



**CONTRA COSTA  
HEALTH SERVICES**

**Contra Costa Health Plan**

**COMMUNITY PROVIDER NETWORK MEETING**

**1350 Arnold Drive, Conference Room #103, Martinez**

**Tuesday, January 26, 2010 7:30 AM to 9:00AM**

**Continental Breakfast will be served**

- |   |                         |
|---|-------------------------|
| <b>I. Call to order</b>                 | <b>J. Tysell, MD</b>    |
| <b>II. Approval of Minutes</b>          | <b>J. Tysell, MD</b>    |
| <b>III. Children with Special Needs</b> | <b>G. Hamilton, MD</b>  |
| • CCS                                   | <b>Y. Baybayan, PHN</b> |
| • Regional Center East Bay/changes      | <b>B. Jacobs, FNP</b>   |
| <b>IV. Medical Director's Report</b>    | <b>J. Tysell, MD</b>    |
| • HEDIS                                 |                         |
| • Provider Bulletin                     |                         |
| <b>V. Flu Update</b>                    | <b>B. Jacobs, FNP</b>   |
| <b>VI. Provider Concerns</b>            | <b>J. Tysell, MD</b>    |
| <b>VII. Adjourn</b>                     | <b>J. Tysell, MD</b>    |

**Next Meeting – April 27, 2010**

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**Please RSVP: Provider Relations (925) 313-9500**



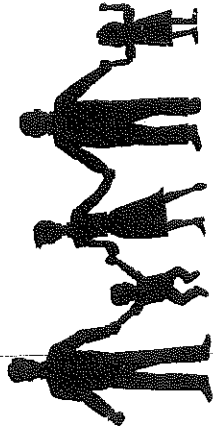
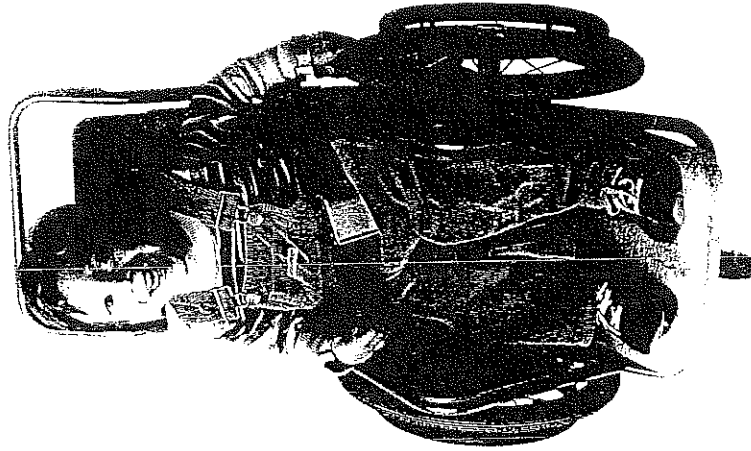
u HANA  
925-628-6330

CONTRA COSTA COUNTY  
**CALIFORNIA CHILDREN SERVICES**  
597 CENTER AVENUE  
SUITE #110  
MARTINEZ, CA 94553-4669  
(925) 313-6100  
FAX (925) 313-6115

**CCS MEDICAL THERAPY  
UNITS (MTU)**

- **CASTRO MTU – EL CERRITO**  
1435 Lawrence Street  
El Cerrito, CA 94530  
(510) 374-3909  
Fax (510) 374-3911
- **MAUZY MTU – ALAMO**  
2964 Miranda Avenue  
Alamo, CA 94507  
(925) 646-6014  
Fax (925) 831-8691
- **SHADELANDS MTU – CONCORD**  
1860 Silverwood Drive  
Concord, CA 94519  
(925) 646-5733  
Fax (925) 646-5005
- **TURNER MTU – ANTIOCH**  
4207 Delta Fair Blvd.  
Antioch, CA 94509  
(925) 427-8522  
Fax (925) 427-8524

**CALIFORNIA  
CHILDREN  
SERVICES  
(CCS)**



**MEDICAL THERAPY  
PROGRAM**

A Program Dedicated to  
Children with Medical  
Therapy Needs

- Medical Therapy Services  
Provided By:
- Supervising Pediatric Therapists
  - Physical Therapists
  - Occupational Therapists
  - Therapy Assistants
  - Therapist Aides

## CALIFORNIA CHILDREN SERVICES MEDICAL THERAPY PROGRAM (MTP)

The CCS MTP provides medically necessary physical therapy (PT), occupational therapy (OT), and medical therapy conference (MTC) services to children who are medically eligible for the program. The MTC team physicians are specialists (physical medicine and rehabilitation specialists, orthopedist and/or pediatrician) experienced in the treatment of children with physical disabilities. The team performs examinations and prescribes PT, OT, durable medical equipment (DME), and recommends any other necessary medical interventions required to treat the child's eligible diagnosis. PTs and OTs work for CCS in the medical therapy units (MTUs) that are located at selected public school sites as part of an interagency agreement with the California Department of Education.

CCS services children from birth to 21 years of age in the Medical Therapy Program.

### CONDITIONS FREQUENTLY SEEN

- Cerebral Palsy
- Orthopedic/musculoskeletal conditions
- Traumatic injuries
- Spina Bifida
- Juvenile Rheumatoid Arthritis
- Muscular Dystrophy
- Neuromuscular conditions
- Other CCS Diagnoses

## OCCUPATIONAL THERAPY (OT)

OT involves assisting the children to develop and experience movement in a normal sequence. The OT will evaluate and provide treatment with improved fine motor skills, oral motor skills, and perceptual motor skills as the objective and functional outcome.

Fine motor development, righting reactions, equilibrium responses, range of motion, strength, sensory and perceptual motor skills, as well as ADL's (Activities of Daily Living) are evaluated and treated.

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Motor development, righting reactions, equilibrium responses, range of motion, strength, endurance, coordination, sensation, postural adjustments, and gait are evaluated and treated.

## SPECIALIZED PEDIATRIC THERAPY SERVICES

- Direct Treatment
- Consultation Services
- School Consultation
- Home Consultation for Equipment
- Equipment

## WHO CAN REFER ?

The CCS agency in the county where a child lives approves services for a child. Such requests or referrals may be made by anyone including the family, school or public health nurse, family doctor, or physician specialist.

Medical eligibility for the CCS program shall be determined by the CCS program medical consultant or designee through the review of medical records that document the applicant's medical history, results of a physical examination by a physician, laboratory test results, radiologic findings, or other tests or examinations that support the diagnosis of the eligible condition.

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## ¿Cómo solicitamos?

Llene una solicitud CCS y envíela a la oficina CCS de su condado. Puede obtener una solicitud en la oficina CCS de su condado o bajarla de: [www.dhs.ca.gov/ccs](http://www.dhs.ca.gov/ccs)

Llene su solicitud con cuidado, para que CCS tenga toda la información que necesite para ver si su hijo califica.

## ¿Puede un niño solicitar CCS?

Si su hijo tiene 18 años de edad o más, o es menor de edad emancipado, puede presentar su propia solicitud.

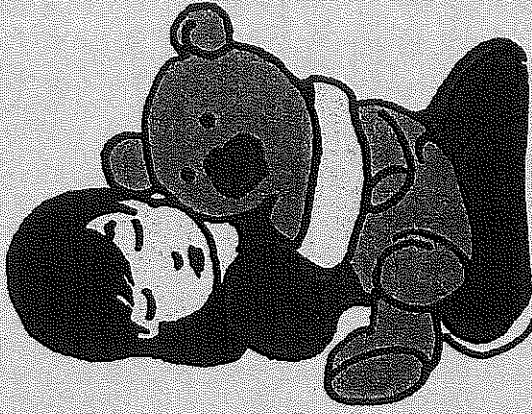
## ¿Cómo obtengo más información sobre CCS?

Para más información o ayuda para llenar su solicitud, póngase en contacto con la oficina CCS de su condado. Busque la dirección y el número de teléfono en la sección de gobierno de su directorio telefónico. Busque bajo *California Children's Services* o *County Health Department*.

O busque su oficina local de CCS en: [www.dhs.ca.gov/ccs](http://www.dhs.ca.gov/ccs)

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# Servicios para los niños de California

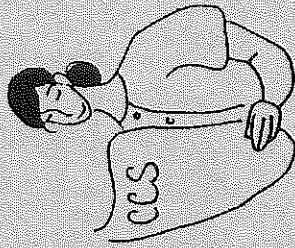


Arnold Schwarzenegger  
Governor, State of California

Atendiendo a niños  
con necesidades  
médicas especiales

## ¿Qué son Servicios para los niños de California (CCS)?

CCS es un programa del estado que ayuda a niños con ciertas enfermedades, limitaciones físicas o problemas de salud crónicos.



## ¿Puede nuestro hijo obtener CCS?

Si usted o el médico de su hijo creen que su hijo tiene un problema médico que cubre CCS, CCS puede pagar un examen para ver si CCS puede cubrir el problema de su hijo.

Si CCS cubre el problema de su hijo, CCS paga o presta servicios como:

- visitas al médico
- estadías en el hospital
- operaciones
- fisioterapia y terapia ocupacional
- pruebas de laboratorio y radiografías
- aparatos ortopédicos y equipo médico.

## ¿Qué más puede hacer CCS por nuestro hijo?

CCS puede manejar la atención médica de su hijo. Esto significa que CCS puede obtener los médicos y los cuidados especiales que necesite su hijo.

A veces CCS remite a su hijo a otras agencias, como enfermería de salud pública y centros regionales, para que pueda obtener los servicios que necesite su hijo.

CCS también tiene un Programa de Terapia Médica (MTP). Los MTP están en las escuelas públicas y dan fisioterapia y terapia ocupacional a niños calificados.

## ¿Hay otros requisitos?

Para obtener CCS, su hijo tiene que:

- ser menor de 21 años de edad; y
- tener o poder tener un problema médico que cubre CCS; y
- ser residente de California; y
- tener un ingreso familiar de menos de \$40,000 (su ingreso bruto ajustado en la declaración de impuestos del estado).

## ¿Qué pasa si el ingreso de mi familia es de más de \$40,000?

Igual puede obtener CCS si:

- tiene Medi-Cal (completo, sin costo);
- tiene el seguro Healthy Families;
- sus gastos médicos de su bolsillo para el cuidado de su hijo son más del 20% de su ingreso familiar;
- solo desea servicios MTP;
- necesita ver a un médico para saber si su hijo califica para CCS; o,
- adoptó a un niño con un problema médico conocido que lo hace elegible para CCS.

## ¿Qué problemas médicos cubre CCS?

CCS no cubre todos los problemas. CCS cubre la mayoría de los problemas que causan impedimentos físicos o que hay que tratar con medicamentos, operaciones o rehabilitación. También hay otros factores.

CCS cubre a niños con problemas como:

- enfermedad congénita del corazón
- cánceres, tumores
- hemofilia, anemia de células falciformes
- problemas de tiroides, diabetes
- problemas crónicos serios de los riñones
- enfermedades del hígado o del intestino
- labio leporino, hendidura palatina, espina bífida
- pérdida de audición, cataratas
- parálisis cerebral, ataques no controlados
- artritis reumatoide, distrofia muscular
- SIDA
- lesiones serias de la cabeza, el cerebro o la médula espinal, quemaduras graves
- problemas causados por el nacimiento prematuro
- dientes muy torcidos
- huesos rotos

## ¿Podemos usar cualquier médico o proveedor que elijamos?

No. CCS debe aprobar *primero* el proveedor, los servicios y los equipos.

If clients have private health insurance, Medi-Cal, or Medicare, their medical providers must bill those health plans for payment first.

GHPP pays only when a service is not covered by those plans. Persons with managed care insurance plans must seek approval of medical services through their plans.

### Do Clients Pay Anything?

Some families pay an annual enrollment fee to GHPP. The amount is based on a sliding fee scale determined by family size and income.

# GENETICALLY HANDICAPPED PERSONS PROGRAM

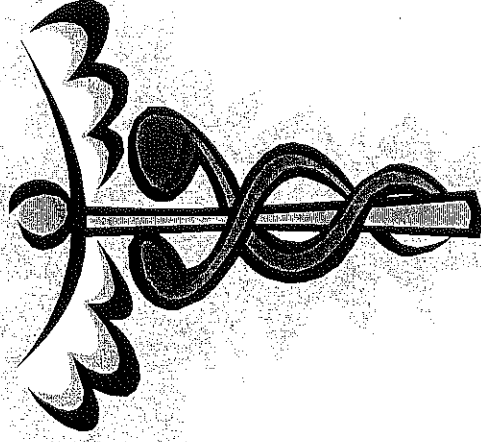
## TO APPLY:

Write, phone or visit the website below for an application.

STATE OF CALIFORNIA  
DEPARTMENT OF HEALTH SERVICES  
Genetically Handicapped Persons Program  
1515 K Street, Suite 400  
Sacramento, CA 95814  
(916) 327-0470  
1-800-639-0597

Please visit the website for the GHPP applications and more GHPP information:

<http://www.dhs.ca.gov/PCFH/cms/ghpp/publications.htm>



Arnold Schwarzenegger  
Governor

Sandra Shewry, Director  
Department of Health Services  
8/05

STATE OF CALIFORNIA  
HEALTH AND HUMAN SERVICES AGENCY  
DEPARTMENT OF HEALTH SERVICES

## What Is The Genetically Handicapped Persons Program (GHPP)?

The GHPP is a State funded program which coordinates care and helps pay for medical costs of persons with the following conditions:

- ... Hemophilia and certain other hereditary bleeding conditions
- ... Cystic Fibrosis
- ... Sickle Cell Disease and Thalassemia
- ... Huntington's Disease, Fredreich's Ataxia and Joseph's Disease
- ... Selected hereditary metabolic disorders including Phenylketonuria (PKU)
- ... Von Hippel Lindau Disease

## What Are The Goals Of The Program?

To help each client achieve the best level of health and functioning possible through:

- ... early identification and enrollment in the program
  - ... prevention and treatment services from highly skilled comprehensive center teams
  - ... ongoing care in the home community provided by qualified physicians and other health professionals
- ## Who Is Eligible?
- Anyone with an eligible GHPP condition who is a resident of California may apply. Those under 21 may be eligible to receive care through the California Children Services Program. All clients must complete an application and may be required to apply to Medi-Cal.

## What Services are Covered?

Program benefits authorized by GHPP include the following, if medically necessary:

- ... Special Care Center services, including comprehensive evaluation and development of treatment plan
  - ... Hospital inpatient and outpatient medical services including x-ray, laboratory, and other diagnostic services
  - ... Physician/dental services
  - ... Prescription medications, food supplements, blood products, oxygen, and medical supplies
  - ... Physical therapy, occupational therapy, and speech therapy
  - ... Psychosocial services, and referrals
  - ... Prosthetic and orthopedic appliances, durable medical equipment
  - ... Certain home health agency services
- All services, except emergency care, covered by GHPP must be authorized prior to the service being provided.

## Who Can Provide These Services?

- ... GHPP approved Special Care Centers which are teams of medical, nursing, social work, and other health professionals with expertise in the care of GHPP eligible conditions.
- ... GHPP approved private specialists and community physicians working in cooperation with the approved Special Care Center team.
- ... GHPP approved hospitals and many other providers.

## What Advantages Does The Program Offer Persons Covered By Insurance, Medicare or Medi-Cal?

- ... GHPP promotes high quality, coordinated medical care through case management services which assure collaboration between the comprehensive Special Care Center team and local physicians.
- ... GHPP refers clients to appropriate medical specialists and other health care providers in the client's community to provide services recommended by the Center.
- ... GHPP pays for medical care in case of loss of private health insurance or Medi-Cal due to change in employment or income.
- ... GHPP often pays for medical services not fully covered by other plans.
- ... GHPP protects families, who are self-supporting, from undue financial hardship at times of unusual heavy medical expenses. GHPP makes it possible for self-employed and part-time workers without private health insurance coverage to work and continue to receive essential medical care.

## Does GHPP Cover The Entire Cost Of Medical Care For All Clients?

- No. Some services are not benefits of GHPP. For example, long term care in a facility when patients can no longer be cared for by family members at home and experimental drugs or treatment are not GHPP benefits.
- GHPP pays for services at rates set by the State. Health care providers may not get paid the full-billed amount. When GHPP authorizes a service, the authorized provider must accept the GHPP rate as payment in full and cannot bill the client for the balance.



# CARE Parent Network

Family Support,  
Resources, and Training  
for Families of Children  
with Special Needs

925-313-0999  
800-281-3023

## Our Services:

## How Can You Contact Us?

### Family Support:

- ☆ One-to-One Peer Support
- ☆ Mentor Parent Program
- ☆ Support Groups

CARE Parent Network Serves  
Contra Costa County

### Resource and Referral:

- ☆ Quarterly Newsletter
- ☆ Browsing Library
- ☆ Resource Directories
- ☆ Customized Information Packets
- ☆ Helping Families to Find Services
- ☆ Information on Specific Disabilities

We are located at:  
1340 Arnold Drive, #115  
Martinez, CA 94553

### Website:

[www.careparentnetwork.org](http://www.careparentnetwork.org)

### Early Childhood Connections:

- ☆ Information for Families About California's Early Start Program
- ☆ Training for Community Agencies and Professionals
- ☆ Early Education Council
- ☆ Community Outreach
- ☆ Inclusion Resources

Phone: 925-313-0999 or  
800-281-3023  
Fax: 925-370-8651

Email: [careofarc@aol.com](mailto:careofarc@aol.com)

### Parent Education:

- ☆ Quarterly Workshops
- ☆ Internet Access
- ☆ Transition Resource Center

### Health Care Information:

- ☆ Parent Liaison to California Children Services (CCS)
- ☆ Care Notebooks (organizing tools for children's records)

*We believe that children reach  
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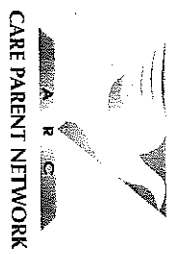
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**2010**

Departamento de Salud Pública de Contra Costa

## **Calendario de las Clínicas de Inmunizaciones**

Las personas son atendidas por orden de llegada. Por favor llegue lo más temprano posible porque no se aceptan clientes cuando la clínica está llena. La época del año cuando estamos más ocupados es de Agosto a Septiembre. Las vacunas no se dan durante el embarazo en ninguna clínica (*excepto la vacuna de la gripe*). Las clínicas de vacunas están cerradas durante los días festivos. Solo dinero efectivo o cheques - no se acepta crédito o tarjetas de ATM.

**1-800-246-2494**

No necesita cita en estas clínicas

### **Richmond Departamento de Salud Pública**

Esquina de la 39 Calle y Avenida Bissell, 1 Piso, Richmond  
Todos los Lunes, 1:00 - 4:30 pm

### **Brentwood Departamento de Salud Pública**

171 Sand Creek Rd., Suite A, Brentwood  
Todos los Martes, 1:00-4:30 p.m.

### **Pittsburg Departamento de Salud Pública**

2311 Loveridge Rd., Pittsburg  
Todos los Miércoles, 1:00 - 4:30 p.m.

### **Concord Departamento de Salud Pública**

2355 Stanwell Circle, Concord  
Todos los Viernes, 1:00 - 4:30 p.m.

## **Costo de Vacunas** (efectivo 1/1/2010)

### **18 Años O Menores**

**El costo es de \$10 por persona o \$30 por familia (3 niños o mas)  
(a nadie se le negarán estas vacunas si no puede pagar)**

DTaP or DT	Hib
Td	Meningococo
Tdap	MMR
Polio-(inyectable)	Pneumococcal (para niños)
Hepatitis A	Rotavirus
Hepatitis B	Varicela <i>Chickenpox</i>
HPV	Gripe

### **(OPTAR PAGO) 19 Años Y Mayores**

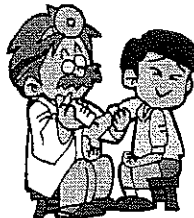
Td -----\$15.00	Polio (inyectable)-----\$15.00
Tdap (edades 19-64 años)----\$15.00	Flu/Gripe (para adulto)-----\$15.00

### **(VACUNAS QUE HAY QUE PAGAR) 19 AÑOS Y MAYORES**

Hepatitis A -----\$ 70.00 (cada dosis)	MMR ----- \$ 80.00
Hepatitis B -----\$ 65.00 (cada dosis)	Meningococo ----- \$140.00
HPV(edades 19-26 años)-\$140.00 (cada dosis)	Pneumococcal (para adulto)----- \$ 40.00
Varicela ----- \$120.00 (cada dosis)	Herpes Zoster-(edades 60 años y mayores)-\$175.00

**Para vacunas de viajeros llame: 925-313-6488  
O visite nuestro sitio en el internet [www.cchealth.org](http://www.cchealth.org)**

#### **Consentimiento para menores de edad:**



- Todos los menores de 14 años de edad deben venir acompañados por uno de los padres, apoderado legal o la persona autorizada por los padres.
  - Niños de 14 a 17 años de edad que no estén acompañados por un adulto, deben de tener un consentimiento firmado por los padres, apoderado legal o persona autorizada por los padres
- La persona que firme el consentimiento debe indicar en el mismo su parentezco con niño y el número de teléfono a donde se les pueda localizar

La ley de California requiere, que cuando los niños se registren en las escuelas de California, tienen que tener, o deben obtener las siguientes vacunas (con algunas excepciones dependiendo de la edad, creencias religiosas o por razones médicas):

<b>VACUNAS REQUERIDAS PARA INGRESAR A LA ESCUELA</b>		
<b>POLIO</b>	4 dosis	3 dosis cumplen con el requisito si por lo menos recibió una dosis después del cuarto cumpleaños.
<b>DIFTERIA - TETANOS - TOS FERINA (DTP)</b> Menores de 6 años (Requieren la vacuna contra la Tos Ferina) DTP/DTaP o cualquier combinación de DTP/DTaP con DT ó Td (Tétanos y Difteria)  Mayores de 7 años (No requieren la vacuna contra la Tos Ferina) Td, DT, ó DTP/DtaP, Tdap ó cualquiera combinación de estas.	5 dosis pero...  4 dosis pero...	Cuatro dosis cumplen con el requisito si la última dosis se administró después de los 4 años de edad.  3 dosis llenan los requisitos para las edades de 7 a 17 años si por lo menos una dosis fue dada el día del segundo cumpleaños o después. Si la última dosis se dió antes del segundo cumpleaños se requiere una dosis más de Td.
<b>SARAMPION, SARAMPION ALEMAN, PAPERAS - MMR</b> Son administradas juntas en una sola inyección.	1 o 2 dosis (2)	Debe darse en el primer año o después del primer año de edad.
<b>HEPATITIS B</b>	3 dosis	Requerida para entra al kinder durante el mes de Agosto de 1997 o después y para todos los niños que entren al 7o. grado el 1 de Julio de 1999 o después.
<b>VARICELA</b>	1 dosis	Requerida para todos los niños que entran a kinder, niños de 18 meses y mayores. Como alternativa se acepta documentación del proveedor médico indicando que el niño tuvo varicela.

