1.3.3a is a new measure CDC developed during FY 2012 to reflect the universal influenza vaccination recommendation. The new measure aligns with CDC's Advisory Committee on Immunization Practices (ACIP) updated recommendation (as of 2010) for the seasonal influenza vaccine.

Addressing barriers to adult immunization and increasing adult vaccination rates will require different strategies from those used to bolster childhood coverage. Adult vaccination recommendations are

typically not included in the routine adult preventive care schedule. Further, efforts to increase adult vaccination coverage must include a variety of providers, including general practice doctors, OB-GYN practitioners, and other specialists and pharmacists. CDC's efforts to improve adult vaccination coverage rates include: (1) increasing patient and provider education to improve demand; (2) implementing system changes in practitioner office settings to reduce missed opportunities for vaccinations; (3) enhancing evidence-based communication campaigns to increase public awareness about adult vaccines and recommendations; (4) expanding provider outreach to the variety of healthcare service providers in which adults receive care; and (5) implementing vaccination programs in new venues such as pharmacies and other retail clinics.

CDC assesses vaccination coverage levels across the lifespan to identify groups at risk of vaccine-preventable diseases. This involves monitoring racial and ethnic disparities, evaluating the effectiveness of programs, monitoring uptake of new vaccines, assessing differential impact of vaccine shortages, measuring provider performance, and providing greater understanding of socio-demographic and attitudinal factors associated with vaccination. Public Health leaders, healthcare providers, and policymakers use this information to enhance current strategies and develop new strategies to improve protection of persons of all ages against vaccine-preventable diseases.

Performance Measures for Long Term Objective: Improve vaccination safety and effectiveness

Measure	Most Recent Result	FY 2012 Target	FY 2014 Target	FY 2014 +/- FY 2012 Target
1.H.: Percentage of Vaccine Events Reporting System (VAERS) reports received electronically (Output)	FY 2012: 32% (Baseline)	N/A	42%	N/A
1.5.2: Increase the number of associations between vaccines and adverse health events evaluated to ensure the safety of vaccines used in the U.S. (Outcome)	FY 2011: 326 pairs (Historical Actual)	N/A	363 pairs	N/A

Performance Trends: A strong vaccine safety monitoring system is essential to ensure that the nation's vaccines are safe. CDC is the nation's lead public health agency responsible for providing a safe, effective vaccine supply for all licensed vaccines approved for use in the United States. CDC's vaccine safety findings and recommendations inform vaccine policy decisions of other federal agencies and the Department of Health and Human Services (HHS) advisory committees, advance vaccine safety science through published findings in medical and scientific literature, and inform the public of vaccine safety concerns through our website, partnerships, and public health messages. CDC's Vaccine Safety Datalink System (VSD) and Vaccine Adverse Event Reporting System (VAERS) are vital for rapid detection and accurate assessment of vaccine risks, and allow for identification of established or disproven associations of an adverse event (AE) with a specific vaccine (vaccine-adverse event).

Recent CDC vaccine safety findings confirmed the safety of the 2009 influenza A pandemic (H1N1) vaccine for the approximately 80 million people in the United States who received it. CDC findings confirmed thimerosal is not related to autism or other neurodevelopmental outcomes; hepatitis B vaccine does not cause multiple sclerosis (MS); vaccinations do not cause type-1 diabetes; and influenza vaccines do not increase the risk of asthma exacerbations. CDC confirmed associations of two vaccines—measles, mumps, rubella, varicella (MMRV) vaccine, and the 2010-11 trivalent inactivated influenza (TIV) vaccines—with febrile seizures in young children. The MMRV finding contributed to the ACIP recommendation to remove the preference for MMRV vaccine over MMR and varicella vaccines in May 2010. The TIV findings resulted in a revision in the Vaccine Information Statement for TIV influenza vaccine, which now cautions providers that administering the TIV influenza vaccine and the PCV-13 at the same time may increase the risk of seizures.

From 2001 to 2012, the number of diseases for which childhood vaccines increased from 10 to 16, and the number of reports submitted to VAERS more than doubled from 15,000 to 33,000. With these increases, CDC developed two new measures in FY 2012: adverse events reported electronically and early detection of possible vaccine-adverse events. HHS received approximately 30 percent of adverse events reported electronically in FY 2011 and 32 percent in FY 2012 (Measure 1.H). HHS is currently developing and implementing automation initiatives and IT enhancements that are expected to increase electronic reporting to VAERS and early detection of events. VAERS continues to be the primary system to detect early vaccine safety signals. From 2007 to 2010, “early warnings signals” of possible vaccine-adverse event associations detected by VAERS increased CDC’s vaccine-adverse event pair findings by 55 percent (increasing from 210 pairs in 2007 to 326 pairs in 2011; Measure 1.5.2).