- (1) Para niños mayores de 7 años se recomienda la vacuna contra las Paperas, pero no es obligatorio.  
 (2) Una segunda dosis de la vacuna MMR (Sarampión, sarampión alemán, paperas) es un requisito legal para ingresar al kinder y para ingresar al 7 grado.

<b>VACUNAS REQUERIDAS PARA NIÑOS QUE ATIENDEN CENTROS DE CUIDADO DURANTE EL DIA, JARDINES INFANTILES, PROGRAMAS DE HEADSTART Y ELEGIBLES PARA CALWORKS</b>	
<b>Edad del niño</b>	<b>Vacunas y número de dosis requeridas</b>
Menos de 2 meses	Ninguna
2 a 3 meses	1 Polio, 1 DTaP (o DTP) , 1 Hib, y 1 Hep B
4 a 5 meses	2 Polio, 2 DTaP (o DTP) , 2 Hib, y 2 Hep B
6 a 14 meses	2 Polio, 3 DTaP (o DTP) y 2 Hib y 2 Hep B
15 a 17 meses	3 Polio, 3 DTaP (o DTP) y 2 Hep B 1 Hib Una de MMR es requerida al año de edad o después
18 meses a 4 años	3 Polio, 4 DTaP (o DTP), 3 Hep B y 1 Hib 1 MMR es requerida al año de edad o después.  La vacuna de varicela es requisito en niños mayores de 18 meses . Como alternativa se acepta documentación de un proveedor de salud indicando que el niño tuvo varicela.



**DOCUMENTACION:** Todos los estudiantes que entren a una escuela guardería o programa de aprendizaje en California deben presentar una prueba por escrito del doctor o clínica de inmunizaciones, indicando fechas de vacunas recibidas. Los estudiantes que se estén cambiando de escuela pueden presentar la documentación de la escuela anterior. Esta documentación debe indicar el mes y el año en que se recibió cada vacuna; si la vacuna MMR y Hib fue recibida en el mes del primer cumpleaños, debe indicarse el mes, día y año.

## Plan Recomendado de Vacunas Durante la Infancia

Al nacer -----	Primera dosis Hep B
2 meses de edad -----	Primera dosis contra DTaP, Polio, Hib, PnuCon, Rotavirus Segunda dosis contra Hep B
4 meses de edad -----	Segunda dosis contra DTaP, Polio, Hib, PnuCon, Rotavirus
6 meses de edad -----	Tercera dosis contra DTaP, Hep B, Hib, PnuCon, Rotavirus
6-18 meses de edad -----	Tercera dosis contra Polio
6 meses -- 18 años de edad-	Gripe (durante la temporada de la gripe)
12-15 meses de edad -----	Primera dosis MMR, Varicela (chickenpox) Cuarta dosis Hib, DTaP, PnuCon
1-2 años de edad -----	Hep A (dos dosis 6 a 12 meses aparte)
4 - 6 años de edad ----- (ingreso a la escuela)	Quinta dosis contra DTaP, cuarta dosis contra Polio, Segunda dosis MMR, Varicela
11-12 años de edad -----	Tdap refuerzo, Meningococcal, HPV (3 series de dosis para niñas)

Polio	-	Vacuna de Polio Inactivada (IPV)
DTaP	-	Difteria, Tétanos, Tos Ferina
Hib	-	Hemophilus Influenza Tipo b (Hib) vacuna conjugada
MMR	-	Sarampión, paperas y sarampión alemán
Hep B	-	Hepatitis B vacuna-(El tiempo para recibir esta vacuna puede variar)
Hep A	-	Hepatitis A vacuna
PnuCon	-	Pneumococcal para niños
Meningococcal	-	Meningocócica vacuna conjugada
HPV	-	Human Papilomavirus vacuna
Tdap	-	Tétanos, Difteria, Tos Ferina

Servicios de salud de contra costa recomiendan obtener las vacunas con el médico personal de la familia cuando sea possible. (El Plan Recomendado de Vacunas puede variar ligeramente en consultorios privados).

*Para mayor información llame a su doctor o al  
Departamento de Salud Pública de Contra Costa: 925-313-6767*

**Para información acerca de las vacunas recomendadas para adolescents y  
Adultos, visite [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines)**





**2010**

**CONTRA COSTA PUBLIC HEALTH**

# **Immunization Clinic Calendar**

Clients are seen on a first come, first served basis. Please come early, as we stop accepting clients when the clinics are full. Our busiest time of year is during August and September. Vaccines are not given during pregnancy at any of the clinic sites (except flu vaccine). Clinics are closed on holidays. Cash or check only - no credit or ATM cards accepted.

**1-800-246-2494**

No appointment is needed at any of the clinic sites.

## **Richmond Public Health**

39<sup>th</sup> Street & Bissell Avenue, 1<sup>st</sup> Floor, Richmond  
Mondays, 1:00 - 4:30 p.m.

## **Brentwood Public Health**

171 Sand Creek Road, Suite A, Brentwood  
Tuesdays, 1:00 - 4:30 p.m.

## **Pittsburg Public Health**

2311 Loveridge Road, Pittsburg  
Wednesdays, 1:00 - 4:30 p.m.

## **Concord Public Health**

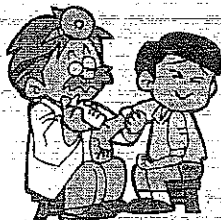
2355 Stanwell Circle, Concord  
Fridays, 1:00 - 4:30 p.m.



## Fee Schedule *effective 1/1/2010*

<b>(WAIVABLE FEES) 18 YEARS &amp; YOUNGER</b> <b>\$10.00 per person or \$30.00 per family (3 or more children)</b>	
DTaP or DT	Hib
Td	Meningococcal
Tdap	MMR
Polio (injectable)	Pneumococcal (Pediatric)
Hepatitis A	Rotavirus
Hepatitis B	Varicella- <i>Chickenpox</i>
HPV	Flu
<b>(WAIVABLE FEES) AGES 19 &amp; OLDER</b>	
Td -----\$15.00	Polio (injectable)-----\$15.00
Tdap (ages 19 – 64 years)----\$15.00	Flu (Adult)----- \$15.00
<b>(NON-WAIVABLE FEES) AGES 19 &amp; OLDER</b>	
Hepatitis A -----\$ 70.00 (each dose)	MMR-----\$ 80.00
Hepatitis B -----\$ 65.00 (each dose)	Meningococcal----- \$140.00
HPV(ages 19-26 years) ---\$140.00 (each dose)	Pneumococcal (Adult) ----- \$ 40.00
Varicella ----- \$120.00 (each dose)	Shingles (ages 60 & up) ----- \$175.00
<b>For travel immunizations call: 925-313-6488</b> <b>or visit Contra Costa Health Services website at <a href="http://www.cchealth.org">www.cchealth.org</a></b>	

### Consent for minors:




- Children under 14 years of age must be accompanied by a parent, legal guardian or authorized relative or caretaker.
- Unaccompanied children 14-17 years must have an informed consent signed by the parent, legal guardian or authorized relative or caretaker. The parent, guardian, or authorized relative or caretaker needs to indicate their relationship to the child and give a phone number where they can be reached.

California law requires, that at the time of enrollment in California schools, children must have or must obtain the following immunizations (with some exceptions based on age, religious belief, or medical reasons):

IMMUNIZATIONS REQUIRED FOR SCHOOL ENTRY, K-12		
<u>POLIO</u>	4 doses	But... 3 doses meet requirement if at least one dose was given on or after the 4 <sup>th</sup> birthday.
<u>DIPHTHERIA, TETANUS, AND PERTUSSIS</u> Age 6 years and under (Pertussis is required) DTaP or DTP, or any combination of DTaP/DTP with DT or Td (Tetanus and Diphtheria)  Age 7 years and older (Pertussis is <u>not</u> required) Td, DT, DTaP, DTP, Tdap or any combination of these	5 doses but...	4 doses meet requirements for ages 4-6 if at least one dose was given on or after the 4 <sup>th</sup> birthday.
	4 doses but...	3 doses meet requirement for ages 7-17 years if at least one dose was given on or after the 2 <sup>nd</sup> birthday. If last dose was given before the 2 <sup>nd</sup> birthday, one more (Td or Tdap) dose is required.
<u>MEASLES, MUMPS, RUBELLA (MMR)</u> Given together as one injection	1 or 2 doses (2)	Must be given on or after the 1st birthday.
<u>HEPATITIS B</u>	3 doses	Required for all children entering kindergarten on or after 8/97, and all children entering 7 <sup>th</sup> grade on or after 7/1/99.
<u>VARICELLA</u>	1 dose	Required for all children entering kindergarten, 18 months of age and older or as an alternative, provider documentation of chickenpox disease.

- (1) Mumps is recommended but not required for children over age 7.
- (2) A second dose of MMR is legally required at kindergarten entry and 7<sup>th</sup> grade entry.

IMMUNIZATIONS REQUIRED FOR DAY CARE CENTERS, PRESCHOOLS, HEADSTART PROGRAMS, FAMILY DAY CARE HOMES, AND CALWORKS ELIGIBILITY	
Age of Child	Number of doses required
Under 2 months.....	None required
2-3 months.....	1 Polio, 1 DTaP (or DTP), 1 Hib and 1 Hep B
4-5 months.....	2 Polio, 2 DTaP (or DTP), 2 Hib and 2 Hep B
6-14 months.....	2 Polio, 3 DTaP (or DTP), 2 Hib and 2 Hep B
15-17 months.....	3 Polio, 3 DTaP (or DTP) and 2 Hep B 1 Hib at any age 1 MMR is needed on or after the 1st birthday
18 months through 4 years.....	3 Polio, 4 DTaP (or DTP), 3 Hep B, 1 Hib 1 MMR given on or after the 1st birthday 1 Varicella required for all children 18 months of age and older or provider documentation of chickenpox disease

 **DOCUMENTATION:** All pupils entering schools, day care, preschool, headstarts or family day care homes must present a written immunization record from a health care provider. Transfer students may present the California School Immunization Record (the blue card) from their prior school. The record must show the month and year for each vaccine received, and month, day, and year for MMR and Hib if received in the month of the first birthday.

## Recommended Schedule of Childhood Immunizations

Birth-----	1 <sup>st</sup> Hep B
2 months old-----	1st DTaP, Polio, Hib, PnuCon, Rotavirus, 2 <sup>nd</sup> Hep B
4 months old-----	2nd DTaP, Polio, Hib, PnuCon, Rotavirus
6 months old-----	3rd DTaP, Hib, HepB, PnuCon, Rotavirus
6-18 months old-----	3rd Polio
6 months - 18 years old-----	Flu (during flu season)
12-15 months old-----	1st MMR, Varicella (chickenpox) 4th Hib, DTaP, PnuCon
1-2 years old-----	Hep A (2 doses 6-12 months apart)
4 - 6 years old (school entry)-----	5th DTaP, 4th Polio, 2nd MMR, Varicella
11-12 years old-----	Tdap booster, Meningococcal, HPV (3 dose series for girls)

Polio-----	Inactivated Polio Vaccine (IPV)
DTaP-----	Diphtheria, Tetanus, Pertussis vaccine
Hib-----	Hemophilus Influenza Type b Conjugate Vaccine
MMR-----	Measles, Mumps, Rubella vaccine
HepB-----	Hepatitis B Vaccine (Timing of HepB vaccine may vary)
Hep A-----	Hepatitis A vaccine
PnuCon-----	Pediatric Pneumococcal conjugate Vaccine
Rotavirus-----	Rotavirus vaccine
Tdap-----	Tetanus, Diphtheria, Pertussis vaccine
Meningococcal-----	Meningococcal conjugate vaccine
HPV-----	Human Papillomavirus vaccine

Contra Costa Health Services recommends that immunizations be obtained from one's private doctor whenever possible (schedules in private practice may differ slightly).

For more information call your doctor or Contra Costa Immunization Program  
at: **925-313-6767**

For vaccines recommended for adolescents and adults, visit [www.cdc.gov/vaccines](http://www.cdc.gov/vaccines)

**Recommended Immunization Schedule for Persons Aged 7 Through 18 Years—United States • 2010**  
For those who fall behind or start late, see the schedule below and the catch-up schedule

Vaccine ▼	Age ►	7–10 years	11–12 years	13–18 years
Tetanus, Diphtheria, Pertussis <sup>1</sup>			Tdap	Tdap
Human Papillomavirus <sup>2</sup>		see footnote 2	HPV (3 doses)	HPV series
Meningococcal <sup>3</sup>		MCV	MCV	MCV
Influenza <sup>4</sup>			Influenza (Yearly)	
Pneumococcal <sup>5</sup>			PPSV	
Hepatitis A <sup>6</sup>			HepA Series	
Hepatitis B <sup>7</sup>			Hep B Series	
Inactivated Poliovirus <sup>8</sup>			IPV Series	
Measles, Mumps, Rubella <sup>9</sup>			MMR Series	
Varicella <sup>10</sup>			Varicella Series	

Range of recommended ages for all children except certain high-risk groups

Range of recommended ages for catch-up immunization

Range of recommended ages for certain high-risk groups

This schedule includes recommendations in effect as of December 15, 2009. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse events. Providers should consult the relevant Advisory

Committee on Immunization Practices statement for detailed recommendations: <http://www.cdc.gov/vaccines/pubs/acip-list.htm>. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

- Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).** (Minimum age: 10 years for Boostrix and 11 years for Adacel)
  - Administer at age 11 or 12 years for those who have completed the recommended childhood DTP/DaP vaccination series and have not received a tetanus and diphtheria toxoid (Td) booster dose.
  - Persons aged 13 through 18 years who have not received Tdap should receive a dose.
  - A 5-year interval from the last Td dose is encouraged when Tdap is used as a booster dose; however, a shorter interval may be used if pertussis immunity is needed.
- Human papillomavirus vaccine (HPV).** (Minimum age: 9 years)
  - Two HPV vaccines are licensed: a quadrivalent vaccine (HPV4) for the prevention of cervical, vaginal and vulvar cancers (in females) and genital warts (in females and males), and a bivalent vaccine (HPV2) for the prevention of cervical cancers in females.
  - HPV vaccines are most effective for both males and females when given before exposure to HPV through sexual contact.
  - HPV4 or HPV2 is recommended for the prevention of cervical precancers and cancers in females.
  - HPV4 is recommended for the prevention of cervical, vaginal and vulvar precancers and cancers and genital warts in females.
  - Administer the first dose to females at age 11 or 12 years.
  - Administer the second dose 1 to 2 months after the first dose and the third dose 6 months after the first dose (at least 24 weeks after the first dose).
  - Administer the series to females at age 13 through 18 years if not previously vaccinated.
  - HPV4 may be administered in a 3-dose series to males aged 9 through 18 years to reduce their likelihood of acquiring genital warts.
- Meningococcal conjugate vaccine (MCV4).**
  - Administer at age 11 or 12 years, or at age 13 through 18 years if not previously vaccinated.
  - Administer to previously unvaccinated college freshmen living in a dormitory.
  - Administer MCV4 to children aged 2 through 10 years with persistent complement component deficiency, anatomic or functional asplenia, or certain other conditions placing them at high risk.
  - Administer to children previously vaccinated with MCV4 or MPSV4 who remain at increased risk after 3 years (if first dose administered at age 2 through 6 years) or after 5 years (if first dose administered at age 7 years or older). Persons whose only risk factor is living in on-campus housing are not recommended to receive an additional dose. See *MMWR* 2009;58:1042–3.
- Influenza vaccine (seasonal).**
  - Administer annually to children aged 6 months through 18 years.
  - For healthy nonpregnant persons aged 7 through 18 years (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used.
  - Administer 2 doses (separated by at least 4 weeks) to children aged younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
  - For recommendations for use of influenza A (H1N1) 2009 monovalent vaccine. See *MMWR* 2009;58(No. RR-10).
- Pneumococcal polysaccharide vaccine (PPSV).**
  - Administer to children with certain underlying medical conditions, including a cochlear implant. A single revaccination should be administered after 5 years to children with functional or anatomic asplenia or an immunocompromising condition. See *MMWR* 1997;46(No. RR-8).
- Hepatitis A vaccine (HepA).**
  - Administer 2 doses at least 6 months apart.
  - HepA is recommended for children aged older than 23 months who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.
- Hepatitis B vaccine (HepB).**
  - Administer the 3-dose series to those not previously vaccinated.
  - A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children aged 11 through 15 years.
- Inactivated poliovirus vaccine (IPV).**
  - The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
  - If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age.
- Measles, mumps, and rubella vaccine (MMR).**
  - If not previously vaccinated, administer 2 doses or the second dose for those who have received only 1 dose, with at least 28 days between doses.
- Varicella vaccine.**
  - For persons aged 7 through 18 years without evidence of immunity (see *MMWR* 2007;56[No. RR-4]), administer 2 doses if not previously vaccinated or the second dose if only 1 dose has been administered.
  - For persons aged 7 through 12 years, the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.
  - For persons aged 13 years and older, the minimum interval between doses is 28 days.

# Recommended Immunization Schedule for Persons Aged 0 Through 6 Years—United States • 2010

For those who fall behind or start late, see the catch-up schedule

Vaccine ▼	Age ►	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19–23 months	2–3 years	4–6 years
Hepatitis B <sup>1</sup>		HepB	HepB				HepB					
Rotavirus <sup>2</sup>				RV	RV	RV <sup>2</sup>						
Diphtheria, Tetanus, Pertussis <sup>3</sup>				DTaP	DTaP	DTaP	<sup>see footnote 9</sup>	DTaP				DTaP
<i>Haemophilus influenzae</i> type b <sup>4</sup>				Hib	Hib	Hib <sup>4</sup>		Hib				
Pneumococcal <sup>5</sup>				PCV	PCV	PCV		PCV			PPSV	
Inactivated Poliovirus <sup>6</sup>				IPV	IPV			IPV				IPV
Influenza <sup>7</sup>							Influenza (Yearly)					
Measles, Mumps, Rubella <sup>8</sup>							MMR		<sup>see footnote 8</sup>			MMR
Varicella <sup>9</sup>							Varicella		<sup>see footnote 9</sup>			Varicella
Hepatitis A <sup>10</sup>							HepA (2 doses)				HepA Series	
Meningococcal <sup>11</sup>											MCV	

Range of recommended ages for all children except certain high-risk groups

Range of recommended ages for certain high-risk groups

This schedule includes recommendations in effect as of December 15, 2009. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse events. Providers should consult the relevant Advisory

Committee on Immunization Practices statement for detailed recommendations: <http://www.cdc.gov/vaccines/pubs/acip-list.htm>. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

## 1. Hepatitis B vaccine (HepB). (Minimum age: birth)

### At birth:

- Administer monovalent HepB to all newborns before hospital discharge.
- If mother is hepatitis B surface antigen (HBsAg)-positive, administer HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
- If mother's HBsAg status is unknown, administer HepB within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if HBsAg-positive, administer HBIG (no later than age 1 week).

### After the birth dose:

- The HepB series should be completed with either monovalent HepB or a combination vaccine containing HepB. The second dose should be administered at age 1 or 2 months. Monovalent HepB vaccine should be used for doses administered before age 6 weeks. The final dose should be administered no earlier than age 24 weeks.
  - Infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg 1 to 2 months after completion of at least 3 doses of the HepB series, at age 9 through 18 months (generally at the next well-child visit).
  - Administration of 4 doses of HepB to infants is permissible when a combination vaccine containing HepB is administered after the birth dose. The fourth dose should be administered no earlier than age 24 weeks.
2. Rotavirus vaccine (RV). (Minimum age: 6 weeks)
- Administer the first dose at age 6 through 14 weeks (maximum age: 14 weeks 6 days). Vaccination should not be initiated for infants aged 15 weeks 0 days or older.
  - The maximum age for the final dose in the series is 8 months 0 days
  - If Rotarix is administered at ages 2 and 4 months, a dose at 6 months is not indicated.
3. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). (Minimum age: 6 weeks)
- The fourth dose may be administered as early as age 12 months, provided at least 6 months have elapsed since the third dose.
  - Administer the final dose in the series at age 4 through 6 years.
4. *Haemophilus influenzae* type b conjugate vaccine (Hib). (Minimum age: 6 weeks)
- If PRP-OMP (PedvaxHib or Comvax [HepB-Hib]) is administered at ages 2 and 4 months, a dose at age 6 months is not indicated.
  - TriHIBit (DTaP/Hib) and Hiberix (PRP-T) should not be used for doses at ages 2, 4, or 6 months for the primary series but can be used as the final dose in children aged 12 months through 4 years.
5. Pneumococcal vaccine. (Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPSV])
- PCV is recommended for all children aged younger than 5 years. Administer 1 dose of PCV to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.
  - Administer PPSV 2 or more months after last dose of PCV to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant. See *MMWR* 1997;46(No. RR-8).

## 6. Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks)

- The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
- If 4 doses are administered prior to age 4 years a fifth dose should be administered at age 4 through 6 years. See *MMWR* 2009;58(30):829–30.

## 7. Influenza vaccine (seasonal). (Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 2 years for live, attenuated influenza vaccine [LAIV])

- Administer annually to children aged 6 months through 18 years.
- For healthy children aged 2 through 6 years (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used, except LAIV should not be given to children aged 2 through 4 years who have had wheezing in the past 12 months.
- Children receiving TIV should receive 0.25 mL if aged 6 through 35 months or 0.5 mL if aged 3 years or older.
- Administer 2 doses (separated by at least 4 weeks) to children aged younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
- For recommendations for use of influenza A (H1N1) 2009 monovalent vaccine see *MMWR* 2009;58(No. RR-10).

## 8. Measles, mumps, and rubella vaccine (MMR). (Minimum age: 12 months)

- Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 28 days have elapsed since the first dose.

## 9. Varicella vaccine. (Minimum age: 12 months)

- Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 3 months have elapsed since the first dose.
- For children aged 12 months through 12 years the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.

## 10. Hepatitis A vaccine (HepA). (Minimum age: 12 months)

- Administer to all children aged 1 year (i.e., aged 12 through 23 months). Administer 2 doses at least 6 months apart.
- Children not fully vaccinated by age 2 years can be vaccinated at subsequent visits
- HepA also is recommended for older children who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.

## 11. Meningococcal vaccine. (Minimum age: 2 years for meningococcal conjugate vaccine [MCV4] and for meningococcal polysaccharide vaccine [MPSV4])

- Administer MCV4 to children aged 2 through 10 years with persistent complement component deficiency, anatomic or functional asplenia, and certain other conditions placing them at high risk.
- Administer MCV4 to children previously vaccinated with MCV4 or MPSV4 after 3 years if first dose administered at age 2 through 6 years. See *MMWR* 2009;58:1042–3.

**Catch-up Immunization Schedule for Persons Aged 4 Months Through 18 Years Who Start Late or Who Are More Than 1 Month Behind—United States • 2010**

The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age.

PERSONS AGED 4 MONTHS THROUGH 6 YEARS					
Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B <sup>1</sup>	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)		
Rotavirus <sup>2</sup>	6 wks	4 weeks	4 weeks <sup>2</sup>		
Diphtheria, Tetanus, Pertussis <sup>3</sup>	6 wks	4 weeks	4 weeks <sup>4</sup>	6 months	6 months <sup>5</sup>
<i>Haemophilus influenzae</i> type b <sup>4</sup>	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose) if first dose administered at age 12–14 months No further doses needed if first dose administered at age 15 months or older	4 weeks <sup>4</sup> if current age is younger than 12 months 8 weeks (as final dose) <sup>4</sup> if current age is 12 months or older and first dose administered at younger than age 12 months and second dose administered at younger than 15 months No further doses needed if previous dose administered at age 15 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months	
Pneumococcal <sup>6</sup>	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose for healthy children) if first dose administered at age 12 months or older or current age 24 through 59 months No further doses needed for healthy children if first dose administered at age 24 months or older	4 weeks if current age is younger than 12 months 8 weeks (as final dose for healthy children) if current age is 12 months or older No further doses needed for healthy children if previous dose administered at age 24 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months or for high-risk children who received 3 doses at any age	
Inactivated Poliovirus <sup>5</sup>	6 wks	4 weeks	4 weeks	6 months	
Measles, Mumps, Rubella <sup>7</sup>	12 mos	4 weeks			
Varicella <sup>8</sup>	12 mos	3 months			
Hepatitis A <sup>9</sup>	12 mos	6 months			
PERSONS AGED 7 THROUGH 18 YEARS					
Tetanus, Diphtheria/ Tetanus, Diphtheria, Pertussis <sup>10</sup>	7 yrs <sup>10</sup>	4 weeks	4 weeks if first dose administered at younger than age 12 months 6 months if first dose administered at 12 months or older	6 months if first dose administered at younger than age 12 months	
Human Papillomavirus <sup>11</sup>	9 yrs		Routine dosing intervals are recommended <sup>11</sup>		
Hepatitis A <sup>9</sup>	12 mos	6 months			
Hepatitis B <sup>1</sup>	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)		
Inactivated Poliovirus <sup>5</sup>	6 wks	4 weeks	4 weeks	6 months	
Measles, Mumps, Rubella <sup>7</sup>	12 mos	4 weeks			
Varicella <sup>8</sup>	12 mos	3 months if person is younger than age 13 years 4 weeks if person is aged 13 years or older			

- Hepatitis B vaccine (HepB).**
  - Administer the 3-dose series to those not previously vaccinated.
  - A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children aged 11 through 15 years.
- Rotavirus vaccine (RV).**
  - The maximum age for the first dose is 14 weeks 6 days. Vaccination should not be initiated for infants aged 15 weeks 0 days or older.
  - The maximum age for the final dose in the series is 8 months 0 days.
  - If Rotarix was administered for the first and second doses, a third dose is not indicated.
- Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).**
  - The fifth dose is not necessary if the fourth dose was administered at age 4 years or older.
- Haemophilus influenzae* type b conjugate vaccine (Hib).**
  - Hib vaccine is not generally recommended for persons aged 5 years or older. No efficacy data are available on which to base a recommendation concerning use of Hib vaccine for older children and adults. However, studies suggest good immunogenicity in persons who have sickle cell disease, leukemia, or HIV infection, or who have had a splenectomy; administering 1 dose of Hib vaccine to these persons who have not previously received Hib vaccine is not contraindicated.
  - If the first 2 doses were PRP-OMP (PedvaxHIB or Comvax), and administered at age 11 months or younger, the third (and final) dose should be administered at age 12 through 15 months and at least 8 weeks after the second dose.
  - If the first dose was administered at age 7 through 11 months, administer the second dose at least 4 weeks later and a final dose at age 12 through 15 months.
- Pneumococcal vaccine.**
  - Administer 1 dose of pneumococcal conjugate vaccine (PCV) to all healthy children aged 24 through 59 months who have not received at least 1 dose of PCV on or after age 12 months.
  - For children aged 24 through 59 months with underlying medical conditions, administer 1 dose of PCV if 3 doses were received previously or administer 2 doses of PCV at least 8 weeks apart if fewer than 3 doses were received previously.
  - Administer pneumococcal polysaccharide vaccine (PPSV) to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant, at least 8 weeks after the last dose of PCV. See *MMWR* 1997;46(No. RR-8).
- Inactivated poliovirus vaccine (IPV).**
  - The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
- A fourth dose is not necessary if the third dose was administered at age 4 years or older and at least 6 months following the previous dose.
- In the first 6 months of life, minimum age and minimum intervals are only recommended if the person is at risk for imminent exposure to circulating poliovirus (i.e., travel to a polio-endemic region or during an outbreak).
- Measles, mumps, and rubella vaccine (MMR).**
  - Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 28 days have elapsed since the first dose.
  - If not previously vaccinated, administer 2 doses with at least 28 days between doses.
- Varicella vaccine.**
  - Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 3 months have elapsed since the first dose.
  - For persons aged 12 months through 12 years, the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.
  - For persons aged 13 years and older, the minimum interval between doses is 28 days.
- Hepatitis A vaccine (HepA).**
  - HepA is recommended for children aged older than 23 months who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.
- Tetanus and diphtheria toxoids vaccine (Td) and tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).**
  - Doses of DTaP are counted as part of the Td/Tdap series
  - Tdap should be substituted for a single dose of Td in the catch-up series or as a booster for children aged 10 through 18 years; use Td for other doses.
- Human papillomavirus vaccine (HPV).**
  - Administer the series to females at age 13 through 18 years if not previously vaccinated.
  - Use recommended routine dosing intervals for series catch-up (i.e., the second and third doses should be administered at 1 to 2 and 6 months after the first dose). The minimum interval between the first and second doses is 4 weeks. The minimum interval between the second and third doses is 12 weeks, and the third dose should be administered at least 24 weeks after the first dose.

# Recommended Immunization Schedules for Persons Aged 0 Through 18 Years — United States, 2010

**MMWR**  
**QuickGuide**

Weekly

January 8, 2010 / Vol. 58 / No. 51 & 52

The Advisory Committee on Immunization Practices (ACIP) annually publishes an immunization schedule for persons aged 0 through 18 years that summarizes recommendations for currently licensed vaccines for children aged 18 years and younger and includes recommendations in effect as of December 15, 2009. Changes to the previous schedule (1) include the following:

- The statement concerning use of combination vaccines in the introductory paragraph has been changed to reflect the revised ACIP recommendation on this issue (2).
- The last dose in the inactivated poliovirus vaccine series is now recommended to be administered on or after the fourth birthday and at least 6 months after the previous dose. In addition, if 4 doses are administered before age 4 years, an additional (fifth) dose should be administered at age 4 through 6 years (3).
- The hepatitis A footnote has been revised to allow vaccination of children older than 23 months for whom immunity against hepatitis A is desired.
- Revaccination with meningococcal conjugate vaccine is now recommended for children who remain at increased risk for meningococcal disease after 3 years (if the first dose was administered at age 2 through 6 years), or after 5 years (if the first dose was administered at age 7 years or older) (4).
- Footnotes for human papillomavirus (HPV) vaccine have been modified to include 1) the availability of and recommendations for bivalent HPV vaccine, and 2) a permissive recommendation for administration of quadrivalent HPV vaccine to males aged 9 through 18 years to reduce the likelihood of acquiring genital warts (5).

The National Childhood Vaccine Injury Act requires that health-care providers provide parents or patients with copies of Vaccine Information Statements before administering each dose of the vaccines listed in the schedules. Additional information is available from state health departments and from CDC at <http://www.cdc.gov/vaccines/pubs/vis/default.htm>.

Detailed recommendations for using vaccines are available from ACIP statements (available at <http://www.cdc.gov/vaccines/pubs/acip-list.htm>) and the 2009 *Red Book* (6). Guidance regarding the Vaccine Adverse Event Reporting System form is available at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

## References

1. CDC. Recommended immunization schedules for persons aged 0–18 years—United States 2009. *MMWR* 2009;57(51&52).
2. CDC. ACIP Provisional recommendations for the use of combination vaccines. Atlanta, GA: US Department of Health and Human Services, CDC; 2009. Available at <http://www.cdc.gov/vaccines/recs/provisional/downloads/combo-vax-aug2009-508.pdf>. Accessed November 18, 2009.
3. CDC. Updated recommendations of the Advisory Committee on Immunization Practices (ACIP) regarding routine poliovirus vaccination. *MMWR* 2009;58:829–30.
4. CDC. Updated recommendation from the Advisory Committee on Immunization Practices (ACIP) for revaccination of persons at prolonged increased risk for meningococcal disease *MMWR* 2009;58:1042–3.
5. CDC. ACIP provisional recommendations for HPV vaccine. Atlanta, GA: US Department of Health and Human Services, CDC; 2009. Available at <http://www.cdc.gov/vaccines/recs/provisional/downloads/hpv-vac-dec2009-508.pdf>. Accessed December 23, 2009.
6. American Academy of Pediatrics. Active and passive immunization. In: Pickering LK, Baker CJ, Kimberlin DW, Long SS, eds. 2009 red book: report of the Committee on Infectious Diseases. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2009.

The recommended immunization schedules for persons aged 0 through 18 years and the catch-up immunization schedule for 2010 have been approved by the Advisory Committee on Immunization Practices, the American Academy of Pediatrics, and the American Academy of Family Physicians.

**Suggested citation:** Centers for Disease Control and Prevention. Recommended immunization schedules for persons aged 0 through 18 years—United States, 2010. *MMWR* 2010;58(51&52).

FIGURE 1. Recommended immunization schedule for persons aged 0 through 6 years — United States, 2010 (for those who fall behind or start late, see the catch-up schedule [Table])

Vaccine ▼	Age ►	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19–23 months	2–3 years	4–6 years
Hepatitis B <sup>1</sup>		HepB	HepB				HepB					
Rotavirus <sup>2</sup>				RV	RV	RV <sup>2</sup>						
Diphtheria, Tetanus, Pertussis <sup>3</sup>				DTaP	DTaP	DTaP	see footnote <sup>3</sup>	DTaP				DTaP
<i>Haemophilus influenzae</i> type b <sup>4</sup>				Hib	Hib	Hib <sup>4</sup>		Hib				
Pneumococcal <sup>5</sup>				PCV	PCV	PCV		PCV			PPSV	
Inactivated Poliovirus <sup>6</sup>				IPV	IPV			IPV				IPV
Influenza <sup>7</sup>								Influenza (Yearly)				
Measles, Mumps, Rubella <sup>8</sup>							MMR		see footnote <sup>8</sup>			MMR
Varicella <sup>9</sup>							Varicella		see footnote <sup>9</sup>			Varicella
Hepatitis A <sup>10</sup>							HepA (2 doses)				HepA Series	
Meningococcal <sup>11</sup>												MCV

Range of recommended ages for all children except certain high-risk groups

Range of recommended ages for certain high-risk groups

This schedule includes recommendations in effect as of December 15, 2009. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse

events. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: <http://www.cdc.gov/vaccines/pubs/acip-list.htm>. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

#### 1. Hepatitis B vaccine (HepB). (Minimum age: birth)

##### At birth:

- Administer monovalent HepB to all newborns before hospital discharge.
- If mother is hepatitis B surface antigen (HBsAg)-positive, administer HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
- If mother's HBsAg status is unknown, administer HepB within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if HBsAg-positive, administer HBIG (no later than age 1 week).

##### After the birth dose:

- The HepB series should be completed with either monovalent HepB or a combination vaccine containing HepB. The second dose should be administered at age 1 or 2 months. Monovalent HepB vaccine should be used for doses administered before age 6 weeks. The final dose should be administered no earlier than age 24 weeks.
- Infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg 1 to 2 months after completion of at least 3 doses of the HepB series, at age 9 through 18 months (generally at the next well-child visit).
- Administration of 4 doses of HepB to infants is permissible when a combination vaccine containing HepB is administered after the birth dose. The fourth dose should be administered no earlier than age 24 weeks.

#### 2. Rotavirus vaccine (RV). (Minimum age: 6 weeks)

- Administer the first dose at age 6 through 14 weeks (maximum age: 14 weeks 6 days). Vaccination should not be initiated for infants aged 15 weeks 0 days or older.
- The maximum age for the final dose in the series is 8 months 0 days
- If Rotarix is administered at ages 2 and 4 months, a dose at 6 months is not indicated.

#### 3. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP). (Minimum age: 6 weeks)

- The fourth dose may be administered as early as age 12 months, provided at least 6 months have elapsed since the third dose.
- Administer the final dose in the series at age 4 through 6 years.

#### 4. *Haemophilus influenzae* type b conjugate vaccine (Hib). (Minimum age: 6 weeks)

- If PRP-OMP (PedvaxHIB or Comvax [HepB-Hib]) is administered at ages 2 and 4 months, a dose at age 6 months is not indicated.
- TriHibit (DTaP-Hib) and Hibrix (PRP-T) should not be used for doses at ages 2, 4, or 6 months for the primary series but can be used as the final dose in children aged 12 months through 4 years.

#### 5. Pneumococcal vaccine. (Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPSV])

- PCV is recommended for all children aged younger than 5 years. Administer 1 dose of PCV to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.
- Administer PPSV 2 or more months after last dose of PCV to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant. See *MMWR* 1997;46(No. RR-8).

#### 6. Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks)

- The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
- If 4 doses are administered prior to age 4 years a fifth dose should be administered at age 4 through 6 years. See *MMWR* 2009;58(30):829–30.

#### 7. Influenza vaccine (seasonal). (Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 2 years for live, attenuated influenza vaccine [LAIV])

- Administer annually to children aged 6 months through 18 years.
- For healthy children aged 2 through 6 years (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used, except LAIV should not be given to children aged 2 through 4 years who have had wheezing in the past 12 months.
- Children receiving TIV should receive 0.25 mL if aged 6 through 35 months or 0.5 mL if aged 3 years or older.
- Administer 2 doses (separated by at least 4 weeks) to children aged younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
- For recommendations for use of influenza A (H1N1) 2009 monovalent vaccine see *MMWR* 2009;58(No. RR-10).

#### 8. Measles, mumps, and rubella vaccine (MMR). (Minimum age: 12 months)

- Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 28 days have elapsed since the first dose.

#### 9. Varicella vaccine. (Minimum age: 12 months)

- Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 3 months have elapsed since the first dose.
- For children aged 12 months through 12 years the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.

#### 10. Hepatitis A vaccine (HepA). (Minimum age: 12 months)

- Administer to all children aged 1 year (i.e., aged 12 through 23 months). Administer 2 doses at least 6 months apart.
- Children not fully vaccinated by age 2 years can be vaccinated at subsequent visits
- HepA also is recommended for older children who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.

#### 11. Meningococcal vaccine. (Minimum age: 2 years for meningococcal conjugate vaccine [MCV4] and for meningococcal polysaccharide vaccine [MPSV4])

- Administer MCV4 to children aged 2 through 10 years with persistent complement component deficiency, anatomic or functional asplenia, and certain other conditions placing them at high risk.
- Administer MCV4 to children previously vaccinated with MCV4 or MPSV4 after 3 years if first dose administered at age 2 through 6 years. See *MMWR* 2009; 58:1042–3.



**FIGURE 2. Recommended immunization schedule for persons aged 7 through 18 years — United States, 2010 (for those who fall behind or start late, see the schedule below and the catch-up schedule [Table])**

Vaccine ▼	Age ►	7–10 years	11–12 years	13–18 years
Tetanus, Diphtheria, Pertussis <sup>1</sup>			Tdap	Tdap
Human Papillomavirus <sup>2</sup>		see footnote 2	HPV (3 doses)	HPV series
Meningococcal <sup>3</sup>		MCV	MCV	MCV
Influenza <sup>4</sup>		Influenza (Yearly)		
Pneumococcal <sup>5</sup>		PPSV		
Hepatitis A <sup>6</sup>		HepA Series		
Hepatitis B <sup>7</sup>		Hep B Series		
Inactivated Poliovirus <sup>8</sup>		IPV Series		
Measles, Mumps, Rubella <sup>9</sup>		MMR Series		
Varicella <sup>10</sup>		Varicella Series		

Range of recommended ages for all children except certain high-risk groups

Range of recommended ages for catch-up immunization

Range of recommended ages for certain high-risk groups

This schedule includes recommendations in effect as of December 15, 2009. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse

events. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: <http://www.cdc.gov/vaccines/pubs/acip-list.htm>. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

- Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).** (Minimum age: 10 years for Boostrix and 11 years for Adacel)
  - Administer at age 11 or 12 years for those who have completed the recommended childhood DTP/DaP vaccination series and have not received a tetanus and diphtheria toxoid (Td) booster dose.
  - Persons aged 13 through 18 years who have not received Tdap should receive a dose.
  - A 5-year interval from the last Td dose is encouraged when Tdap is used as a booster dose; however, a shorter interval may be used if pertussis immunity is needed.
- Human papillomavirus vaccine (HPV).** (Minimum age: 9 years)
  - Two HPV vaccines are licensed: a quadrivalent vaccine (HPV4) for the prevention of cervical, vaginal and vulvar cancers (in females) and genital warts (in females and males), and a bivalent vaccine (HPV2) for the prevention of cervical cancers in females.
  - HPV vaccines are most effective for both males and females when given before exposure to HPV through sexual contact.
  - HPV4 or HPV2 is recommended for the prevention of cervical precancers and cancers in females.
  - HPV4 is recommended for the prevention of cervical, vaginal and vulvar precancers and cancers and genital warts in females.
  - Administer the first dose to females at age 11 or 12 years.
  - Administer the second dose 1 to 2 months after the first dose and the third dose 6 months after the first dose (at least 24 weeks after the first dose).
  - Administer the series to females at age 13 through 18 years if not previously vaccinated.
  - HPV4 may be administered in a 3-dose series to males aged 9 through 18 years to reduce their likelihood of acquiring genital warts.
- Meningococcal conjugate vaccine (MCV4).**
  - Administer at age 11 or 12 years, or at age 13 through 18 years if not previously vaccinated.
  - Administer to previously unvaccinated college freshmen living in a dormitory.
  - Administer MCV4 to children aged 2 through 10 years with persistent complement component deficiency, anatomic or functional asplenia, or certain other conditions placing them at high risk.
  - Administer to children previously vaccinated with MCV4 or MPSV4 who remain at increased risk after 3 years (if first dose administered at age 2 through 6 years) or after 5 years (if first dose administered at age 7 years or older). Persons whose only risk factor is living in on-campus housing are not recommended to receive an additional dose. See *MMWR* 2009;58:1042–3.
- Influenza vaccine (seasonal).**
  - Administer annually to children aged 6 months through 18 years.
  - For healthy nonpregnant persons aged 7 through 18 years (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used.
  - Administer 2 doses (separated by at least 4 weeks) to children aged younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
  - For recommendations for use of influenza A (H1N1) 2009 monovalent vaccine. See *MMWR* 2009;58(No. RR-10)
- Pneumococcal polysaccharide vaccine (PPSV).**
  - Administer to children with certain underlying medical conditions, including a cochlear implant. A single revaccination should be administered after 5 years to children with functional or anatomic asplenia or an immunocompromising condition. See *MMWR* 1997;46(No. RR-8).
- Hepatitis A vaccine (HepA).**
  - Administer 2 doses at least 6 months apart.
  - HepA is recommended for children aged older than 23 months who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.
- Hepatitis B vaccine (HepB).**
  - Administer the 3-dose series to those not previously vaccinated.
  - A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children aged 11 through 15 years.
- Inactivated poliovirus vaccine (IPV).**
  - The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
  - If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age.
- Measles, mumps, and rubella vaccine (MMR).**
  - If not previously vaccinated, administer 2 doses or the second dose for those who have received only 1 dose, with at least 28 days between doses.
- Varicella vaccine.**
  - For persons aged 7 through 18 years without evidence of immunity (see *MMWR* 2007;56[No. RR-4]), administer 2 doses if not previously vaccinated or the second dose if only 1 dose has been administered.
  - For persons aged 7 through 12 years, the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.
  - For persons aged 13 years and older, the minimum interval between doses is 28 days.

**TABLE. Catch-up immunization schedule for persons aged 4 months through 18 years who start late or who are more than 1 month behind — United States, 2010**

The table below provides catch-up schedules and minimum intervals between doses for children whose vaccinations have been delayed. A vaccine series does not need to be restarted, regardless of the time that has elapsed between doses. Use the section appropriate for the child's age.