CDC’s efforts to publicize the availability of web-based reporting available to physicians and the public have increased electronic reporting to VAERS since FY 2008. Incorporating a standardized data structure for electronic reporting by vaccine manufacturers is expected to further improve reporting upon completion by 2014. Increased electronic reporting improves program decision-making by increasing the timeliness, quality, and quantity of VAERS reports, especially those from healthcare providers and vaccine manufacturers.

Program: Influenza Planning and Response

Performance Measures for Long Term Objective: Protect Americans from infectious diseases – Influenza.

Measure	Most Recent Result	FY 2012 Target	FY 2014 Target	FY 2014 +/- FY 2012 Target
1.6.1: Increase the number of public health laboratories monitoring influenza virus resistance to antiviral drugs (Output)	FY 2012: 18 (Target Exceeded)	12	18	+6
1.6.3: Percentage of countries achieving an increase of five percent over last year’s indicator score on CDC’s National Inventory of Core Capacities for Pandemic Influenza Preparedness and Response ⁴ (Output)	FY 2012: 42.5% (Target Not Met)	75%	75% ⁵	Maintain
1.K: Number of Epidemiology and Laboratory Capacity (ELC) funded laboratorians and influenza coordinators assigned to state and local public health departments (Output)	FY 2012: 93 (Target Exceeded)	70	70	Maintain
1.L: Number of influenza diagnostic kits and virus reference panels distributed domestically and internationally (Output)	FY 2012: 2,245 (Target Exceeded)	2,100	2,100	Maintain
1.M: Number of virus specimens received and characterized annually from global National Influenza Centers for use in determining vaccine strain selection (Output)	FY 2012: 10,984 (Target Not Met)	11,000	11,000	Maintain

⁴This indicator score is formally assessed every other year. The instrument may be reassessed and improved in FY 2013.

⁵This measure assesses the number of countries increasing their indicator score by 5 percent over the previous year. Since the measure is not cumulative; over time, as countries achieve higher scores, it is expected that fewer countries will meet this objective.

Performance Trends: CDC exceeded the FY 2012 target of 15 domestic public health programs monitoring influenza virus resistance to antiviral drugs, a 600 percent increase from the 2009 baseline of

three (Measure 1.6.1). Resistance monitoring results in more rapid detection and reporting to the affected states, and also allows for more timely data for case investigations. Timeliness is critical to identify and contain possible clusters of resistant strains and prevent transmission. Recent evaluations of preparedness and response capabilities for 36 countries participating in CDC's National Inventory of Core Capacities for Pandemic Influenza and Response consistently demonstrate significant improvements for the 2008-2010 reporting period regarding: (1) integration of laboratory and epidemiologic surveillance; (2) timely reporting and sharing of surveillance data; (3) outbreak response capacity and containment practices, and; (4) communication of surveillance information. In FY 2012, 42.5 percent of countries achieved a five percent increase in indicator scores, compared to 94 percent in FY 2010. However, as individual countries continue to improve their core capacities, the aggregate percent of countries increasing five percent over the last reporting period will decline (Measure 1.6.3).

In FY 2010 and FY 2011, CDC enhanced state and local capacity to gather influenza epidemiology and laboratory data essential for systematic, accurate surveillance of seasonal and novel influenza viruses. In FY 2012, with a return to pre-pandemic funding, CDC provided funding to state and select local health departments to carry out year-round influenza surveillance and laboratory diagnostics for seasonal and novel influenza viruses. CDC accomplished this by fully funding 32 and partially funding 61 Epidemiology and Laboratory Capacity (ELC) laboratorians and influenza coordinators at state and local health departments to provide the necessary capacity to monitor and identify influenza threats (Measure 1.K). While CDC was able to maintain the overall number of staff, more of these are partially funded than in previous years. CDC adjusted its target for FY 2014 to reflect current performance.

As a World Health Organization Collaborating Center for Influenza, CDC has enhanced global capacity to monitor influenza viruses and inform vaccine policy and antiviral treatment recommendations.