PERSONS AGED 4 MONTHS THROUGH 6 YEARS					
Vaccine	Minimum Age for Dose 1	Minimum Interval Between Doses			
		Dose 1 to Dose 2	Dose 2 to Dose 3	Dose 3 to Dose 4	Dose 4 to Dose 5
Hepatitis B <sup>1</sup>	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)		
Rotavirus <sup>2</sup>	6 wks	4 weeks	4 weeks <sup>2</sup>		
Diphtheria, Tetanus, Pertussis <sup>3</sup>	6 wks	4 weeks	4 weeks	6 months	6 months <sup>3</sup>
Haemophilus influenzae type b <sup>4</sup>	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose) if first dose administered at age 12–14 months No further doses needed if first dose administered at age 15 months or older	4 weeks <sup>4</sup> if current age is younger than 12 months 8 weeks (as final dose) <sup>1</sup> if current age is 12 months or older and first dose administered at younger than age 12 months and second dose administered at younger than 15 months No further doses needed if previous dose administered at age 15 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months	
Pneumococcal <sup>5</sup>	6 wks	4 weeks if first dose administered at younger than age 12 months 8 weeks (as final dose for healthy children) if first dose administered at age 12 months or older or current age 24 through 59 months No further doses needed for healthy children if first dose administered at age 24 months or older	4 weeks if current age is younger than 12 months 8 weeks (as final dose for healthy children) if current age is 12 months or older No further doses needed for healthy children if previous dose administered at age 24 months or older	8 weeks (as final dose) This dose only necessary for children aged 12 months through 59 months who received 3 doses before age 12 months or for high-risk children who received 3 doses at any age	
Inactivated Poliovirus <sup>6</sup>	6 wks	4 weeks	4 weeks	6 months	
Measles, Mumps, Rubella <sup>7</sup>	12 mos	4 weeks			
Varicella <sup>8</sup>	12 mos	3 months			
Hepatitis A <sup>9</sup>	12 mos	6 months			
PERSONS AGED 7 THROUGH 18 YEARS					
Tetanus, Diphtheria/ Tetanus, Diphtheria, Pertussis <sup>10</sup>	7 yrs <sup>10</sup>	4 weeks	4 weeks if first dose administered at younger than age 12 months 6 months if first dose administered at 12 months or older	6 months if first dose administered at younger than age 12 months	
Human Papillomavirus <sup>11</sup>	9 yrs		Routine dosing intervals are recommended <sup>11</sup>		
Hepatitis A <sup>9</sup>	12 mos	6 months			
Hepatitis B <sup>1</sup>	Birth	4 weeks	8 weeks (and at least 16 weeks after first dose)		
Inactivated Poliovirus <sup>6</sup>	6 wks	4 weeks	4 weeks	6 months	
Measles, Mumps, Rubella <sup>7</sup>	12 mos	4 weeks			
Varicella <sup>8</sup>	12 mos	3 months if person is younger than age 13 years 4 weeks if person is aged 13 years or older			

- Hepatitis B vaccine (HepB).**
  - Administer the 3-dose series to those not previously vaccinated.
  - A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children aged 11 through 15 years.
- Rotavirus vaccine (RV).**
  - The maximum age for the first dose is 14 weeks 6 days. Vaccination should not be initiated for infants aged 15 weeks 0 days or older.
  - The maximum age for the final dose in the series is 8 months 0 days.
  - If Rotarix was administered for the first and second doses, a third dose is not indicated.
- Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).**
  - The fifth dose is not necessary if the fourth dose was administered at age 4 years or older.
- Haemophilus influenzae type b conjugate vaccine (Hib).**
  - Hib vaccine is not generally recommended for persons aged 5 years or older. No efficacy data are available on which to base a recommendation concerning use of Hib vaccine for older children and adults. However, studies suggest good immunogenicity in persons who have sickle cell disease, leukemia, or HIV infection, or who have had a splenectomy; administering 1 dose of Hib vaccine to these persons who have not previously received Hib vaccine is not contraindicated.
  - If the first 2 doses were PRP-OMP (Pedvaxi-IB or Comvax), and administered at age 11 months or younger, the third (and final) dose should be administered at age 12 through 15 months and at least 8 weeks after the second dose.
  - If the first dose was administered at age 7 through 11 months, administer the second dose at least 4 weeks later and a final dose at age 12 through 15 months.
- Pneumococcal vaccine.**
  - Administer 1 dose of pneumococcal conjugate vaccine (PCV) to all healthy children aged 24 through 59 months who have not received at least 1 dose of PCV on or after age 12 months.
  - For children aged 24 through 59 months with underlying medical conditions, administer 1 dose of PCV if 3 doses were received previously or administer 2 doses of PCV at least 8 weeks apart if fewer than 3 doses were received previously.
  - Administer pneumococcal polysaccharide vaccine (PPSV) to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant, at least 8 weeks after the last dose of PCV. See *MMWR* 1997;46(No. RR-8).
- Inactivated poliovirus vaccine (IPV).**
  - The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
- Measles, mumps, and rubella vaccine (MMR).**
  - Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 28 days have elapsed since the first dose.
  - If not previously vaccinated, administer 2 doses with at least 28 days between doses.
- Varicella vaccine.**
  - Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 3 months have elapsed since the first dose.
  - For persons aged 12 months through 12 years, the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.
  - For persons aged 13 years and older, the minimum interval between doses is 28 days.
- Hepatitis A vaccine (HepA).**
  - HepA is recommended for children aged older than 23 months who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.
- Tetanus and diphtheria toxoids vaccine (Td) and tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).**
  - Doses of DTaP are counted as part of the Td/Tdap series.
  - Tdap should be substituted for a single dose of Td in the catch-up series or as a booster for children aged 10 through 18 years; use Td for other doses.
- Human papillomavirus vaccine (HPV).**
  - Administer the series to females at age 13 through 18 years if not previously vaccinated.
  - Use recommended routine dosing intervals for series catch-up (i.e., the second and third doses should be administered at 1 to 2 and 6 months after the first dose). The minimum interval between the first and second doses is 4 weeks. The minimum interval between the second and third doses is 12 weeks, and the third dose should be administered at least 24 weeks after the first dose.

Information about reporting reactions after immunization is available online at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967. Suspected cases of vaccine-preventable diseases should be reported to the state or local health department. Additional information, including precautions and contraindications for immunization, is available from the National Center for Immunization and Respiratory Diseases at <http://www.cdc.gov/vaccines> or telephone, 800-CDC-INFO (800-232-4636).

**CONTRA COSTA  
HEALTH PLAN**

A Division of Contra Costa Health Services

# 2009 Medi-Cal HEDIS Rates

## Annual 2009 and 2008 Rate Comparisons

	CGHP '08	CCHP '09	Blue Cross '09
Use of Appropriate Medications for Asthma *	86.00	85.91	86.9
Well-Child Visits in the First 15 Months	68.30	71.05	31.8
Well-Child Visits in age 3-6	66.46 *	77.37	55.7
Adolescent Well-Care Visits	38.93	47.45	29.2
Childhood Immunization Status (Combo 3, both years)	80.00	82.48	62.8
Timeliness of Prenatal Care	80.25	83.45	79.3
Postpartum Care	61.48	68.13	47.1
Breast Cancer Screening *	47.56	43.68	38.6
Cervical Cancer Screening	69.70	67.88	55.5
Diabetes Measure 1: Retinal Eye Exam	52.55	53.47	43.3
Diabetes Measure 2: HbA1c Testing	82.00	83.03	71.1
Diabetes Measure 3: LDL-C Screening	77.86	79.38	65.6
Diabetes Measure 4: Medical Attention for Nephropathy	81.27	82.3	65.6
Appropriate Upper Respiratory Infection Treatment in Children *	91.95	92.64	88.7
Avoidance of Antibiotics for Acute Bronchitis in Adults *	62.50	67.5	63.4

**Legend:**

Indicates the measure is used for Medi-Cal auto-assignment
Indicates an increase of at least 1 percentage point from previous year
Indicates a variation of less than 1 percentage point from previous year
Indicates a decrease of at least 1 percentage point from previous year
Indicates the measure is "administrative" only or admin rate was used
*

4.1.1

## Year 5 Default Allocations

(to be effective December 1, 2009 through November 30, 2010)

Counties	Plan Code	Plan Name	Default Rates
Alameda	300	Alameda Alliance for Health	63%
	340	Anthem Blue Cross	37%
Contra Costa	301	Contra Costa Health Plan	88%
	344	Anthem Blue Cross	12%
Fresno	341	Anthem Blue Cross	23%
	351	Health Net Community Solutions	77%
Kern	303	Kern Family Health Care	43%
	360	Health Net Community Solutions	57%
Los Angeles	304	L.A. Care Health Plan	69%
	352	Health Net Community Solutions	31%
Riverside	305	Inland Empire Health Plan	50%
	355	Molina Healthcare of CA	50%
San Bernardino	306	Inland Empire Health Plan	55%
	356	Molina Healthcare of CA	45%
San Francisco	307	San Francisco Health Plan	71%
	343	Anthem Blue Cross	29%
San Joaquin	308	Health Plan of San Joaquin	64%
	358	Anthem Blue Cross	36%
Santa Clara	309	Santa Clara Family Health Plan	73%
	345	Anthem Blue Cross	27%
Stanislaus	310	Anthem Blue Cross	12%
	361	Health Net Community Solutions	88%
Tulare	311	Anthem Blue Cross	28%
	353	Health Net Community Solutions	72%
GMC Sacramento	190	Anthem Blue Cross	17%
	150	Health Net Community Solutions	23%
	170	Kaiser Permanente: North	31%
	130	Molina Healthcare of CA	29%
	140	Western Health Advantage (to terminate 12-31-09)	0%
GMC San Diego	167	Care 1st	17%
	029	Community Health Group	20%
	068	Health Net Community Solutions	15%
	079	Kaiser Permanente: South	18%
	131	Molina Healthcare of CA	30%

4.1-8



The WIC Program is asking for comment on the recent WIC food package revisions before they are finalized by the federal government. WIC food package regulations can be viewed at: <http://www.fns.usda.gov/wic/regspublished/foodpackages-interimrule.htm>.

Some of the WIC revisions that may impact medical practices are:

1. requiring a Rx for soy milk and tofu for a WIC child 1-5 years of age
2. requiring a Rx for the amount of infant formula needed per day for WIC participants with medical conditions
3. requiring a Rx for the types and amount of WIC foods (milk, eggs, cheese, etc.) appropriate when there is a medical condition
4. only issuing whole milk to a child 1-2 years of age
5. giving exclusively breastfeeding women more WIC foods than those who partially breastfeed

All comments must be submitted prior to **February 1, 2010**, in one of the two following ways:

1. Go to [www.regulations.gov](http://www.regulations.gov) and follow instructions at that site for submitting comments. *The following tips will help you to quickly find the site for providing your comments.*
  - Once on the site, click on "**Open for Comment/Submission**" and enter the keywords: "**wic food package interim rule**" in the search box (or) "**FNS-2006-0037-0003**".
  - When you find the interim rule FNS-2006-0037-0003, click on "**submit a comment**".
2. Mail your comments to:

Director, Supplemental Food Programs Division  
Food and Nutrition Service, USDA  
3101 Park Center Drive, Room 520  
Alexandria, Virginia 22302

Thank you for submitting your comments for optimizing health and well-being for women, infants, and children nationwide. If you have any questions, please call Waverly Pierce at (916) 928-8753.

**“Choking Game” Awareness and Participation Among 8th Graders — Oregon, 2008**

The “choking game” is an activity in which persons strangle themselves to achieve euphoria through brief hypoxia (1). It is differentiated from autoerotic asphyxiation (2,3). The activity can cause long-term disability and death among youths (4). In 2008, CDC reported 82 deaths attributed to the choking game and other strangulation activities during the period 1995–2007; most victims were adolescent males aged 11–16 years (4). To assess the awareness and prevalence of this behavior among 8th graders in Oregon, the Oregon Public Health Division added a question to the 2008 Oregon Healthy Teens survey concerning familiarity with and participation in this activity. This report describes the results of that survey, which indicated that 36.2% of 8th-grade respondents had heard of the choking game, 30.4% had heard of someone participating, and 5.7% had participated themselves. Youths in rural areas were significantly more likely (6.7%) to have participated than youths in urban areas (4.9%). Choking game participation was higher among 8th graders who reported mental health risk factors (4.0%), substance use (7.9%), or both (15.8%), compared with those who reported neither (1.7%). Public health surveillance of these strangulation activities among youths should be expanded to better quantify the risks and understand the motives and circumstances surrounding participation. Parents, educators, counselors, and others who work with youths should be aware of strangulation activities and their serious health effects; they should watch for signs of participation in strangulation activities, especially among youths with suspected substance use or mental health risk factors.

The Oregon Healthy Teens survey, an annual population-based anonymous survey\* of 8th and 11th graders† designed to monitor and measure adolescent health and well-being, is

\* Available at <http://www.dhs.state.or.us/dhs/ph/chs/youthsurvey>. Beginning in 2009, Oregon Healthy Teens will be a biannual survey conducted in odd years only.

† The Oregon Healthy Teens survey includes students in 8th and 11th grades. However, knowledge of and participation in the choking game were only assessed on the 8th-grade survey. Therefore, all discussion and description of the survey in this report refers to the 8th-grade portion only.

based on the CDC’s Youth Risk Behavior Survey (YRBS) and includes questions on physical and mental health, sexual activity, substance use, physical activity/nutrition, and community characteristics. In 2008, all 647 Oregon public middle and high schools were part of the sampling frame, which was stratified into eight regions. Schools were sampled randomly from within each region, with a total of 114 schools being sampled. The data were weighted to achieve a statewide representative sample. Weighting was based on the probability of school and student selection, and a post-stratification adjustment for county participation. Schools use an active notification/passive consent model with parents, who may decline their child’s participation. In 2008, the survey contained a total of 188 questions, which were designed to be completed in the course of a class period. Overall, 77.0% of sampled schools agreed to administer the survey, and 83.7% of the 8th graders in those schools participated. In 2008, a single question about the choking game was added to the 8th-grade survey. Students were asked whether they had ever heard of the choking game, had heard of some-

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one participating, had helped someone participate, or had ever participated in the choking game themselves.<sup>§</sup>

All analyses were conducted using statistical software to accommodate the survey design and weighting appropriately. The strength of association between variables was analyzed using a chi-square test with Rao-Scott corrections, and all reported p-values are based on corrected Rao-Scott chi-square results.

The 2008 survey included 10,642 respondents. Of these, 7,757 (73%) answered the choking game question. The mean age of respondents to this question was 13.7 years (standard deviation = 0.5). Those who did not answer this question were more likely to be male and nonwhite and more likely to report

higher levels of sexual activity, substance use, and mental health risk factors. Among the respondents, 36.2% had heard of the choking game, and 30.4% had heard of someone participating in it. Additionally, 2.6% had helped someone participate, and 5.7% had ever participated themselves.

A similar percentage of females reported participating compared with males (5.3% versus 6.1%,  $p = 0.13$ ). Hispanic (7.7%) and American Indian/Alaska Native (7.6%) youths had the highest participation rates, followed by white (5.4%), black (4.5%), Native Hawaiian (3.4%), and Asian (2.8%) youths.<sup>¶</sup> Youths living in rural areas had a significantly higher participation rate than those in urban areas (6.7% rural versus 4.9% urban,  $p = 0.01$ ) (Table).

Youths who participated in the choking game were significantly more likely to also report other unhealthy behaviors and mental health risk factors. In

<sup>§</sup> The survey stated, "The next question refers to the 'Choking Game,' also called Knock Out, Space Monkey, Flatlining, or The Fainting Game. This is an activity that some youth participate in to get a high by cutting off blood and oxygen to the brain with a belt, towel, rope, or other item. Which of the following is true for you? (Please mark all that apply.) a. I have never heard of the Choking Game; b. I've heard of someone participating in the Choking Game; c. I have helped someone else participate in the Choking Game; d. I have participated in the Choking Game myself."

<sup>¶</sup> Persons identified as American Indian/Alaska Native, white, black, Native Hawaiian, and Asian are all non-Hispanic. Race/ethnicity categories are mutually exclusive.

The *MMWR* series of publications is published by the Office of Surveillance, Epidemiology, and Laboratory Services, Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services, Atlanta, GA 30333.

**Suggested citation:** Centers for Disease Control and Prevention. [Article title]. *MMWR* 2010;59:[inclusive page numbers].

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TABLE. Demographic characteristics and risk factors for participation in the "choking game"\* among 8th-grade students — Oregon Healthy Teens survey, 2008

Characteristic/Risk factor	No.	(%)	Prevalence of reported participation in choking game (%)	PR† (95% CI‡)	p-value
Sex					
Male	3,642	(47)	6.1	Referent	0.13
Female	4,115	(53)	5.3	0.9 (0.6–1.2)	
Geography					
Urban	3,944	(55)	4.9	Referent	0.01
Rural	3,813	(45)	6.7	1.4 (1.0–1.9)	
Race/Ethnicity§					
White	5,298	(66)	5.4	Referent	0.009
Hispanic	1,184	(16)	7.7	1.4 (1.0–2.0)	
American Indian/Alaska Native	518	(7)	7.6	1.4 (1.0–2.0)	
Black	220	(4)	4.5	0.8 (0.5–1.3)	
Native Hawaiian	144	(2)	3.4	0.6 (0.3–1.5)	
Asian	308	(5)	2.8	0.5 (0.2–1.7)	
Mental health or substance use**					
None	3,525	(45)	1.7	Referent	<0.001
Mental health only	1,878	(25)	4.0	2.3 (1.3–4.1)	
Substance use only	880	(11)	7.9	4.6 (2.7–7.8)	
Substance use and mental health	1,456	(19)	15.8	9.2 (5.8–14.7)	

\* Based on response to the following survey item: "The next question refers to the 'Choking Game,' also called Knock Out, Space Monkey, Flatlining, or The Fainting Game. This is an activity that some youth participate in to get a high by cutting off blood and oxygen to the brain with a belt, towel, rope, or other item. Which of the following is true for you? (Please mark all that apply.) a. I have never heard of the Choking Game; b. I've heard of someone participating in the Choking Game; c. I have helped someone else participate in the Choking Game; d. I have participated in the Choking Game myself."

† Prevalence ratio.

‡ Confidence interval.

§ Persons identified as white, American Indian/Alaska Native, black, Native Hawaiian, and Asian are all non-Hispanic. Race/ethnicity categories are mutually exclusive.

\*\* *Mental health only* included youths who answered "yes" to at least one of four mental health risk questions: 1) contemplated suicide in past 12 months; 2) self-rated mental health status as "fair" or "poor" (versus "excellent," "very good," or "good"); 3) had an unmet mental health need in the past 12 months; or 4) gambled for money in the past 12 months. Youths indicating a substance use risk were excluded. *Substance use only* included youths who indicated using at least one of four substances in the past 30 days: 1) alcohol, 2) cigarettes, 3) marijuana, or 4) other illegal drugs (e.g., stimulants, LSD, ecstasy, cocaine, or heroin). Youths indicating a mental health risk factor were excluded. *Substance use and mental health* included youths indicating a mental health risk factor and substance use.

particular, youths who had used substances\*\* and also reported mental health risk factors†† had the highest participation rate (15.8%) and were approximately nine times more likely to participate in the choking game than those without either risk factor. Among those who reported substance use only and no mental health risk factors, the participation rate was 7.9%, and among those reporting mental health risk factors only but no substance use, the participation rate was 4.0%. The participation rates among all these groups were substantially higher than the rate among students who reported neither substance use nor mental health risk factors (1.7%) (Table).

\*\* Included youths who indicated using at least one of four substances (alcohol, cigarettes, marijuana, or other illegal drugs) in the past 30 days.

†† Included youths who indicated at least one of four mental health risk factors (suicide contemplation in the past 12 months, self-rated mental health as "fair" or "poor," unmet mental health need in past 12 months, and ever gambled for money).

#### Reported by

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#### Editorial Note

This study represents the first systematic assessment at the state level for awareness of and participation in strangulation activities among youths. Results from the 2008 Oregon Healthy Teens survey indicated that nearly one third of 8th-grade students were aware of someone who participated in the choking game, and nearly 6% acknowledged trying it. Public health experts stress that this high risk activity is not a game and should not be referred to as such (1).

Before this study, published reports of this activity were anecdotal (2–8) or were based on small surveys, including one survey of 357 youths aged 12–18 years



**What is already known on this topic?**

During 1995–2007, CDC identified 82 unintentional deaths among children and adolescents related to participation in the “choking game” and other strangulation activities.

**What is added by this report?**

In 2008, nearly 6% of Oregon 8th graders reported ever having participated in the choking game, with rates highest among those also reporting substance use and mental health risk factors.

**What are the implications for public health practice?**

Parents and persons who work with youths (e.g., educators, counselors, and health-care providers) should be aware of these activities and their serious health consequences, and they should look for and be able to recognize signs of strangulation activities, especially among youths with reported substance use or mental health risk factors.

in Williams County, Ohio,<sup>§§</sup> and one nonrandom survey of 2,504 youths aged 9–18 years in Texas and Ontario, Canada (9). Reported lifetime participation in strangulation activities was 11% in the Ohio study and 6.6% in the Texas/Canada study.

The results of the Oregon study suggest that the risk for participation in strangulation activities was higher for youths who had other health risk factors, particularly substance use and certain mental health risk factors. This is the first study to examine these risk associations in a scientific and systematic way. However, previous case studies with very small numbers (three or fewer) presented theories based on their case subjects that are relevant to the results described in this report. Regarding substance use, previous case studies proposed that youths who engage in strangulation activities were not likely to be using drugs or alcohol (2), a suggestion that is contrary to the results described in this report. On the other hand, the link between poorer mental health and strangulation activities has been reflected in some case studies, suggesting that youths experiencing peer rejection or other disruptive factors are more likely to participate in strangulation activities (6,8). Case reports also suggest that participation in strangulation activities might occur alone, which might result in increased risk for fatality or serious injury (2), or in groups gathered to watch others lose consciousness (6).

The association between participation in strangulation activities and other sensation-seeking behaviors or mental health risk factors suggests that effective methods for substance use prevention might serve as

<sup>§§</sup> Additional information available at <http://www.co.williams.oh.us/family%20first/williams%20final%20report%202-6-07.pdf>.

models for effective prevention strategies. Prevention messages for this activity should be tested before being incorporated into general use to minimize unintended consequences, such as increased participation (4). Because of the apparent overlap between youths participating in strangulation activities and mental health and substance use risk factors, effective prevention messages could be incorporated into existing substance use and mental health screening instruments, curricula, or related public health tools.

The previous survey of youths aged 9–18 years conducted in Texas and Ontario, Canada, found that 40% of surveyed youths thought no risk existed for participating in the choking game existed (9). This common misconception highlights the need for basic factual information about the health risks of strangulation activities in prevention messages. The age of the youths should be considered when determining the type of message and the messenger (9).