- In FY 2012, CDC provided 2,245 influenza diagnostic kits and virus reference panels to ensure the availability of timely diagnostic resources domestically and globally (Measure 1.L). While CDC exceeded the 2012 target, CDC maintained future targets at 2,100 units. CDC achieved higher than expected results in FY 2012 due to prolonged expanded surveillance activities related to the 2009 H1N1 pandemic and U.S. Food and Drug Administration (FDA)-approved revisions related to the configuration of the diagnostic kits. These factors increased the number of kits shipped during the reporting timeframe.
- CDC received and characterized 10,984 influenza virus specimens in FY 2012, just slightly below the target of 11,000. The number of influenza virus specimens received and characterized fluctuates by year depending on the severity and burden of the disease. CDC expects to process approximately 11,000 influenza virus specimens in FY 2014 (Measure 1.M). Investments in laboratory technologies have increased CDC's capacity to monitor circulating influenza viruses. Worldwide characterization of these specimens is essential to the production of each season's influenza vaccine. It also aids in informing vaccine policies and recommendations as well as decisions regarding potential vaccines for novel viruses with pandemic potential.

STATE TABLES¹

DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2014 DISCRETIONARY STATE/FORMULA GRANTS CFDA Number: 93.268/Section 317 Immunization Program^{1,2}				
State/City/Territory	FY 2012 Enacted	FY 2013 CR	FY 2014 President's Budget	FY 2014 +/- FY 2012
Alabama	\$7,849,253	\$5,457,963	\$5,772,959	-\$2,076,295
Alaska	\$3,428,383	\$2,477,112	\$2,120,397	-\$1,307,986
Arizona	\$11,126,450	\$8,150,828	\$8,754,545	-\$2,371,906
Arkansas	\$5,138,393	\$3,847,943	\$4,086,984	-\$1,051,410

DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2014 DISCRETIONARY STATE/FORMULA GRANTS CFDA Number: 93.268/Section 317 Immunization Program^{1,2}				
State/City/Territory	FY 2012 Enacted	FY 2013 CR	FY 2014 President's Budget	FY 2014 +/- FY 2012
California	\$55,709,538	\$38,817,398	\$45,816,717	-\$9,892,821
Colorado	\$8,244,057	\$5,792,459	\$6,315,820	-\$1,928,237
Connecticut	\$6,126,044	\$4,215,090	\$4,353,220	-\$1,772,823
Delaware	\$1,742,506	\$1,482,032	\$1,555,082	-\$187,425
District of Columbia (D.C.)	\$1,925,918	\$1,687,615	\$1,661,098	-\$264,820
Florida	\$26,932,503	\$18,214,251	\$20,833,263	-\$6,099,239
Georgia	\$14,410,202	\$9,886,013	\$11,816,786	-\$2,593,416
Hawaii	\$2,346,030	\$2,088,349	\$2,487,574	\$141,545
Idaho	\$3,350,438	\$2,426,609	\$2,473,578	-\$876,860
Illinois	\$13,867,107	\$9,107,485	\$10,631,195	-\$3,235,911
Indiana	\$9,774,465	\$6,430,415	\$6,866,759	-\$2,907,706
Iowa	\$5,092,865	\$3,701,211	\$3,912,205	-\$1,180,660
Kansas	\$3,431,170	\$2,869,973	\$3,730,200	\$299,030
Kentucky	\$6,037,032	\$4,306,541	\$4,865,372	-\$1,171,660
Louisiana	\$6,049,802	\$4,171,155	\$4,908,993	-\$1,140,810
Maine	\$3,183,179	\$2,737,279	\$2,848,247	-\$334,932
Maryland	\$6,917,632	\$5,026,090	\$6,326,784	-\$590,848
Massachusetts	\$10,206,663	\$6,717,458	\$7,269,519	-\$2,937,144
Michigan	\$15,819,511	\$10,649,482	\$11,394,961	-\$4,424,550
Minnesota	\$8,795,315	\$6,256,339	\$6,720,851	-\$2,074,464
Mississippi	\$4,909,071	\$3,653,798	\$3,998,631	-\$910,441
Missouri	\$8,487,364	\$5,795,419	\$6,530,503	-\$1,956,861
Montana	\$1,867,985	\$1,432,862	\$1,544,613	-\$323,372
Nebraska	\$3,613,036	\$3,025,579	\$3,132,717	-\$480,319
Nevada	\$3,686,661	\$2,455,222	\$2,993,761	-\$692,900
New Hampshire	\$2,224,244	\$1,540,614	\$1,721,505	-\$502,739
New Jersey	\$10,373,757	\$7,947,594	\$10,421,521	\$47,764
New Mexico	\$3,141,554	\$2,262,536	\$2,504,215	-\$637,339
New York	\$15,564,202	\$12,107,916	\$12,969,155	-\$2,595,047
North Carolina	\$12,649,732	\$8,033,784	\$9,720,036	-\$2,929,696
North Dakota	\$2,149,133	\$1,575,887	\$1,728,970	-\$420,163
Ohio	\$15,675,182	\$10,442,251	\$12,151,617	-\$3,523,564
Oklahoma	\$7,849,668	\$5,238,607	\$4,870,579	-\$2,979,089
Oregon	\$6,952,228	\$4,898,812	\$4,950,496	-\$2,001,732
Pennsylvania	\$16,072,145	\$10,343,509	\$11,330,650	-\$4,741,495
Rhode Island	\$3,386,863	\$2,251,166	\$1,748,253	-\$1,638,610
South Carolina	\$5,927,385	\$4,474,420	\$5,614,004	-\$313,381
South Dakota	\$2,608,651	\$1,868,623	\$2,053,071	-\$555,579
Tennessee	\$8,779,690	\$6,291,661	\$7,119,772	-\$1,659,918
Texas	\$35,444,159	\$23,878,597	\$27,426,318	-\$8,017,841

DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2014 DISCRETIONARY STATE/FORMULA GRANTS CFDA Number: 93.268/Section 317 Immunization Program^{1,2}				
State/City/Territory	FY 2012 Enacted	FY 2013 CR	FY 2014 President's Budget	FY 2014 +/- FY 2012
Utah	\$4,833,787	\$3,512,312	\$3,719,652	-\$1,114,136
Vermont	\$2,669,272	\$1,865,309	\$1,792,976	-\$876,297
Virginia	\$12,205,027	\$8,025,736	\$8,695,966	-\$3,509,061
Washington	\$9,504,090	\$6,498,425	\$7,369,543	-\$2,134,546
West Virginia	\$2,992,301	\$2,216,870	\$2,372,018	-\$620,283
Wisconsin	\$9,145,979	\$6,340,054	\$6,851,847	-\$2,294,132
Wyoming	\$1,464,778	\$1,314,814	\$1,330,810	-\$133,968
Chicago	\$5,723,868	\$4,753,885	\$4,937,445	-\$786,423
Houston³	\$2,308,028	\$2,741,239	\$2,479,194	\$171,166
New York City	\$15,647,607	\$10,553,447	\$11,300,437	-\$4,347,170
Philadelphia	\$2,867,196	\$2,338,489	\$2,346,174	-\$521,022
San Antonio	\$2,749,696	\$2,105,270	\$1,904,020	-\$845,676
American Samoa	\$551,996	\$606,519	\$616,227	\$64,231
Guam	\$1,446,803	\$1,366,377	\$1,542,852	\$96,048
Marshall Islands	\$2,382,509	\$1,845,265	\$2,570,811	\$188,302
Micronesia	\$2,982,327	\$2,217,569	\$3,718,203	\$735,876
Northern Mariana Islands	\$1,021,037	\$1,112,672	\$1,129,327	\$108,290
Puerto Rico	\$4,959,655	\$3,790,921	\$4,774,333	-\$185,322
Republic Of Palau	\$417,301	\$361,841	\$506,268	\$88,967
Virgin Islands	\$971,495	\$1,076,766	\$997,864	\$26,368
Total States/Cities/Territories	\$495,711,922	\$350,961,544	\$393,043,910	-\$102,668,012
Other Adjustments⁴	\$62,158,078	\$19,265,456	\$40,716,090	-\$21,441,988
Outbreak Vaccines	\$0	\$0	\$18,641,000	\$18,641,000
Total Resources^{5,6}	\$557,870,000	\$370,227,000	\$452,401,000	-\$105,469,000

¹This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial awardees). For a more comprehensive view of grant and cooperative agreement funding to awardees by jurisdiction, visit <http://www.cdc.gov/FundingProfiles/FundingProfilesRIA/>.

²Includes vaccine direct assistance and immunization infrastructure/operations grant funding.

³Immunization infrastructure/operations grant funding only; vaccine direct assistance for Houston is included with Texas.

⁴Other adjustments include vaccine that is in inventory at the centralized distribution center but has not been ordered by immunization providers, funds for centralized vaccine distribution activities, vaccine safety data link, special projects, and program support services.