Parents, educators, counselors, health-care providers, and others who work with youths should become aware of strangulation activities and the signs of participation (e.g., mention of the choking game [or the game by its other names]; bloodshot eyes; marks on the neck; frequent, severe headaches; disorientation after spending time alone; and ropes, scarves, and belts tied to bedroom furniture or doorknobs or found knotted on the floor) (3). Nearly one third of 163 pediatricians and family practitioners recently surveyed were not aware of the choking game or the signs indicating that a patient might be participating in this activity (10). Finally, to identify participating youths, health and mental health practitioners should consider adding a question about strangulation activities to clinical screening tools, especially for youths identified as having substance use or mental health risks.

The findings in this report are subject to at least four limitations. First, because only public school students were surveyed, youths who attended private schools, were homeschooled, were institutionalized, or were not attending school were not represented in the results. Second, the survey did not ask about frequency of participation or time elapsed since most recent participation. Substantial differences might exist among youths who participated regarding frequency or recency. Third, this analysis is based on a prevalence determination from a single question that was not tested for reliability or validity. Finally, a substantial proportion of the 8th graders surveyed

(23%) did not complete the choking game question. A comparison of responders and nonresponders revealed that nonresponders belong to groups with likely higher rates of participation in the choking game.

To develop effective prevention programs, quantitative and qualitative research is needed to understand why and under what circumstances youths engage in strangulation activities. In the meantime, based on the findings described in this report, the Oregon Public Health Division is developing and evaluating educational materials for educators and clinicians who work in school-based health centers and other primary-care locations.

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## Outbreak of Adenovirus 14 Respiratory Illness — Prince of Wales Island, Alaska, 2008

On September 22, 2008, a physician on Prince of Wales Island, Alaska, notified the Alaska Department of Health and Social Services (ADHSS) of an unusually high number of adult patients with recently diagnosed pneumonia ( $n = 10$ ), including three persons who required hospitalization and one who died. ADHSS and CDC conducted an investigation to determine the cause and distribution of the outbreak, identify risk factors for hospitalization, and implement control measures. This report summarizes the results of that investigation, which found that the outbreak was caused by adenovirus 14 (Ad14), an emerging adenovirus serotype in the United States that is associated with a higher rate of severe illness compared with other adenoviruses. Among the 46 cases identified in the outbreak from September 1 through October 27, 2008, the most frequently observed characteristics included the following: male (70%), Alaska Native (61%), underlying pulmonary disease (44%), aged  $\geq 65$  years (26%), and current smoker (48%). Patients aged  $\geq 65$  years had a fivefold increased risk for hospitalization. The most commonly reported symptoms were cough (100%), shortness of breath (87%), and fever (74%). Of the 11 hospitalized patients, three required intensive care, and one required mechanical ventilation. One death was reported. Ad14 isolates obtained during the outbreak were identical genetically to those in recent community-acquired outbreaks in the United States which suggests the emergence of a new, and possibly more virulent Ad14 variant. Clinicians should consider Ad14 infection in the differential diagnosis for patients with community-acquired pneumonia, particularly when unexplained clusters of severe respiratory infections are detected.

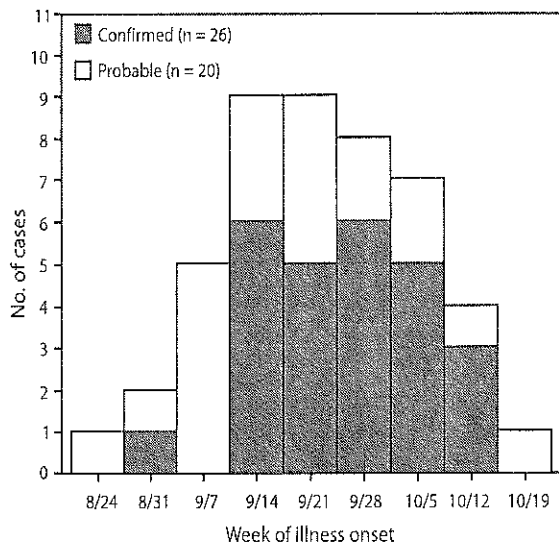
On October 1, 2008, epidemiologists from ADHSS arrived at Prince of Wales Island to identify cases and help collect clinical specimens from patients at clinics A and B. On October 6, CDC confirmed that six of 13 nasopharyngeal samples collected from patients at clinics A and B from September 1 through October 6 tested positive for Ad14 infection. Before the outbreak (October 2005–August 2008), only six sporadic cases of Ad14 infection had been identified by the Alaska State Virology Laboratory.

On October 12, ADHSS and CDC investigators returned to the island to conduct additional investigations. Investigators reviewed hospital and clinic medical records using a CDC data collection form\* to ascertain demographic characteristics of patients, symptom information, past medical history, and clinical outcomes. A probable case of Ad14 infection was defined by a clinically diagnosed acute lower respiratory tract infection in a resident of Prince of Wales Island who had been treated at clinic A or B from September 1 through October 27. A confirmed case was defined by laboratory-confirmed Ad14 infection by polymerase chain reaction, viral culture, or serology during the same period. Sera were collected at the time of the clinic or home visit and tested for Ad14-specific neutralizing antibodies using a standardized neutralization assay for Ad14; a titer of  $\geq 1:80$  was considered evidence of recent Ad14 infection (1). Paired sera were not collected. Patients who met the probable or confirmed case definitions completed a written questionnaire on risk factors for hospitalization, smoking status, travel history, and social history.

From September 1 through October 27, 46 cases of Ad14 infection (20 probable and 26 confirmed) were identified at clinics A and B; symptom onset ranged from August 29 to October 19 (Figure). Patients ranged in age from 2 to 95 years (median: 47 years); 70% were male, 61% were Alaska Native, and 48% were current smokers. The most common symptoms included cough in 46 patients (100%), shortness of breath in 40 (87%), and self-reported fever in 34 (74%) (Table 1). Chest radiographs were obtained for 39 (85%) patients; 30 (77%) of the radiographs were consistent with acute lower tract respiratory illness, most commonly patchy or interstitial infiltrates. The median duration of illness was 14 days (range: 1–41 days). Most of the 46 patients received one or more of the following treatments: antibiotics (91%), bronchodilators (41%), or corticosteroids (28%) (Table 1); none received antiviral therapy.

\* The acute respiratory illness outbreak data collection short form, available at <http://www.bt.cdc.gov/urdo/pdf/shortform.pdf>.

FIGURE. Number of confirmed and probable cases of adenovirus 14 infection\* (N = 46), by week of illness onset — Prince of Wales Island, Alaska, 2008



\* Confirmed cases were those in which laboratory confirmation of adenovirus 14 infection by polymerase chain reaction, culture, or serology was obtained. Probable cases were those in which a clinical diagnosis was made of acute lower respiratory tract infection.

Among the 11 (24%) patients who were hospitalized, ages ranged from 33–78 years (median age: 68 years); nine patients were medically evacuated off the island. One patient with a history of underlying chronic obstructive pulmonary disease (COPD) requiring supplemental oxygen refused hospitalization and died within 10 days of symptom onset. Postmortem testing for adenovirus was not performed.

Among the 46 cases identified, 28 (61%) also had pulmonary disease (including COPD, asthma, or lung cancer) or another chronic condition (including cardiovascular disease, diabetes, cancer, and liver disease) (Table 2). Patients aged  $\geq 65$  years had a five-fold increased risk for hospitalization on univariate analysis ( $p < 0.01$ ) (Table 2). In a multivariate logistic regression model that included age, current smoking status, race, underlying pulmonary disease, and comorbid condition, only age  $\geq 65$  years remained a statistically significant predictor of hospitalization (odds ratio [OR] = 13.7;  $p < 0.01$ ).

Serum and nasal/oral swabs were obtained from September 1 through October 27, and submitted to ASVL and CDC's Gastroenteritis and Respiratory Viruses Laboratory Branch for testing. Respiratory

TABLE 1. Frequency of selected symptoms, signs, treatment, and clinical outcomes among patients with confirmed or probable adenovirus 14 infection\* (N = 46) — Prince of Wales Island, Alaska, 2008

Characteristic	No <sup>†</sup>	(%)
<b>Symptoms</b>		
Cough	46	(100)
Shortness of breath	40	(87)
Fever (self-reported)	34	(74)
Productive cough	32	(70)
Headache	26	(56)
Nasal congestion	25	(54)
Sore throat	24	(52)
Vomiting	11	(24)
<b>Signs</b>		
Measured temperature $\geq 100.4^\circ\text{F}$ ( $\geq 38.0^\circ\text{C}$ )	18	(39)
Tachypnea <sup>‡</sup>	10	(22)
<b>Treatment</b>		
Antibiotics	42	(91)
Antivirals	0	(0)
Bronchodilators	19	(41)
Corticosteroid (oral or inhaled)	13	(28)
<b>Clinical outcome</b>		
Hospitalized	11	(24)
Intensive care	4	(9)
Supplemental oxygen	9	(20)
Mechanical ventilation	1	(2)
Cardiopulmonary resuscitation	1	(2)
Death	1	(2)

\* Confirmed cases were those in which laboratory confirmation of adenovirus 14 infection by polymerase chain reaction, culture, or serology was obtained. Probable cases were those in which a clinical diagnosis was made of acute lower respiratory tract infection.

<sup>†</sup> Unknown or not recorded in the medical record: shortness of breath, one; fever (self-reported), one; productive cough, three; headache, four; nasal congestion, three; sore throat, six; vomiting, one; measured temperature, one; tachypnea, five; mechanical ventilation, one.

<sup>‡</sup> Respiratory rate: adult,  $\geq 25$ ; child aged  $< 5$  years,  $\geq 40$ ; infant,  $\geq 50$ .

specimens were cultured for respiratory syncytial virus, influenza viruses, parainfluenza viruses, adenoviruses, herpes simplex virus, rhinoviruses, coxsackie viruses, echoviruses, and enteroviruses. Respiratory specimens were also tested for Ad14 DNA using an Ad14-specific real-time polymerase chain reaction assay and viral isolates were sequenced.

Serum and/or nasal/oral swabs were collected from 39 (85%) patients (25 serum samples, 39 nasal/oral swabs). Among the 39 respiratory specimens submitted for testing, 16 (41%) tested positive for Ad14. Among the 25 serum specimens submitted for testing, 12 (48%) had elevated Ad14 neutralizing antibody titers. In total, 26 (67%) of 39 patients tested had laboratory-confirmed Ad14 infection. The genetic sequences of the Ad14 viruses isolated from this

TABLE 2. Risk for hospitalization among patients with confirmed and probable adenovirus 14 infection\* (N = 46), by selected patient characteristics† — Prince of Wales Island, Alaska, 2008

Characteristic	Total cases		Hospitalized		RR†	95% CI‡	p-value
	No.	No.	No.	(%)			
Sex							
Male	32	8		(25.0)	1.2	(0.4–3.8)	1.00
Female	14	3		(21.4)	1.0	Referent	
Age (yrs)							
≥65	12	7		(58.3)	5.0	(1.8–14.0)	<0.01
<65	34	4		(11.8)	1.0	Referent	
Race							
Alaska Native	28	8		(28.6)	1.9	(0.4–8.3)	0.40
Not Alaska Native	17	3		(17.6)	1.0	Referent	
Unknown race	1	0		(0.0)			
Laboratory-confirmation status							
Confirmed	26	6		(23.1)	0.9	(0.3–2.6)	1.00
Probable	20	5		(25.0)	1.0	Referent	
Comorbid condition							
Underlying pulmonary disease‡	20	7		(35.0)	2.1	(0.6–6.9)	0.30
Other comorbid condition**	8	1		(12.5)	0.8	(0.1–6.1)	1.00
No comorbid condition	18	3		(16.7)	1.0	Referent	
Smoking status							
Current smoker	22	6		(27.3)	1.3	(0.5–3.7)	0.60
Not a current smoker	20	4		(20.0)	1.0	Referent	
Unknown smoking status	4	1		(25.0)			

\* Confirmed cases were those in which laboratory confirmation of adenovirus 14 infection by polymerase chain reaction, culture, or serology was obtained. Probable cases were those in which a clinical diagnosis was made of acute lower respiratory tract infection.

† Risk ratio.

‡ Confidence interval.

§ Underlying pulmonary disease included any patients with a history of congestive-obstructive pulmonary disease, asthma, or lung cancer. Some patients defined as having underlying pulmonary disease also had other comorbid conditions.

\*\* Other comorbid conditions included cardiovascular disease, diabetes, cancer, and liver disease. Excludes any patients with underlying pulmonary disease.

outbreak were identical with those found in other outbreak strains in the United States (2,3). No other pathogens were identified.

#### Reported by

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#### Editorial Note

This report documents the first recognized community outbreak of Ad14 infection in Alaska. Adenoviruses have been associated with acute respiratory infections, pharyngoconjunctival fever, gastrointestinal illness, and hemorrhagic cystitis (4). Although adenovirus infections are typically mild, some persons, including infants and immunocompromised persons, are at increased risk for severe disease (2). Before 2003, U.S. outbreaks of Ad14 most often occurred among U.S. military recruits, and most cases were mild (3,5).

However, recent U.S. reports of Ad14 outbreaks, including the Alaska outbreak, describe severe and sometimes fatal respiratory illness in persons of all ages (2,3). The genetic sequences of the isolated Ad14 viruses in these recent outbreaks are identical and are distinct from the Ad14 reference strain of 1955, which suggests the emergence of a new and possibly more virulent Ad14 variant (2,3).

During this outbreak, certain groups were more frequently affected, including males, persons aged ≥65 years, and persons with underlying pulmonary disease. In addition, 22 (48%) patients were current smokers. Smoking has not been associated with Ad14 infection previously. As part of a separate investigation of this outbreak, a case-control study was conducted on Prince of Wales Island during September and October 2008. Cases were patients with clinical or radiological evidence of pneumonia in an island resident aged >1 year who sought care from September 1 through October 27, 2008. Age-matched controls were randomly selected from the community. Controls with self-reported signs of

**What is already known on this topic?**

Before 2003, outbreaks of adenovirus 14 (Ad14) respiratory infections in the United States typically occurred among military recruits; however, increasing numbers of outbreaks of severe and sometimes fatal Ad14 infection in nonmilitary settings have been described recently.

**What is added by this report?**

This outbreak of community-acquired Ad14 occurred in a remote Alaskan community and Alaska Natives (61%), males (70%), and persons with underlying pulmonary disease (44%) were more frequently affected; persons aged  $\geq 65$  years were at five times greater risk for hospitalization.

**What are the implications for public health practice?**

Clinicians should consider Ad14 infection in the differential diagnosis for patients with community-acquired pneumonia, particularly when unexplained clusters of severe respiratory infections are detected.

febrile acute upper respiratory infection or acute lower respiratory tract illness in the 2 weeks preceding onset of symptoms in the case-patient to whom they were matched were excluded. Preliminary results indicate that smoking (OR = 13.0,  $p = 0.002$ ), comorbid condition (OR = 3.5,  $p = 0.03$ ), and contact with an Ad14-infected person (OR = 18.0,  $p < 0.001$ ) to be risk factors for disease (CDC, unpublished data; 2009). Although smoking prevalence for the Prince of Wales Island was unavailable, the 48% rate of smoking among patients in this report was substantially higher than the smoking prevalence in the general Alaska public (22%) and the Alaska Native population (38%).<sup>†</sup> This finding, when combined with the preliminary results of the case-control study, suggests that smoking was associated with Ad14 illness in this outbreak. In addition, 70% of the patients who met the case definition were Alaska Natives, a group that constitutes only 33% of the Prince of Wales Island population. Alaska Natives living in rural Alaska have been shown to be at increased risk for many respiratory infections, likely due to multiple risk factors, including lack of modern sanitation services, crowded housing conditions, and barriers to health care (6).

During this outbreak, 11 of 46 (24%) patients were hospitalized. In the multivariable analysis, the only statistically significant independent risk factor for hospitalization was advanced age ( $\geq 65$  years). In other studies of Ad14, additional risk factors for

hospitalization have included certain underlying medical conditions, such as pulmonary and cardiovascular disease (7). No such associations were found in this investigation, but the ability to assess the individual effect of these risk factors was limited by small sample size.

Among the 46 patients, 42 (91%) were prescribed antibiotics at the time of their clinic visit. Although cidofovir, gancyclovir, and ribavirin might be beneficial (4), no specific antiviral medication is recommended for the treatment of severe adenovirus disease, and none of the patients received antiviral medications. No licensed vaccine for Ad14 currently exists. However, initial studies to assess the safety and immunogenicity of newly manufactured adenovirus 4 (Ad4) and 7 (Ad7) vaccines have shown promise in study populations (8). Ad4 and Ad7 vaccine safety and efficacy trials are in progress, and vaccines for these adenovirus serotypes might offer some cross-immunity to Ad14 (3,9).

Adenovirus infections continue to be identified in communities throughout Alaska; the last reported cases of Ad14 were in August 2009. Health-care providers should consider Ad14 in their differential diagnosis for patients with community-acquired pneumonia, obtain respiratory and serologic specimens for laboratory confirmation, and report suspected Ad14 outbreaks to public health officials. Patients with symptoms of severe viral respiratory infections and those diagnosed with adenovirus infection should be placed in private rooms or share a room with other patients with the same infection to help control the spread of respiratory infections (10). Health-care providers should follow standard contact and droplet precautions when caring for persons hospitalized with an adenoviral infection (10).

**Acknowledgments**

The findings in this report are based, in part, on contributions by M Fribush, MD, who initially reported this outbreak, and by E Funk, Alaska Section of Epidemiology; T Schmidt, Alaska State Virology Laboratory; C Watson, Alaska Public Health Nursing; L Thomas, health-care providers and staff members of clinics A and B, Prince of Wales Island; L Anderson, G Armstrong, A Curns, D Erdman, G Fischer, X Lu, Div of Viral Diseases; and D Bensyl, B Gunnels, Office of Workforce and Career Development, CDC.

<sup>†</sup> Alaska Department of Health and Social Services. Alaska Behavioral Risk Factor Survey—2007 annual report. August 2008. Available at <http://www.hss.state.ak.us/dph/chronic/hsl/brfss/pubs/brfss07.pdf>.

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## Announcements

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### National Glaucoma Awareness Month — January 2010

January is National Glaucoma Awareness Month. Glaucoma is a group of disorders that damage the optic nerve and lead to vision loss (1). According to the National Eye Institute, glaucoma affects approximately 4 million people in the United States, and nearly half of those with glaucoma are not aware that they have the disease (2).

Persons aged >60 years (especially Mexican Americans) have an increased risk for developing glaucoma, as do African Americans aged >40 years, persons with a family history of glaucoma, and persons with diabetes (2). Glaucoma can be detected with a comprehensive dilated eye examination. Early detection and treatment can prevent or control vision loss (2).

Information on CDC's Vision Health Initiative and strategies for prevention and control of common eye diseases is available at <http://www.cdc.gov/visionhealth>. Additional information about glaucoma is available at <http://www.nei.nih.gov/health/glaucoma>.

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## Notices to Readers

### New Look for *MMWR* Weekly Publication

The *MMWR* weekly has a new look starting with this issue, the first issue of Volume 59. The changes are intended to give the weekly and other *MMWR* publications a more modern appearance, make them easier to read, and allow incorporation of new features. Other publications in the *MMWR* series (e.g., *Recommendations and Reports* and *Surveillance Summaries*) will feature the same new look when published in 2010. In conjunction with the new look for the weekly, the *MMWR* website also has been redesigned. The website can be accessed at <http://www.cdc.gov/mmwr>.

### Changes to the National Notifiable Infectious Disease List and Data Presentation — January 2010

This issue of *MMWR* incorporates changes to Table I (Provisional cases of infrequently reported notifiable diseases, United States) and Table II (Provisional cases of selected notifiable diseases, United States). This year, the modifications add and remove diseases designated as nationally notifiable by the Council of State and Territorial Epidemiologists (CSTE) in conjunction with CDC (1–5).

Two new diseases have been added to the list of nationally notifiable infectious diseases: viral hemorrhagic fever and dengue fever. Incidence data for viral hemorrhagic fever will appear in Table I, and dengue virus infections will appear in Table II. The surveillance case definitions adopted for these diseases are listed in their respective CSTE position statements (1,2) and are included in the case definitions section of the National Notifiable Diseases Surveillance System (NNDSS) website (3).

Two diseases have been removed from the list of nationally notifiable infectious diseases: invasive group A streptococcal disease and coccidioidomycosis (4,5). Incidence data for these diseases no longer appear in Table II.

Rocky Mountain spotted fever has been renamed spotted fever rickettsiosis (6). Incidence data for spotted fever rickettsiosis continue to appear in Table II.

*Streptococcus pneumoniae*, invasive disease has replaced two previous nationally notifiable diseases: 1) *Streptococcus pneumoniae*, nondrug resistant invasive

disease in children aged < 5 years and 2) *Streptococcus pneumoniae* drug-resistant invasive disease (7). Incidence data for *Streptococcus pneumoniae*, invasive disease appear in Table II.

Data for hepatitis C viral, acute, and ehrlichiosis/anaplasmosis (including subcategories *Ehrlichia chaffeensis*, *Ehrlichia ewingii*, *Anaplasma phagocytophilum*, and ehrlichiosis/anaplasmosis, undetermined) are now displayed in Table II because case reports exceeded 1,000 during 2009.

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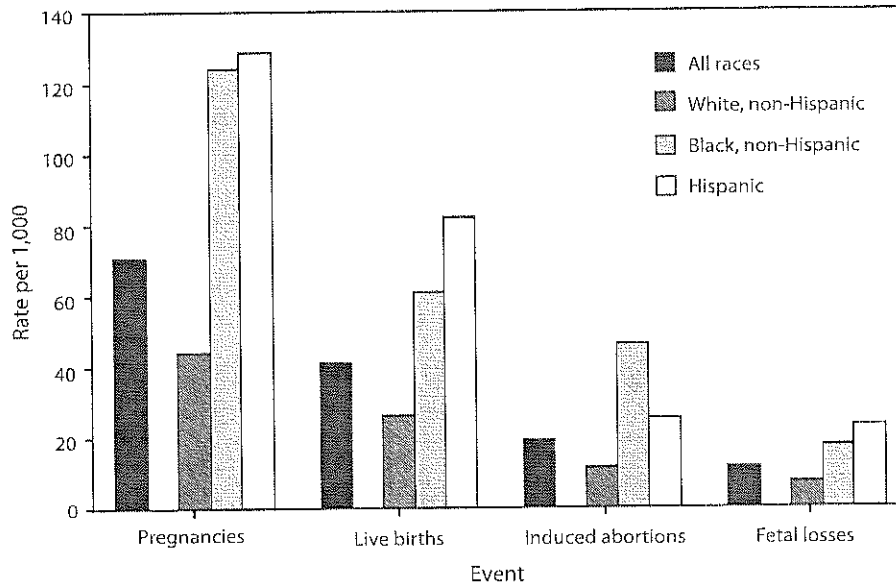
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## QuickStats

FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

### Pregnancy, Birth, Abortion, and Fetal Loss Rates Per 1,000 Women Aged 15–19 Years, by Race and Hispanic Ethnicity — United States, 2005



Estimated pregnancy, birth, abortion, and fetal loss rates among non-Hispanic white women aged 15–19 years during 2005 were substantially lower than among their non-Hispanic black and Hispanic counterparts. Although overall pregnancy rates for non-Hispanic black and Hispanic women aged 15–19 years are similar, black women in this age group had lower birth rates and higher abortion rates than their Hispanic counterparts.

**SOURCES:** Ventura SJ, Abma JC, Mosher WD, Henshaw SK. Estimated pregnancy rates for the United States, 1990–2005: an update. *Natl Vital Stat Rep* 2009;58(4). Available at [http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58\\_04.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_04.pdf).

Ventura SJ, Abma JC, Mosher WD, Henshaw SK. Estimated pregnancy rates by outcome for the United States, 1990–2004. *Natl Vital Stat Rep* 2009;56(15). Available at [http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56\\_15.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_15.pdf).

## Notifiable Diseases and Mortality Tables

TABLE I. Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending January 9, 2010 (1st week)\*

Disease	Current week	Cum 2010	5-year weekly average†	Total cases reported for previous years					States reporting cases during current week (No.)
				2009	2008	2007	2006	2005	
Anthrax	—	—	—	—	—	1	1	—	
Botulism, total	—	—	3	93	145	144	165	135	
foodborne	—	—	0	12	17	32	20	19	
infant	—	—	2	58	109	85	97	85	
other (wound and unspecified)	—	—	1	23	19	27	48	31	
Brucellosis	—	—	2	102	80	131	121	120	
Chancroid	1	1	0	24	25	23	33	17	SC (1)
Cholera	—	—	0	10	5	7	9	8	
Cyclosporiasis <sup>§</sup>	—	—	4	125	139	93	137	543	
Diphtheria	—	—	—	—	—	—	—	—	
Domestic arboviral diseases <sup>§,¶</sup> :									
California serogroup virus disease	—	—	—	41	62	55	67	80	
Eastern equine encephalitis virus disease	—	—	—	4	4	4	8	21	
Powassan virus disease	—	—	—	1	2	7	1	1	
St. Louis encephalitis virus disease	—	—	0	10	13	9	10	13	
Western equine encephalitis virus disease	—	—	—	—	—	—	—	—	
<i>Haemophilus influenzae</i> ,** invasive disease (age <5 yrs):									
serotype b	—	—	1	26	30	22	29	9	
nonsерotype b	1	1	5	205	244	199	175	135	CO (1)
unknown serotype	3	3	5	223	163	180	179	217	PA (2), MO (1)
Hansen disease <sup>§</sup>	—	—	2	59	80	101	66	87	
Hantavirus pulmonary syndrome <sup>§</sup>	—	—	0	13	18	32	40	26	
Hemolytic uremic syndrome, postdiarrheal <sup>§</sup>	1	1	5	213	330	292	288	221	MI (1)
HIV infection, pediatric (age <13 yrs) <sup>††</sup>	—	—	1	—	—	—	—	380	
Influenza-associated pediatric mortality <sup>§,§§</sup>	7	7	1	360	90	77	43	45	NY (2), IL (1), MI (1), TX (2), OR (1)
Listeriosis	2	2	18	765	759	808	884	896	VA (1), TN (1)
Measles <sup>¶¶</sup>	—	—	1	61	140	43	55	66	
Meningococcal disease, invasive <sup>***</sup> :									
A, C, Y, and W-135	—	—	6	273	330	325	318	297	
serogroup B	—	—	5	146	188	167	193	156	
other serogroup	—	—	1	23	38	35	32	27	
unknown serogroup	8	8	15	464	616	550	651	765	NYC (1), PA (2), OH (1), MI (1), GA (1), FL (2)
Mumps	—	—	17	989	454	800	6,584	314	
Novel influenza A virus infections <sup>†††</sup>	—	—	—	43,771	2	4	NN	NN	
Plague	—	—	0	7	3	7	17	8	
Poliomyelitis, paralytic	—	—	—	—	—	—	—	1	
Polio virus infection, nonparalytic <sup>§</sup>	—	—	0	—	—	—	NN	NN	
Psittacosis <sup>§</sup>	—	—	0	9	8	12	21	16	
Q fever, total <sup>§,§§§</sup>	—	—	3	99	120	171	169	136	
acute	—	—	2	84	106	—	—	—	
chronic	—	—	0	15	14	—	—	—	
Rabies, human	—	—	0	4	2	1	3	2	
Rubella <sup>¶¶¶</sup>	—	—	0	3	16	12	11	11	
Rubella, congenital syndrome	—	—	—	2	—	—	1	1	
SARS-CoV <sup>§,****</sup>	—	—	—	—	—	—	—	—	
Smallpox <sup>§</sup>	—	—	—	—	—	—	—	—	
Streptococcal toxic-shock syndrome <sup>§</sup>	—	—	4	127	157	132	125	129	
Syphilis, congenital (age <1 yr)	—	—	6	257	431	430	349	329	
Tetanus	—	—	1	14	19	28	41	27	
Toxic-shock syndrome (staphylococcal) <sup>§</sup>	—	—	2	76	71	92	101	90	
Trichinellosis	—	—	0	12	39	5	15	16	
Tularemia	—	—	2	82	123	137	95	154	
Typhoid fever	3	3	9	326	449	434	353	324	VA (2), FL (1)
Vancomycin-intermediate <i>Staphylococcus aureus</i> <sup>§</sup>	—	—	0	70	63	37	6	2	
Vancomycin-resistant <i>Staphylococcus aureus</i> <sup>§</sup>	—	—	0	1	—	2	1	3	
Vibriosis (noncholera <i>Vibrio</i> species infections) <sup>§</sup>	—	—	5	597	588	549	NN	NN	
Viral Hemorrhagic Fever <sup>††††</sup>	—	—	—	NN	NN	NN	NN	NN	
Yellow fever	—	—	—	—	—	—	—	—	

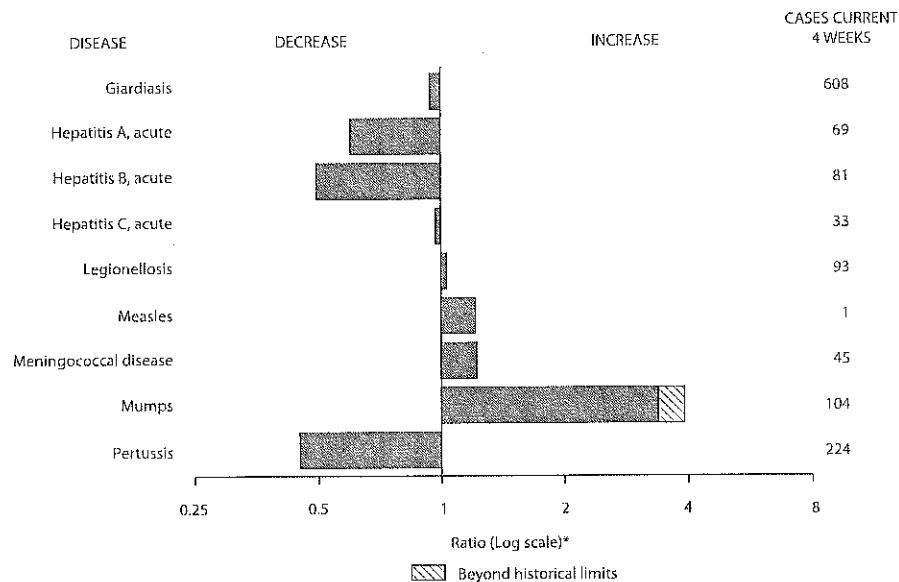
See Table I footnotes on next page.

## Notifiable Diseases and Mortality Tables

TABLE I. (Continued) Provisional cases of infrequently reported notifiable diseases (<1,000 cases reported during the preceding year) — United States, week ending January 9, 2010 (1st week)\*

- : No reported cases. N: Not reportable. NN: Not Nationally Notifiable Cum: Cumulative year-to-date counts.  
 \* Incidence data for reporting years 2009 and 2010 are provisional, whereas data for 2005 through 2008 are finalized.  
 † Calculated by summing the incidence counts for the current week, the 2 weeks preceding the current week, and the 2 weeks following the current week, for a total of 5 preceding years. Additional information is available at <http://www.cdc.gov/epo/dphsi/phs/files/5yearweeklyaverage.pdf>.  
 ‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.  
 § Includes both neuroinvasive and nonneuroinvasive. Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for West Nile virus are available in Table II.  
 \*\* Data for *H. influenzae* (all ages, all serotypes) are available in Table II.  
 †† Updated monthly from reports to the Division of HIV/AIDS Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. Implementation of HIV reporting influences the number of cases reported. Updates of pediatric HIV data have been temporarily suspended until upgrading of the national HIV/AIDS surveillance data management system is completed. Data for HIV/AIDS, when available, are displayed in Table IV, which appears quarterly.  
 ††† Updated weekly from reports to the Influenza Division, National Center for Immunization and Respiratory Diseases. Since April 26, 2009, a total of 255 influenza-associated pediatric deaths associated with 2009 influenza A (H1N1) virus infection have been reported. Since August 30, 2009, a total of 236 influenza-associated pediatric deaths occurring during the 2009–10 influenza season have been reported. A total of 130 influenza-associated pediatric deaths occurring during the 2008–09 influenza season have been reported.  
 †††† No measles cases were reported for the current week.  
 ††††† Data for meningococcal disease (all serogroups) are available in Table II.  
 †††††† CDC discontinued reporting of individual confirmed and probable cases of 2009 pandemic influenza A (H1N1) virus infections on July 24, 2009. CDC will report the total number of 2009 pandemic influenza A (H1N1) hospitalizations and deaths weekly on the CDC H1N1 influenza website (<http://www.cdc.gov/h1n1flu>). In addition, three cases of novel influenza A virus infections, unrelated to the 2009 pandemic influenza A (H1N1) virus, were reported to CDC during 2009.  
 †††††† In 2009, Q fever acute and chronic reporting categories were recognized as a result of revisions to the Q fever case definition. Prior to that time, case counts were not differentiated with respect to acute and chronic Q fever cases.  
 ††††††† No rubella cases were reported for the current week.  
 †††††††† Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases.  
 ††††††††† There were no cases of Viral Hemorrhagic Fever during week one. See Table II for Dengue Hemorrhagic Fever.

Figure 1. Selected notifiable disease reports, United States, comparison of provisional 4-week totals January 9, 2010, with historical data



\* Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

### Notifiable Disease Data Team and 122 Cities Mortality Data Team

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## Notifiable Diseases and Mortality Tables

TABLE II. Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	Chlamydia trachomatis infection					Cryptosporidiosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max		
United States	8,474	22,405	26,592	8,474	20,541	27	113	259	27	99
New England	356	760	1,482	356	394	—	6	45	—	45
Connecticut	2	225	400	2	34	—	0	38	—	38
Maine†	—	47	75	—	56	—	0	4	—	1
Massachusetts	340	377	944	340	212	—	2	16	—	5
New Hampshire	1	34	61	1	35	—	1	5	—	1
Rhode Island†	—	63	244	—	29	—	0	8	—	—
Vermont†	13	22	63	13	28	—	1	9	—	—
Mid. Atlantic	2,262	3,014	4,307	2,262	2,555	4	13	37	4	5
New Jersey	190	429	838	190	426	—	1	5	—	—
New York (Upstate)	187	607	1,193	187	148	1	3	12	1	1
New York City	1,495	1,160	1,956	1,495	1,243	—	1	8	—	1
Pennsylvania	390	826	1,001	390	738	3	8	19	3	3
E.N. Central	805	3,442	4,280	805	4,008	10	25	54	10	17
Illinois	2	1,046	1,427	2	1,427	—	2	8	—	2
Indiana	140	399	695	140	374	—	4	9	—	3
Michigan	543	870	1,332	543	841	1	5	11	1	2
Ohio	55	697	1,044	55	1,022	7	7	16	7	4
Wisconsin	65	375	471	65	344	2	7	24	2	6
W.N. Central	219	1,339	1,697	219	1,148	1	18	61	1	4
Iowa	—	174	256	—	191	—	3	14	—	1
Kansas	6	176	561	6	102	—	2	6	—	—
Minnesota	—	260	338	—	315	—	4	34	—	—
Missouri	171	508	638	171	412	1	3	12	1	2
Nebraska†	39	100	236	39	65	—	2	9	—	1
North Dakota	3	32	91	3	8	—	0	5	—	—
South Dakota	—	53	80	—	55	—	1	10	—	—
S. Atlantic	2,305	3,854	5,360	2,305	3,059	5	19	45	5	12
Delaware	65	88	180	65	48	—	0	2	—	—
District of Columbia	—	124	225	—	112	—	0	1	—	—
Florida	557	1,421	1,670	557	1,154	4	8	24	4	7
Georgia	—	681	1,150	—	185	1	5	23	1	5
Maryland†	262	425	896	262	275	—	1	5	—	—
North Carolina	—	0	0	—	—	—	0	9	—	—
South Carolina†	488	523	1,421	488	807	—	1	7	—	—
Virginia†	907	598	926	907	422	—	1	7	—	—
West Virginia	26	69	136	26	56	—	0	2	—	—
E.S. Central	487	1,739	2,217	487	1,941	2	3	10	2	1
Alabama†	9	466	629	9	429	—	1	5	—	1
Kentucky	—	249	642	—	373	1	1	4	1	—
Mississippi	—	442	840	—	532	—	0	3	—	—
Tennessee†	478	579	809	478	607	1	1	5	1	—
W.S. Central	1,530	2,952	5,806	1,530	2,932	1	8	35	1	—
Arkansas†	224	269	417	224	332	—	1	5	—	—
Louisiana	—	525	1,130	—	596	—	0	6	—	—
Oklahoma	1,306	167	2,717	1,306	192	—	2	9	—	—
Texas†	—	2,007	2,519	—	1,812	1	4	20	1	—
Mountain	282	1,432	2,089	282	903	2	9	26	2	10
Arizona	174	499	755	174	27	—	1	3	—	2
Colorado	—	299	727	—	509	—	2	10	—	2
Idaho†	33	69	184	33	18	1	1	7	1	1
Montana†	22	56	86	22	56	1	1	4	1	1
Nevada†	4	170	477	4	99	—	0	2	—	—
New Mexico†	42	175	344	42	38	—	2	8	—	3
Utah	7	110	160	7	133	—	0	3	—	—
Wyoming†	—	36	69	—	23	—	0	2	—	1
Pacific	228	3,483	4,688	228	3,601	2	14	25	2	5
Alaska	—	99	137	—	104	—	0	1	—	—
California	228	2,689	3,591	228	2,870	—	8	20	—	2
Hawaii	—	120	147	—	130	—	0	1	—	—
Oregon	—	200	468	—	65	2	3	9	2	3
Washington	—	388	571	—	432	—	1	8	—	—
American Samoa	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	75	135	332	75	53	N	0	0	N	N
U.S. Virgin Islands	—	9	17	—	1	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	Dengue Virus Infection									
	Dengue Fever				Dengue Hemorrhagic Fever†					
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
	Med	Max				Med	Max			
United States	—	0	0	—	NN	—	0	0	—	NN
New England	—	0	0	—	NN	—	0	0	—	NN
Connecticut	—	0	0	—	NN	—	0	0	—	NN
Maine‡	—	0	0	—	NN	—	0	0	—	NN
Massachusetts	—	0	0	—	NN	—	0	0	—	NN
New Hampshire	—	0	0	—	NN	—	0	0	—	NN
Rhode Island‡	—	0	0	—	NN	—	0	0	—	NN
Vermont‡	—	0	0	—	NN	—	0	0	—	NN
Mid. Atlantic	—	0	0	—	NN	—	0	0	—	NN
New Jersey	—	0	0	—	NN	—	0	0	—	NN
New York (Upstate)	—	0	0	—	NN	—	0	0	—	NN
New York City	—	0	0	—	NN	—	0	0	—	NN
Pennsylvania	—	0	0	—	NN	—	0	0	—	NN
E.N. Central	—	0	0	—	NN	—	0	0	—	NN
Illinois	—	0	0	—	NN	—	0	0	—	NN
Indiana	—	0	0	—	NN	—	0	0	—	NN
Michigan	—	0	0	—	NN	—	0	0	—	NN
Ohio	—	0	0	—	NN	—	0	0	—	NN
Wisconsin	—	0	0	—	NN	—	0	0	—	NN
W.N. Central	—	0	0	—	NN	—	0	0	—	NN
Iowa	—	0	0	—	NN	—	0	0	—	NN
Kansas	—	0	0	—	NN	—	0	0	—	NN
Minnesota	—	0	0	—	NN	—	0	0	—	NN
Missouri	—	0	0	—	NN	—	0	0	—	NN
Nebraska‡	—	0	0	—	NN	—	0	0	—	NN
North Dakota	—	0	0	—	NN	—	0	0	—	NN
South Dakota	—	0	0	—	NN	—	0	0	—	NN
S. Atlantic	—	0	0	—	NN	—	0	0	—	NN
Delaware	—	0	0	—	NN	—	0	0	—	NN
District of Columbia	—	0	0	—	NN	—	0	0	—	NN
Florida	—	0	0	—	NN	—	0	0	—	NN
Georgia	—	0	0	—	NN	—	0	0	—	NN
Maryland‡	—	0	0	—	NN	—	0	0	—	NN
North Carolina	—	0	0	—	NN	—	0	0	—	NN
South Carolina‡	—	0	0	—	NN	—	0	0	—	NN
Virginia‡	—	0	0	—	NN	—	0	0	—	NN
West Virginia	—	0	0	—	NN	—	0	0	—	NN
E.S. Central	—	0	0	—	NN	—	0	0	—	NN
Alabama‡	—	0	0	—	NN	—	0	0	—	NN
Kentucky	—	0	0	—	NN	—	0	0	—	NN
Mississippi	—	0	0	—	NN	—	0	0	—	NN
Tennessee‡	—	0	0	—	NN	—	0	0	—	NN
W.S. Central	—	0	0	—	NN	—	0	0	—	NN
Arkansas‡	—	0	0	—	NN	—	0	0	—	NN
Louisiana	—	0	0	—	NN	—	0	0	—	NN
Oklahoma	—	0	0	—	NN	—	0	0	—	NN
Texas‡	—	0	0	—	NN	—	0	0	—	NN
Mountain	—	0	0	—	NN	—	0	0	—	NN
Arizona	—	0	0	—	NN	—	0	0	—	NN
Colorado	—	0	0	—	NN	—	0	0	—	NN
Idaho‡	—	0	0	—	NN	—	0	0	—	NN
Montana‡	—	0	0	—	NN	—	0	0	—	NN
Nevada‡	—	0	0	—	NN	—	0	0	—	NN
New Mexico‡	—	0	0	—	NN	—	0	0	—	NN
Utah	—	0	0	—	NN	—	0	0	—	NN
Wyoming‡	—	0	0	—	NN	—	0	0	—	NN
Pacific	—	0	0	—	NN	—	0	0	—	NN
Alaska	—	0	0	—	NN	—	0	0	—	NN
California	—	0	0	—	NN	—	0	0	—	NN
Hawaii	—	0	0	—	NN	—	0	0	—	NN
Oregon	—	0	0	—	NN	—	0	0	—	NN
Washington	—	0	0	—	NN	—	0	0	—	NN
American Samoa	—	0	0	—	NN	—	0	0	—	NN
C.N.M.I.	—	—	—	—	NN	—	—	—	—	NN
Guam	—	0	0	—	NN	—	0	0	—	NN
Puerto Rico	—	0	0	—	NN	—	0	0	—	NN
U.S. Virgin Islands	—	0	0	—	NN	—	0	0	—	NN

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

† DHF includes cases that meet criteria for dengue shock syndrome (DSS), a more severe form of DHF.

‡ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	Ehrlichiosis/Anaplasmosis†														
	<i>Ehrlichia chaffeensis</i>				<i>Anaplasma phagocytophilum</i>					Undetermined					
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
	Med	Max				Med	Max				Med	Max			
United States	1	11	64	1	2	—	12	49	—	—	—	2	12	—	—
New England	—	0	4	—	—	—	1	21	—	—	—	0	2	—	—
Connecticut	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Maine‡	—	0	1	—	—	—	0	3	—	—	—	0	0	—	—
Massachusetts	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	0	3	—	—	—	0	1	—	—
Rhode Island‡	—	0	4	—	—	—	0	20	—	—	—	0	1	—	—
Vermont‡	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	—	2	8	—	—	—	3	19	—	—	—	0	2	—	—
New Jersey	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	1	6	—	—	—	3	18	—	—	—	0	1	—	—
New York City	—	0	3	—	—	—	0	1	—	—	—	0	2	—	—
Pennsylvania	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
E.N. Central	—	1	7	—	—	—	2	22	—	—	—	1	8	—	—
Illinois	—	0	4	—	—	—	0	1	—	—	—	0	1	—	—
Indiana	—	0	0	—	—	—	0	0	—	—	—	0	7	—	—
Michigan	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Ohio	—	0	2	—	—	—	0	1	—	—	—	0	1	—	—
Wisconsin	—	0	4	—	—	—	2	22	—	—	—	0	3	—	—
W.N. Central	—	1	24	—	—	—	0	20	—	—	—	0	5	—	—
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Kansas	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
Minnesota	—	0	1	—	—	—	0	19	—	—	—	0	5	—	—
Missouri	—	1	22	—	—	—	0	1	—	—	—	0	3	—	—
Nebraska‡	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
S. Atlantic	1	3	24	1	2	—	0	2	—	—	—	0	2	—	—
Delaware	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Florida	1	0	1	1	1	—	0	1	—	—	—	0	0	—	—
Georgia	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Maryland‡	—	1	4	—	—	—	0	1	—	—	—	0	1	—	—
North Carolina	—	0	4	—	1	—	0	1	—	—	—	0	0	—	—
South Carolina‡	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Virginia‡	—	0	14	—	—	—	0	1	—	—	—	0	2	—	—
West Virginia	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	1	11	—	—	—	0	1	—	—	—	0	6	—	—
Alabama‡	—	0	3	—	—	—	0	1	—	—	—	0	0	—	—
Kentucky	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Mississippi	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Tennessee‡	—	1	11	—	—	—	0	1	—	—	—	0	6	—	—
W.S. Central	—	0	9	—	—	—	0	2	—	—	—	0	0	—	—
Arkansas‡	—	0	5	—	—	—	0	0	—	—	—	0	0	—	—
Louisiana	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oklahoma	—	0	8	—	—	—	0	1	—	—	—	0	0	—	—
Texas‡	—	0	1	—	—	—	0	2	—	—	—	0	0	—	—
Mountain	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Arizona	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Colorado	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Idaho‡	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Montana‡	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Nevada‡	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
New Mexico‡	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Utah	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Wyoming‡	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Pacific	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Alaska	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

† Cumulative total *E. ewingii* cases reported as of this week = 0.