⁵FY 2013 does not include Prevention and Public Health Fund (PPHF) funding. The FY 2013 Prevention Fund resources are reflected in the Office of the Secretary.

⁶FY 2012 includes 317 and PPHF as follows: \$367,870,000 (BA) + \$190,000,000 (PPHF) = \$557,870,000; FY 2014 includes Section 317 request of \$379,941,000 and PPHF request of \$72,460,000 for a total of \$452,401,000.

DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2014 MANDATORY STATE/FORMULA GRANTS CFDA Number: 93.268/Vaccines for Children (VFC) Program¹				
State/City/Territory	FY 2012 Enacted	FY 2013 CR	FY 2014 President's Budget	FY 2014 +/- FY 2013
Alabama	\$52,765,413	\$48,048,680	\$57,486,737	\$9,438,056
Alaska	\$11,243,865	\$10,300,087	\$12,188,927	\$1,888,840

DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2014 MANDATORY STATE/FORMULA GRANTS CFDA Number: 93.268/Vaccines for Children (VFC) Program¹				
State/City/Territory	FY 2012 Enacted	FY 2013 CR	FY 2014 President's Budget	FY 2014 +/- FY 2013
Arizona	\$75,265,393	\$68,538,162	\$81,975,828	\$13,437,665
Arkansas	\$38,639,138	\$35,185,502	\$42,086,076	\$6,900,574
California	\$362,487,279	\$330,086,184	\$394,864,699	\$64,778,514
Colorado	\$39,807,150	\$36,250,229	\$43,324,148	\$7,073,918
Connecticut	\$31,020,780	\$28,250,307	\$33,720,134	\$5,469,827
Delaware	\$9,179,207	\$8,360,094	\$9,957,010	\$1,596,916
District of Columbia (D.C.)	\$10,071,171	\$9,172,335	\$10,928,476	\$1,756,141
Florida	\$191,061,913	\$173,981,770	\$208,188,351	\$34,206,581
Georgia	\$110,957,133	\$101,039,563	\$120,856,061	\$19,816,498
Hawaii	\$13,716,822	\$12,494,292	\$14,833,197	\$2,338,905
Idaho	\$18,924,995	\$17,233,864	\$20,600,419	\$3,366,555
Illinois	\$88,019,299	\$80,152,807	\$95,845,859	\$15,693,052
Indiana	\$52,429,296	\$47,744,242	\$57,070,567	\$9,326,325
Iowa	\$24,222,349	\$22,058,585	\$26,344,209	\$4,285,625
Kansas	\$24,458,776	\$22,273,445	\$26,615,016	\$4,341,571
Kentucky	\$43,118,264	\$39,263,977	\$46,973,906	\$7,709,929
Louisiana	\$57,261,717	\$52,142,875	\$62,390,959	\$10,248,085
Maine	\$11,538,053	\$10,509,081	\$12,496,297	\$1,987,216
Maryland	\$53,602,599	\$48,811,626	\$58,380,607	\$9,568,981
Massachusetts	\$52,256,282	\$47,587,286	\$56,863,961	\$9,276,676
Michigan	\$81,739,515	\$74,434,883	\$88,988,677	\$14,553,794
Minnesota	\$33,099,315	\$30,142,136	\$36,012,317	\$5,870,181
Mississippi	\$40,983,536	\$37,319,979	\$44,651,077	\$7,331,098
Missouri	\$55,360,006	\$50,411,903	\$60,296,271	\$9,884,367
Montana	\$7,554,121	\$6,879,753	\$8,202,508	\$1,322,755
Nebraska	\$16,952,107	\$15,437,455	\$18,447,302	\$3,009,847
Nevada	\$31,064,665	\$28,289,158	\$33,801,950	\$5,512,792
New Hampshire	\$8,713,437	\$7,935,915	\$9,450,921	\$1,515,005
New Jersey	\$65,995,028	\$60,098,392	\$71,817,481	\$11,719,089
New Mexico	\$34,392,966	\$31,320,020	\$37,425,598	\$6,105,578
New York	\$78,936,401	\$71,886,678	\$85,801,996	\$13,915,317
North Carolina	\$97,230,979	\$88,540,229	\$105,906,915	\$17,366,686
North Dakota	\$5,400,742	\$4,918,708	\$5,861,284	\$942,576
Ohio	\$92,603,426	\$84,324,812	\$100,911,914	\$16,587,102
Oklahoma	\$53,760,227	\$48,956,109	\$58,523,386	\$9,567,277
Oregon	\$30,138,595	\$27,446,497	\$32,773,840	\$5,327,343
Pennsylvania	\$78,615,945	\$71,592,959	\$85,511,291	\$13,918,332
Rhode Island	\$11,175,363	\$10,177,922	\$12,128,431	\$1,950,510
South Carolina	\$50,481,991	\$45,971,167	\$54,944,143	\$8,972,976

DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR DISEASE CONTROL AND PREVENTION FY 2014 MANDATORY STATE/FORMULA GRANTS CFDA Number: 93.268/Vaccines for Children (VFC) Program¹				
State/City/Territory	FY 2012 Enacted	FY 2013 CR	FY 2014 President's Budget	FY 2014 +/- FY 2013
South Dakota	\$9,194,770	\$8,373,574	\$9,995,144	\$1,621,570
Tennessee	\$67,519,299	\$61,483,818	\$73,557,399	\$12,073,581
Texas	\$333,290,653	\$303,497,305	\$363,121,696	\$59,624,391
Utah	\$20,451,081	\$18,624,716	\$22,226,803	\$3,602,086
Vermont	\$5,867,408	\$5,344,776	\$6,335,478	\$990,702
Virginia	\$52,161,350	\$47,498,549	\$56,830,661	\$9,332,112
Washington	\$84,315,473	\$76,783,188	\$91,715,146	\$14,931,959
West Virginia	\$19,934,750	\$18,153,393	\$21,699,408	\$3,546,015
Wisconsin	\$41,279,074	\$37,590,097	\$44,942,496	\$7,352,399
Wyoming	\$4,633,070	\$4,219,867	\$5,018,545	\$798,678
Chicago	\$45,730,610	\$41,645,535	\$49,736,391	\$8,090,856
Houston²	\$716,820	\$654,856	\$716,259	\$61,403
New York City	\$119,038,695	\$108,399,359	\$129,640,846	\$21,241,486
Philadelphia	\$27,017,251	\$24,604,637	\$29,358,936	\$4,754,298
San Antonio	\$23,701,407	\$21,583,485	\$25,798,847	\$4,215,362
American Samoa	\$1,131,336	\$1,032,853	\$1,227,816	\$194,963
Guam	\$2,537,628	\$2,320,896	\$2,735,049	\$414,153
Northern Mariana Islands	\$1,921,304	\$1,754,841	\$2,048,492	\$293,651
Puerto Rico	\$66,613,816	\$60,660,176	\$72,543,355	\$11,883,179
Virgin Islands	\$1,819,272	\$1,658,753	\$1,917,564	\$258,811
Total States/Cities/Territories	\$3,175,120,325	\$2,891,454,344	\$3,456,615,076	\$565,160,732
Other Adjustments³	\$825,332,837	\$715,801,656	\$836,767,924	\$120,966,268
Total Resources^{4,5}	\$4,000,453,162	\$3,607,256,000	\$4,293,383,000	\$686,127,000

¹This State Table is a snapshot of selected programs that fund all 50 states (and in some cases local, tribal, and territorial awardees). For a more comprehensive view of grant and cooperative agreement funding to awardees by jurisdiction, visit <http://www.cdc.gov/FundingProfiles/FundingProfilesRIA/>.

²Funding for Houston only includes funding for operations, not the cost of vaccines. Funding for Texas includes the cost of vaccines for Houston.

³Other adjustments include vaccine that is in inventory at the centralized distribution center but has not been ordered by immunization providers, funds for centralized vaccine distribution activities, developing a new centralized vaccine ordering system, pediatric stockpile, influenza stockpile, stockpile storage and rotation, and program support services.

⁴Total resources for FY 2012 reflect actual obligations, which did not equal total available resources. The FY 2014 estimate is an increase of \$287,442,000 above the FY 2012 estimate of \$4,005,941,000, exclusive of unobligated balances brought forward.

⁵Total resources for FY 2013 and FY 2014 are based on the FY 2014 VFC President's Budget ten year table. The FY 2013 level represents estimated total obligations, including \$0.656 billion in prior year recoveries and refunds brought forward and \$3.607 billion in transfer from CMS. The FY 2014 net increase of estimated total obligations, inclusive of prior year recoveries and refunds brought into FY 2013 totals \$686,127,000; the FY 2014 net increase of the non-expenditure transfer from CMS, exclusive of prior year recoveries and refunds brought into FY 2013 totals \$686,782,938.