‡ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	Giardiasis				Gonorrhea					Haemophilus influenzae, invasive <sup>†</sup> All ages, all serotypes					
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	93	321	508	93	244	2,171	5,316	6,606	2,171	5,916	22	59	92	22	69
New England	5	30	65	5	19	51	96	210	51	45	—	3	12	—	4
Connecticut	—	5	15	—	5	2	47	107	2	7	—	0	9	—	—
Maine <sup>‡</sup>	3	3	13	3	3	—	3	9	—	2	—	0	2	—	1
Massachusetts	—	13	36	—	4	44	38	112	44	30	—	2	6	—	2
New Hampshire	—	3	11	—	3	5	2	6	5	1	—	0	1	—	1
Rhode Island <sup>‡</sup>	—	1	6	—	—	—	6	19	—	4	—	0	2	—	—
Vermont <sup>‡</sup>	2	3	14	2	4	—	1	5	—	1	—	0	1	—	—
Mid. Atlantic	8	60	100	8	55	463	588	846	463	597	6	12	25	6	14
New Jersey	—	3	17	—	17	38	90	124	38	103	—	2	7	—	3
New York (Upstate)	4	25	54	4	9	35	106	244	35	54	1	3	9	1	2
New York City	1	16	26	1	12	289	210	366	289	239	—	2	11	—	2
Pennsylvania	3	15	35	3	17	101	195	275	101	201	5	4	10	5	7
E.N. Central	20	45	74	20	44	263	1,085	1,400	263	1,400	2	11	28	2	20
Illinois	—	11	20	—	12	—	339	524	—	524	—	3	9	—	6
Indiana	N	0	0	N	N	51	136	206	51	139	—	1	5	—	2
Michigan	3	11	24	3	8	180	272	501	180	319	—	0	3	—	—
Ohio	16	15	28	16	16	18	232	333	18	310	2	2	6	2	4
Wisconsin	1	9	19	1	8	14	89	144	14	108	—	3	20	—	8
W.N. Central	13	25	145	13	23	62	276	365	62	287	3	3	11	3	4
Iowa	6	6	15	6	4	—	32	47	—	30	—	0	0	—	—
Kansas	—	3	14	—	3	5	44	83	5	12	—	0	2	—	—
Minnesota	—	0	124	—	—	—	40	65	—	41	—	0	9	—	—
Missouri	3	9	27	3	11	49	124	173	49	173	3	1	4	3	4
Nebraska <sup>‡</sup>	4	3	9	4	1	7	22	55	7	19	—	0	4	—	—
North Dakota	—	0	8	—	—	1	2	14	1	—	—	0	2	—	—
South Dakota	—	1	5	—	4	—	5	14	—	12	—	0	0	—	—
S. Atlantic	22	69	109	22	37	668	1,107	1,500	668	1,027	4	13	31	4	13
Delaware	—	0	3	—	1	11	18	37	11	7	—	0	1	—	—
District of Columbia	—	0	5	—	2	—	48	88	—	62	—	0	1	—	—
Florida	21	38	59	21	18	243	410	476	243	400	3	4	10	3	8
Georgia	—	10	67	—	6	—	228	465	—	79	1	3	9	1	2
Maryland <sup>‡</sup>	—	5	13	—	5	66	114	212	66	90	—	1	6	—	1
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	17	—	2
South Carolina <sup>‡</sup>	—	2	8	—	1	148	159	412	148	259	—	1	5	—	—
Virginia <sup>‡</sup>	1	8	18	1	4	194	147	272	194	113	—	1	5	—	—
West Virginia	—	1	5	—	—	6	9	21	6	17	—	0	3	—	—
E.S. Central	2	7	22	2	7	165	495	686	165	686	1	3	10	1	3
Alabama <sup>‡</sup>	2	4	13	2	2	4	136	186	4	143	—	1	4	—	1
Kentucky	N	0	0	N	N	—	72	156	—	124	—	0	5	—	—
Mississippi	N	0	0	N	N	—	134	252	—	190	—	0	1	—	—
Tennessee <sup>‡</sup>	—	4	18	—	5	161	156	229	161	229	1	2	9	1	2
W.S. Central	4	7	19	4	—	410	873	1,555	410	991	—	2	7	—	2
Arkansas <sup>‡</sup>	1	2	9	1	—	72	83	134	72	92	—	0	3	—	1
Louisiana	—	1	7	—	—	—	167	418	—	201	—	0	1	—	1
Oklahoma	3	3	10	3	—	338	59	612	338	72	—	1	5	—	—
Texas <sup>‡</sup>	N	0	0	N	N	—	554	695	—	626	—	0	2	—	—
Mountain	13	27	61	13	22	29	175	233	29	118	5	5	10	5	7
Arizona	3	4	7	3	4	22	59	91	22	10	2	2	8	2	3
Colorado	9	8	26	9	4	—	40	106	—	68	3	1	6	3	3
Idaho <sup>‡</sup>	1	3	10	1	—	2	2	8	2	3	—	0	1	—	—
Montana <sup>‡</sup>	—	2	11	—	2	1	1	5	1	1	—	0	1	—	—
Nevada <sup>‡</sup>	—	1	10	—	—	—	27	93	—	11	—	0	2	—	—
New Mexico <sup>‡</sup>	—	2	8	—	3	4	21	34	4	17	—	0	3	—	1
Utah	—	5	12	—	7	—	5	12	—	7	—	0	2	—	—
Wyoming <sup>‡</sup>	—	1	5	—	2	—	1	7	—	1	—	0	1	—	—
Pacific	6	51	82	6	37	60	545	765	60	765	1	2	8	1	2
Alaska	—	2	7	—	1	—	18	32	—	18	—	0	3	—	—
California	—	33	60	—	29	60	449	658	60	658	—	0	4	—	—
Hawaii	—	0	2	—	—	—	11	24	—	18	—	0	3	—	1
Oregon	6	7	18	6	7	—	20	44	—	6	1	1	4	1	1
Washington	—	7	25	—	—	—	39	71	—	65	—	0	2	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	2	10	—	—	2	4	24	2	1	—	0	1	—	—
U.S. Virgin Islands	—	0	0	—	—	—	2	7	—	—	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

<sup>†</sup> Data for *H. influenzae* (age <5 yrs for serotype b, nonserotype b, and unknown serotype) are available in Table I.

<sup>‡</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	Hepatitis (viral, acute), by type														
	A				B				C						
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
	Med	Max				Med	Max				Med	Max			
United States	8	35	57	8	31	17	61	89	17	77	2	17	36	2	18
New England	—	2	5	—	1	2	1	3	2	3	1	1	5	1	1
Connecticut	—	0	2	—	—	2	0	3	2	2	1	1	4	1	1
Maine†	—	0	1	—	—	—	0	2	—	—	—	0	2	—	—
Massachusetts	—	1	4	—	1	—	0	2	—	1	—	0	2	—	—
New Hampshire	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
Rhode Island†	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Vermont†	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Mid. Atlantic	2	5	10	2	4	2	5	16	2	4	—	2	7	—	1
New Jersey	—	1	5	—	1	—	1	6	—	2	—	0	1	—	—
New York (Upstate)	—	1	3	—	—	—	1	4	—	—	—	1	4	—	—
New York City	1	2	5	1	2	1	1	5	1	1	—	0	0	—	—
Pennsylvania	1	1	6	1	1	1	2	8	1	1	—	0	4	—	1
E.N. Central	2	4	18	2	9	—	6	21	—	21	—	4	14	—	7
Illinois	—	2	12	—	4	—	1	7	—	1	—	0	1	—	—
Indiana	—	0	4	—	—	—	1	5	—	5	—	0	4	—	—
Michigan	—	1	4	—	2	—	2	8	—	2	—	3	12	—	5
Ohio	1	0	3	1	3	—	1	13	—	13	—	0	5	—	2
Wisconsin	1	0	4	1	—	—	0	4	—	—	—	0	2	—	—
W.N. Central	1	2	7	1	1	—	3	8	—	6	—	0	4	—	—
Iowa	—	0	3	—	—	—	0	3	—	1	—	0	4	—	—
Kansas	—	0	2	—	—	—	0	2	—	—	—	0	1	—	—
Minnesota	—	0	4	—	—	—	0	4	—	—	—	0	2	—	—
Missouri	1	0	3	1	1	—	1	5	—	4	—	0	1	—	—
Nebraska†	—	0	3	—	—	—	0	2	—	1	—	0	1	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
S. Atlantic	1	8	14	1	7	7	16	32	7	15	1	3	12	1	2
Delaware	—	0	1	—	—	U	0	0	U	U	U	0	0	U	U
District of Columbia	U	0	0	U	U	U	0	0	U	U	U	0	0	U	U
Florida	1	4	9	1	4	5	6	13	5	6	—	1	4	—	—
Georgia	—	1	3	—	2	2	3	9	2	9	—	0	3	—	1
Maryland†	—	1	4	—	1	—	1	5	—	—	1	1	3	1	1
North Carolina	—	0	7	—	—	—	0	19	—	—	—	0	10	—	—
South Carolina†	—	1	4	—	—	—	1	4	—	—	—	0	1	—	—
Virginia†	—	1	3	—	—	—	1	6	—	—	—	0	2	—	—
West Virginia	—	0	2	—	—	—	0	19	—	—	—	0	2	—	—
E.S. Central	—	1	4	—	4	3	7	11	3	11	—	2	6	—	4
Alabama†	—	0	2	—	1	1	1	7	1	2	—	0	2	—	—
Kentucky	—	0	2	—	—	2	2	6	2	4	—	1	5	—	2
Mississippi	—	0	2	—	2	—	1	2	—	1	—	0	0	—	—
Tennessee†	—	0	2	—	1	—	2	5	—	4	—	0	3	—	2
W.S. Central	—	3	10	—	—	3	9	19	3	4	—	1	4	—	—
Arkansas†	—	0	1	—	—	—	1	4	—	—	—	0	1	—	—
Louisiana	—	0	1	—	—	—	0	4	—	2	—	0	1	—	—
Oklahoma	—	0	3	—	—	—	2	8	—	—	—	0	4	—	—
Texas†	—	3	10	—	—	3	6	11	3	2	—	0	3	—	—
Mountain	2	3	8	2	4	—	2	6	—	2	—	1	4	—	2
Arizona	2	1	5	2	2	—	1	3	—	—	—	0	0	—	—
Colorado	—	1	5	—	1	—	0	2	—	2	—	0	3	—	1
Idaho†	—	0	1	—	—	—	0	2	—	—	—	0	1	—	—
Montana†	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Nevada†	—	0	2	—	—	—	0	3	—	—	—	0	1	—	—
New Mexico†	—	0	1	—	—	—	0	2	—	—	—	0	2	—	1
Utah	—	0	2	—	1	—	0	1	—	—	—	0	2	—	—
Wyoming†	—	0	1	—	—	—	0	2	—	—	—	0	0	—	—
Pacific	—	5	17	—	1	—	6	14	—	11	—	1	4	—	1
Alaska	—	0	1	—	—	—	0	1	—	—	—	0	2	—	—
California	—	5	16	—	1	—	4	10	—	10	—	1	4	—	—
Hawaii	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Oregon	—	0	2	—	—	—	1	4	—	1	—	0	2	—	1
Washington	—	1	3	—	—	—	1	5	—	—	—	0	3	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	2	—	—	—	0	5	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).



## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	Legionellosis					Lyme disease					Malaria				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	14	49	158	14	33	26	320	1,944	26	154	7	22	47	7	16
New England	—	2	17	—	1	—	64	479	—	28	—	1	4	—	2
Connecticut	—	1	5	—	—	—	0	0	—	—	—	0	3	—	—
Maine†	—	0	3	—	—	—	11	77	—	—	—	0	1	—	—
Massachusetts	—	1	9	—	1	—	26	321	—	13	—	0	3	—	2
New Hampshire	—	0	2	—	—	—	14	89	—	9	—	0	1	—	—
Rhode Island†	—	0	4	—	—	—	1	28	—	—	—	0	1	—	—
Vermont†	—	0	1	—	—	—	5	40	—	6	—	0	1	—	—
Mid. Atlantic	2	15	69	2	11	8	176	1,078	8	61	3	6	13	3	—
New Jersey	—	2	13	—	1	—	38	378	—	26	—	0	1	—	—
New York (Upstate)	1	5	29	1	3	—	53	272	—	4	1	1	4	1	—
New York City	—	2	20	—	1	—	2	24	—	3	1	4	11	1	—
Pennsylvania	1	6	25	1	6	8	87	631	8	28	1	1	4	1	—
E.N. Central	5	9	34	5	8	—	18	216	—	11	—	3	10	—	1
Illinois	—	1	10	—	—	—	1	11	—	—	—	1	4	—	—
Indiana	—	1	3	—	—	—	1	6	—	—	—	0	3	—	—
Michigan	—	2	11	—	4	—	1	10	—	—	—	0	3	—	—
Ohio	5	4	17	5	4	—	1	5	—	—	—	1	6	—	1
Wisconsin	—	0	2	—	—	—	16	198	—	11	—	0	1	—	—
W.N. Central	1	2	7	1	—	—	5	31	—	2	—	1	8	—	2
Iowa	—	0	2	—	—	—	1	14	—	1	—	0	1	—	1
Kansas	—	0	1	—	—	—	0	2	—	1	—	0	1	—	1
Minnesota	—	0	4	—	—	—	0	25	—	—	—	0	8	—	—
Missouri	1	1	5	1	—	—	0	1	—	—	—	0	2	—	—
Nebraska†	—	0	2	—	—	—	0	3	—	—	—	0	1	—	—
North Dakota	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
S. Atlantic	3	10	21	3	5	18	58	236	18	47	3	6	17	3	3
Delaware	—	0	5	—	—	4	12	65	4	8	—	0	1	—	—
District of Columbia	—	0	2	—	—	—	0	5	—	—	—	0	2	—	—
Florida	1	4	10	1	1	3	2	11	3	—	—	1	7	—	—
Georgia	—	1	5	—	1	—	1	6	—	—	—	1	5	—	—
Maryland†	2	2	12	2	3	5	27	125	5	38	2	1	13	2	1
North Carolina	—	0	6	—	—	—	0	14	—	—	—	0	5	—	1
South Carolina†	—	0	2	—	—	—	0	3	—	—	—	0	1	—	—
Virginia†	—	1	5	—	—	6	9	49	6	1	1	1	5	1	1
West Virginia	—	0	2	—	—	—	0	33	—	—	—	0	1	—	—
E.S. Central	—	2	12	—	3	—	1	2	—	—	1	0	3	1	—
Alabama†	—	0	2	—	1	—	0	1	—	—	1	0	3	1	—
Kentucky	—	1	3	—	1	—	0	1	—	—	—	0	3	—	—
Mississippi	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Tennessee†	—	1	9	—	1	—	1	2	—	—	—	0	3	—	—
W.S. Central	1	2	7	1	1	—	0	5	—	—	—	1	10	—	—
Arkansas†	—	0	1	—	—	—	0	0	—	—	—	0	1	—	—
Louisiana	—	0	2	—	1	—	0	0	—	—	—	0	1	—	—
Oklahoma	—	0	2	—	—	—	0	0	—	—	—	0	1	—	—
Texas†	1	2	6	1	—	—	0	5	—	—	—	0	9	—	—
Mountain	2	3	8	2	2	—	1	4	—	—	—	0	6	—	1
Arizona	2	1	3	2	2	—	0	2	—	—	—	0	2	—	—
Colorado	—	0	4	—	—	—	0	1	—	—	—	0	3	—	1
Idaho†	—	0	2	—	—	—	0	3	—	—	—	0	1	—	—
Montana†	—	0	2	—	—	—	0	1	—	—	—	0	3	—	—
Nevada†	—	0	1	—	—	—	0	1	—	—	—	0	0	—	—
New Mexico†	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Utah	—	0	4	—	—	—	0	1	—	—	—	0	2	—	—
Wyoming†	—	0	2	—	—	—	0	1	—	—	—	0	0	—	—
Pacific	—	3	12	—	2	—	4	11	—	5	—	3	9	—	7
Alaska	—	0	1	—	—	—	0	1	—	—	—	0	1	—	—
California	—	3	11	—	2	—	3	10	—	4	—	2	6	—	6
Hawaii	—	0	1	—	—	N	0	0	N	N	—	0	1	—	—
Oregon	—	0	2	—	—	—	0	4	—	1	—	0	2	—	1
Washington	—	0	4	—	—	—	0	3	—	—	—	0	2	—	—
American Samoa	N	0	0	N	N	N	0	0	N	N	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	1	—	—	N	0	0	N	N	—	0	1	—	1
U.S. Virgin Islands	—	0	0	—	—	N	0	0	N	N	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

† Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	Meningococcal disease, invasive <sup>†</sup>				Pertussis				Rabies, animal						
	All groups				Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	
	Current week	Previous 52 weeks		Cum 2010		Cum 2009	Current week				Med	Max			Current week
United States	8	17	33	8	18	50	264	436	50	244	14	65	140	14	26
New England	—	0	4	—	—	—	12	24	—	23	4	6	24	4	1
Connecticut	—	0	2	—	—	—	1	4	—	1	—	2	22	—	—
Maine <sup>‡</sup>	—	0	1	—	—	—	1	10	—	3	—	1	4	—	—
Massachusetts	—	0	3	—	—	—	7	18	—	18	—	0	0	—	—
New Hampshire	—	0	1	—	—	—	1	7	—	1	1	0	3	1	1
Rhode Island <sup>§</sup>	—	0	1	—	—	—	0	7	—	—	—	1	7	—	—
Vermont <sup>‡</sup>	—	0	1	—	—	—	0	1	—	—	3	1	5	3	—
Mid. Atlantic	3	2	6	3	2	4	21	38	4	20	5	10	23	5	4
New Jersey	—	0	2	—	—	—	3	11	—	6	—	0	0	—	—
New York (Upstate)	—	0	2	—	—	—	4	15	—	1	5	7	22	5	4
New York City	1	0	2	1	2	—	0	11	—	—	—	0	3	—	—
Pennsylvania	2	1	4	2	—	4	12	29	4	13	—	0	16	—	—
E.N. Central	2	3	10	2	4	23	54	100	23	83	1	2	19	1	1
Illinois	—	1	4	—	1	—	12	33	—	33	—	1	9	—	1
Indiana	—	0	3	—	—	—	6	15	—	14	—	0	6	—	—
Michigan	1	0	5	1	—	4	14	40	4	8	—	1	6	—	—
Ohio	1	1	3	1	2	19	18	49	19	26	1	0	5	1	—
Wisconsin	—	0	3	—	1	—	3	12	—	2	N	0	0	N	N
W.N. Central	—	2	6	—	2	5	31	145	5	56	—	7	18	—	3
Iowa	—	0	2	—	—	—	3	10	—	4	—	0	3	—	—
Kansas	—	0	2	—	—	—	4	12	—	2	—	1	6	—	3
Minnesota	—	0	2	—	—	—	0	89	—	—	—	0	11	—	—
Missouri	—	0	3	—	2	2	18	47	2	45	—	1	5	—	—
Nebraska <sup>‡</sup>	—	0	1	—	—	3	2	11	3	2	—	1	6	—	—
North Dakota	—	0	1	—	—	—	0	12	—	—	—	0	7	—	—
South Dakota	—	0	1	—	—	—	0	6	—	3	—	0	4	—	—
S. Atlantic	3	2	10	3	4	8	28	71	8	23	4	26	111	4	10
Delaware	—	0	1	—	—	—	0	2	—	—	—	0	0	—	—
District of Columbia	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Florida	2	1	4	2	2	6	8	29	6	7	3	0	95	3	—
Georgia	1	0	2	1	—	1	3	11	1	4	—	0	72	—	—
Maryland <sup>‡</sup>	—	0	1	—	—	—	2	8	—	3	—	7	15	—	5
North Carolina	—	0	10	—	1	—	0	65	—	—	N	4	4	N	N
South Carolina <sup>§</sup>	—	0	1	—	—	—	4	18	—	8	—	0	0	—	—
Virginia <sup>‡</sup>	—	0	2	—	1	—	3	13	—	1	—	10	26	—	5
West Virginia	—	0	2	—	—	1	0	5	1	—	1	2	6	1	—
E.S. Central	—	0	4	—	—	4	14	30	4	17	—	1	6	—	2
Alabama <sup>‡</sup>	—	0	1	—	—	—	4	19	—	—	—	0	0	—	—
Kentucky	—	0	1	—	—	2	3	15	2	11	—	1	4	—	—
Mississippi	—	0	1	—	—	—	1	5	—	2	—	0	1	—	—
Tennessee <sup>‡</sup>	—	0	2	—	—	2	3	9	2	4	—	0	4	—	2
W.S. Central	—	1	8	—	2	2	60	139	2	2	—	0	13	—	—
Arkansas <sup>‡</sup>	—	0	2	—	1	—	5	21	—	—	—	0	10	—	—
Louisiana	—	0	3	—	1	—	1	8	—	2	—	0	0	—	—
Oklahoma	—	0	2	—	—	—	0	32	—	—	—	0	13	—	—
Texas <sup>‡</sup>	—	1	3	—	—	2	48	126	2	—	—	0	1	—	—
Mountain	—	1	4	—	1	4	17	32	4	17	—	1	6	—	1
Arizona	—	0	2	—	—	—	4	11	—	2	N	0	0	N	N
Colorado	—	0	3	—	—	1	4	12	1	5	—	0	0	—	—
Idaho <sup>‡</sup>	—	0	1	—	—	3	1	19	3	1	—	0	0	—	—
Montana <sup>‡</sup>	—	0	2	—	—	—	1	6	—	—	—	0	4	—	—
Nevada <sup>‡</sup>	—	0	1	—	1	—	0	3	—	—	—	0	1	—	—
New Mexico <sup>‡</sup>	—	0	1	—	—	—	1	6	—	2	—	0	2	—	1
Utah	—	0	1	—	—	—	3	16	—	7	—	0	2	—	—
Wyoming <sup>‡</sup>	—	0	2	—	—	—	0	5	—	—	—	0	4	—	—
Pacific	—	3	10	—	3	—	19	43	—	3	—	4	12	—	4
Alaska	—	0	2	—	1	—	1	4	—	1	—	0	3	—	3
California	—	2	6	—	1	—	10	22	—	1	—	4	12	—	1
Hawaii	—	0	1	—	—	—	0	3	—	—	—	0	0	—	—
Oregon	—	0	6	—	1	—	3	15	—	1	—	0	3	—	—
Washington	—	0	7	—	—	—	5	26	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	1	—	—	—	1	3	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	N	0	0	N	N

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

† Data for meningococcal disease, invasive caused by serogroups A, C, Y, and W-135; serogroup B; other serogroup; and unknown serogroup are available in Table I.

‡ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	Salmonellosis					Shiga toxin-producing <i>E. coli</i> (STEC) <sup>†</sup>					Shigellosis				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	221	842	1,372	221	1,030	9	81	153	9	124	82	284	495	82	331
New England	—	31	431	—	431	—	3	65	—	65	—	4	45	—	45
Connecticut	—	0	406	—	406	—	0	65	—	65	—	0	40	—	40
Maine <sup>‡</sup>	—	2	7	—	2	—	0	3	—	—	—	0	2	—	—
Massachusetts	—	23	51	—	15	—	2	6	—	—	—	3	27	—	5
New Hampshire	—	3	42	—	4	—	0	3	—	—	—	0	4	—	—
Rhode Island <sup>§</sup>	—	2	11	—	3	—	0	26	—	—	—	0	7	—	—
Vermont <sup>§</sup>	—	1	5	—	1	—	0	3	—	—	—	0	1	—	—
Mid. Atlantic	13	86	196	13	59	1	6	21	1	6	10	57	87	10	57
New Jersey	—	13	46	—	13	—	0	4	—	2	—	8	27	—	21
New York (Upstate)	—	23	66	—	6	—	3	9	—	1	1	4	11	1	—
New York City	2	22	43	2	16	—	1	5	—	2	1	8	15	1	15
Pennsylvania	11	30	65	11	24	1	2	8	1	1	8	27	63	8	21
E.N. Central	29	91	152	29	114	3	15	34	3	8	6	48	96	6	82
Illinois	—	25	52	—	27	—	3	10	—	2	—	11	34	—	13
Indiana	—	6	19	—	13	—	1	8	—	—	—	1	5	—	5
Michigan	5	18	34	5	22	1	3	8	1	—	—	4	13	—	13
Ohio	23	27	52	23	26	2	2	11	2	1	6	18	57	6	39
Wisconsin	1	12	30	1	26	—	5	20	—	5	—	7	26	—	12
W.N. Central	11	47	86	11	28	—	12	39	—	5	45	22	86	45	11
Iowa	2	7	16	2	4	—	2	14	—	1	—	0	8	—	4
Kansas	—	6	22	—	4	—	1	5	—	1	—	3	13	—	6
Minnesota	—	12	29	—	—	—	2	19	—	—	—	1	7	—	—
Missouri	9	12	30	9	13	—	2	10	—	2	45	16	72	45	1
Nebraska <sup>§</sup>	—	5	41	—	2	—	1	6	—	1	—	0	3	—	—
North Dakota	—	0	21	—	—	—	0	3	—	—	—	0	2	—	—
South Dakota	—	2	22	—	5	—	0	12	—	—	—	0	1	—	—
S. Atlantic	140	276	452	140	216	3	12	22	3	19	13	43	79	13	63
Delaware	—	2	9	—	—	—	0	2	—	—	1	3	10	1	—
District of Columbia	—	0	5	—	—	—	0	1	—	—	—	0	2	—	1
Florida	87	133	278	87	68	3	4	7	3	5	3	9	24	3	12
Georgia	37	42	98	37	25	—	1	4	—	2	9	12	29	9	12
Maryland <sup>§</sup>	11	16	32	11	9	—	2	5	—	3	—	6	19	—	7
North Carolina	—	17	92	—	92	—	1	11	—	9	—	4	27	—	24
South Carolina <sup>§</sup>	—	17	67	—	15	—	0	3	—	—	—	2	8	—	2
Virginia <sup>§</sup>	5	20	45	5	7	—	2	7	—	—	—	3	12	—	5
West Virginia	—	4	23	—	—	—	0	5	—	—	—	0	3	—	—
E.S. Central	9	52	113	9	43	2	4	12	2	2	2	13	46	2	11
Alabama <sup>§</sup>	1	14	39	1	18	2	1	4	2	1	—	2	11	—	3
Kentucky	4	8	18	4	10	—	1	4	—	1	—	2	25	—	2
Mississippi	—	14	45	—	5	—	0	1	—	—	—	1	4	—	—
Tennessee <sup>§</sup>	4	14	33	4	10	—	1	10	—	—	2	6	16	2	6
W.S. Central	1	91	216	1	8	—	5	15	—	1	1	48	149	1	8
Arkansas <sup>§</sup>	—	10	25	—	—	—	1	4	—	—	1	6	14	1	—
Louisiana	—	6	43	—	5	—	0	0	—	—	—	1	8	—	1
Oklahoma	1	11	30	1	—	—	0	6	—	—	—	5	19	—	—
Texas <sup>§</sup>	—	54	150	—	3	—	3	11	—	1	—	33	123	—	7
Mountain	16	51	129	16	47	—	9	26	—	4	5	19	49	5	27
Arizona	1	19	50	1	12	—	1	4	—	1	—	14	42	—	18
Colorado	9	10	33	9	9	—	3	13	—	—	5	2	6	5	2
Idaho <sup>§</sup>	4	3	10	4	3	—	1	7	—	—	—	0	2	—	—
Montana <sup>§</sup>	2	1	7	2	1	—	0	7	—	—	—	0	5	—	—
Nevada <sup>§</sup>	—	3	11	—	3	—	0	3	—	—	—	1	7	—	4
New Mexico <sup>§</sup>	—	5	29	—	2	—	1	3	—	2	—	1	8	—	3
Utah	—	5	15	—	15	—	1	11	—	1	—	0	2	—	—
Wyoming <sup>§</sup>	—	1	9	—	2	—	0	2	—	—	—	0	1	—	—
Pacific	2	125	224	2	84	—	8	31	—	14	—	24	48	—	27
Alaska	—	1	7	—	—	—	0	0	—	—	—	0	2	—	—
California	—	93	151	—	67	—	4	15	—	14	—	18	41	—	25
Hawaii	—	4	59	—	13	—	0	2	—	—	—	0	4	—	1
Oregon	2	8	19	2	4	—	1	11	—	—	—	1	3	—	1
Washington	—	12	44	—	—	—	2	17	—	—	—	2	9	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—	—	1	2	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	6	21	—	2	—	0	0	—	—	—	0	2	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

† Includes *E. coli* O157:H7; Shiga toxin-positive, serogroup non-O157; and Shiga toxin-positive, not serogrouped.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	Spotted Fever Rickettsiosis (including RMSF) <sup>†</sup>									
	Confirmed					Probable				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
	Med	Max				Med	Max			
United States	—	20	78	—	1	—	20	78	—	7
New England	—	0	2	—	—	—	0	2	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—
Maine <sup>§</sup>	—	0	2	—	—	—	0	2	—	—
Massachusetts	—	0	1	—	—	—	0	1	—	—
New Hampshire	—	0	0	—	—	—	0	0	—	—
Rhode Island <sup>§</sup>	—	0	0	—	—	—	0	0	—	—
Vermont <sup>§</sup>	—	0	1	—	—	—	0	1	—	—
Mid. Atlantic	—	1	6	—	—	—	1	6	—	—
New Jersey	—	0	0	—	—	—	0	0	—	—
New York (Upstate)	—	0	3	—	—	—	0	3	—	—
New York City	—	0	4	—	—	—	0	4	—	—
Pennsylvania	—	0	2	—	—	—	0	2	—	—
E.N. Central	—	1	7	—	1	—	1	7	—	—
Illinois	—	0	6	—	—	—	0	6	—	—
Indiana	—	0	3	—	—	—	0	3	—	—
Michigan	—	0	2	—	1	—	0	2	—	—
Ohio	—	0	4	—	—	—	0	4	—	—
Wisconsin	—	0	1	—	—	—	0	1	—	—
W.N. Central	—	3	27	—	—	—	3	27	—	—
Iowa	—	0	1	—	—	—	0	1	—	—
Kansas	—	0	1	—	—	—	0	1	—	—
Minnesota	—	0	2	—	—	—	0	2	—	—
Missouri	—	3	26	—	—	—	3	26	—	—
Nebraska <sup>§</sup>	—	0	2	—	—	—	0	2	—	—
North Dakota	—	0	0	—	—	—	0	0	—	—
South Dakota	—	0	0	—	—	—	0	0	—	—
S. Atlantic	—	7	27	—	—	—	7	27	—	5
Delaware	—	0	3	—	—	—	0	3	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—
Florida	—	0	2	—	—	—	0	2	—	—
Georgia	—	0	7	—	—	—	0	7	—	—
Maryland <sup>§</sup>	—	0	3	—	—	—	0	3	—	1
North Carolina	—	3	25	—	—	—	3	25	—	2
South Carolina <sup>§</sup>	—	0	5	—	—	—	0	5	—	1
Virginia <sup>§</sup>	—	1	5	—	—	—	1	5	—	1
West Virginia	—	0	1	—	—	—	0	1	—	—
E.S. Central	—	4	16	—	—	—	3	16	—	2
Alabama <sup>§</sup>	—	1	7	—	—	—	1	7	—	1
Kentucky	—	0	1	—	—	—	0	1	—	—
Mississippi	—	0	1	—	—	—	0	1	—	—
Tennessee <sup>§</sup>	—	3	14	—	—	—	3	14	—	1
W.S. Central	—	1	28	—	—	—	1	28	—	—
Arkansas <sup>§</sup>	—	0	14	—	—	—	0	14	—	—
Louisiana	—	0	1	—	—	—	0	1	—	—
Oklahoma	—	0	27	—	—	—	0	27	—	—
Texas <sup>§</sup>	—	0	3	—	—	—	0	3	—	—
Mountain	—	0	3	—	—	—	0	3	—	—
Arizona	—	0	1	—	—	—	0	0	—	—
Colorado	—	0	1	—	—	—	0	1	—	—
Idaho <sup>§</sup>	—	0	1	—	—	—	0	1	—	—
Montana <sup>§</sup>	—	0	2	—	—	—	0	2	—	—
Nevada <sup>§</sup>	—	0	0	—	—	—	0	0	—	—
New Mexico <sup>§</sup>	—	0	1	—	—	—	0	1	—	—
Utah	—	0	1	—	—	—	0	1	—	—
Wyoming <sup>§</sup>	—	0	1	—	—	—	0	1	—	—
Pacific	—	0	1	—	—	—	0	1	—	—
Alaska	—	0	0	—	—	—	0	0	—	—
California	—	0	1	—	—	—	0	1	—	—
Hawaii	—	0	0	—	—	—	0	0	—	—
Oregon	—	0	0	—	—	—	0	0	—	—
Washington	—	0	0	—	—	—	0	0	—	—
American Samoa	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

<sup>†</sup> Illnesses with similar clinical presentation that result from Spotted fever group rickettsia infections are reported as Spotted fever rickettsioses. Rocky Mountain spotted fever (RMSF) caused by *Rickettsia rickettsii*, is the most common and well-known spotted fever.

<sup>§</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	<i>Streptococcus pneumoniae</i> , <sup>†</sup> invasive disease										Syphilis, primary and secondary				
	All ages					Age <5					Syphilis, primary and secondary				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
		Med	Max				Med	Max				Med	Max		
United States	99	52	114	99	89	95	44	79	95	43	71	269	327	71	252
New England	3	1	50	3	2	4	1	22	4	—	2	6	15	2	4
Connecticut	—	0	50	—	—	—	0	22	—	—	—	1	8	—	—
Maine <sup>§</sup>	1	0	2	1	1	2	0	2	2	—	—	0	1	—	—
Massachusetts	—	0	1	—	—	—	0	5	—	—	2	4	10	2	3
New Hampshire	2	0	3	2	—	—	0	2	—	—	—	0	2	—	1
Rhode Island <sup>§</sup>	—	0	4	—	—	—	0	1	—	—	—	0	5	—	—
Vermont <sup>§</sup>	—	0	2	—	1	2	0	1	2	—	—	0	0	—	—
Mid. Atlantic	4	3	13	4	2	9	4	19	9	2	23	34	50	23	25
New Jersey	—	0	0	—	—	—	0	4	—	1	3	3	13	3	7
New York (Upstate)	2	2	13	2	—	—	2	9	—	1	—	2	8	—	—
New York City	—	0	1	—	—	—	0	11	—	—	20	22	39	20	8
Pennsylvania	2	1	8	2	2	9	0	2	9	—	—	7	14	—	10
E.N. Central	13	12	25	13	23	19	7	15	19	10	9	24	42	9	22
Illinois	—	0	0	—	—	—	1	4	—	1	2	11	30	2	14
Indiana	—	3	11	—	3	—	1	4	—	2	3	2	10	3	1
Michigan	1	0	2	1	2	15	1	4	15	2	4	4	13	4	2
Ohio	12	7	18	12	18	3	2	7	3	5	—	5	12	—	4
Wisconsin	—	0	0	—	—	1	1	3	1	—	—	1	3	—	1
W.N. Central	3	2	9	3	5	4	3	13	4	3	—	6	12	—	8
Iowa	—	0	0	—	—	—	0	0	—	—	—	0	2	—	—
Kansas	—	1	5	—	1	—	0	2	—	1	—	0	3	—	—
Minnesota	—	0	0	—	—	—	0	10	—	—	—	1	4	—	3
Missouri	3	1	6	3	4	—	0	5	—	2	—	3	8	—	5
Nebraska <sup>§</sup>	—	0	1	—	—	4	0	2	4	—	—	0	3	—	—
North Dakota	—	0	3	—	—	—	0	3	—	—	—	0	1	—	—
South Dakota	—	0	2	—	—	—	0	2	—	—	—	0	1	—	—
S. Atlantic	53	26	53	53	34	18	11	22	18	16	25	61	96	25	48
Delaware	—	0	2	—	—	—	0	2	—	—	—	0	3	—	—
District of Columbia	—	0	0	—	—	—	0	0	—	—	—	3	8	—	8
Florida	45	14	36	45	25	—	4	11	—	4	—	19	32	—	16
Georgia	8	8	25	8	8	2	3	10	2	3	—	14	36	—	—
Maryland <sup>§</sup>	—	0	1	—	1	16	1	7	16	3	3	6	12	3	2
North Carolina	—	0	0	—	—	—	0	0	—	—	7	9	31	7	18
South Carolina <sup>§</sup>	—	0	0	—	—	—	1	4	—	4	4	2	6	4	1
Virginia <sup>§</sup>	—	0	0	—	—	—	0	3	—	2	11	6	15	11	3
West Virginia	—	1	13	—	—	—	0	3	—	—	—	0	2	—	—
E.S. Central	2	3	25	2	15	14	2	10	14	4	6	22	37	6	27
Alabama <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	2	8	18	2	15
Kentucky	2	1	5	2	5	—	0	2	—	1	—	1	13	—	1
Mississippi	—	0	1	—	1	—	0	2	—	2	—	4	12	—	—
Tennessee <sup>§</sup>	—	2	23	—	9	14	2	9	14	1	4	8	15	4	11
W.S. Central	—	1	6	—	5	5	5	16	5	4	—	52	79	—	43
Arkansas <sup>§</sup>	—	1	5	—	3	2	0	4	2	1	—	5	16	—	—
Louisiana	—	0	5	—	2	—	0	4	—	3	—	13	41	—	10
Oklahoma	—	0	0	—	—	1	1	4	1	—	—	1	5	—	3
Texas <sup>§</sup>	—	0	0	—	—	2	3	14	2	—	—	31	48	—	30
Mountain	21	2	7	21	2	22	5	16	22	4	1	8	18	1	6
Arizona	21	0	0	21	—	—	2	10	—	2	1	3	9	1	—
Colorado	—	0	0	—	—	21	1	4	21	2	—	1	4	—	3
Idaho <sup>§</sup>	—	0	0	—	—	—	0	2	—	—	—	0	1	—	—
Montana <sup>§</sup>	—	0	0	—	—	—	0	0	—	—	—	0	1	—	—
Nevada <sup>§</sup>	—	0	4	—	—	—	0	2	—	—	—	1	10	—	—
New Mexico <sup>§</sup>	—	0	1	—	—	1	0	4	1	—	—	1	5	—	2
Utah	—	1	5	—	—	—	1	6	—	—	—	—	—	—	—
Wyoming <sup>§</sup>	—	0	2	—	2	—	0	1	—	—	—	0	1	—	—
Pacific	—	0	1	—	1	—	0	4	—	—	5	43	69	5	69
Alaska	—	0	0	—	—	—	0	3	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	0	—	—	5	40	62	5	62
Hawaii	—	0	1	—	1	—	0	2	—	—	—	0	3	—	3
Oregon	—	0	0	—	—	—	0	0	—	—	—	1	5	—	—
Washington	—	0	0	—	—	—	0	0	—	—	—	2	7	—	4
American Samoa	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	0	0	—	—	—	0	0	—	—	2	3	17	2	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional.

<sup>†</sup> Includes drug resistant and susceptible cases of invasive *Streptococcus pneumoniae* disease among children <5 years and among all ages. Case definition: Isolation of *S. pneumoniae* from a normally sterile body site (e.g., blood or cerebrospinal fluid).

<sup>§</sup> Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE II. (Continued) Provisional cases of selected notifiable diseases, United States, weeks ending January 9, 2010, and January 10, 2009 (1st week)\*

Reporting area	West Nile virus disease <sup>1</sup>														
	Varicella (chickenpox)					Neuroinvasive					Nonneuroinvasive <sup>6</sup>				
	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009	Current week	Previous 52 weeks		Cum 2010	Cum 2009
	Med	Max				Med	Max				Med	Max			
United States	87	289	653	87	379	—	0	44	—	—	—	0	48	—	—
New England	—	6	19	—	11	—	0	0	—	—	—	0	0	—	—
Connecticut	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Maine <sup>6</sup>	—	0	12	—	—	—	0	0	—	—	—	0	0	—	—
Massachusetts	—	0	2	—	—	—	0	0	—	—	—	0	0	—	—
New Hampshire	—	3	10	—	9	—	0	0	—	—	—	0	0	—	—
Rhode Island <sup>6</sup>	—	0	1	—	—	—	0	0	—	—	—	0	0	—	—
Vermont <sup>6</sup>	—	0	7	—	2	—	0	0	—	—	—	0	0	—	—
Mid. Atlantic	7	28	55	7	44	—	0	2	—	—	—	0	1	—	—
New Jersey	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
New York (Upstate)	N	0	0	N	N	—	0	1	—	—	—	0	1	—	—
New York City	—	0	0	—	—	—	0	1	—	—	—	0	0	—	—
Pennsylvania	7	28	55	7	44	—	0	0	—	—	—	0	0	—	—
E.N. Central	47	119	232	47	154	—	0	4	—	—	—	0	3	—	—
Illinois	—	31	73	—	33	—	0	3	—	—	—	0	0	—	—
Indiana	—	7	30	—	11	—	0	1	—	—	—	0	1	—	—
Michigan	12	41	84	12	52	—	0	1	—	—	—	0	0	—	—
Ohio	34	35	88	34	48	—	0	0	—	—	—	0	2	—	—
Wisconsin	1	8	57	1	10	—	0	1	—	—	—	0	0	—	—
W.N. Central	2	15	62	2	20	—	0	5	—	—	—	0	11	—	—
Iowa	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
Kansas	—	3	19	—	—	—	0	1	—	—	—	0	2	—	—
Minnesota	—	0	0	—	—	—	0	1	—	—	—	0	1	—	—
Missouri	2	8	51	2	20	—	0	2	—	—	—	0	6	—	—
Nebraska <sup>6</sup>	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
North Dakota	—	0	26	—	—	—	0	0	—	—	—	0	1	—	—
South Dakota	—	0	2	—	—	—	0	3	—	—	—	0	2	—	—
S. Atlantic	14	29	109	14	31	—	0	3	—	—	—	0	1	—	—
Delaware	—	0	2	—	1	—	0	0	—	—	—	0	0	—	—
District of Columbia	—	0	3	—	—	—	0	0	—	—	—	0	0	—	—
Florida	8	15	61	8	21	—	0	1	—	—	—	0	1	—	—
Georgia	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Maryland <sup>6</sup>	N	0	0	N	N	—	0	0	—	—	—	0	1	—	—
North Carolina	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
South Carolina <sup>6</sup>	—	0	54	—	2	—	0	2	—	—	—	0	0	—	—
Virginia <sup>6</sup>	—	0	9	—	3	—	0	1	—	—	—	0	0	—	—
West Virginia	6	9	32	6	4	—	0	0	—	—	—	0	0	—	—
E.S. Central	—	9	29	—	9	—	0	6	—	—	—	0	4	—	—
Alabama <sup>6</sup>	—	9	27	—	9	—	0	0	—	—	—	0	0	—	—
Kentucky	N	0	0	N	N	—	0	1	—	—	—	0	0	—	—
Mississippi	—	0	2	—	—	—	0	5	—	—	—	0	4	—	—
Tennessee <sup>6</sup>	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
W.S. Central	—	71	260	—	47	—	0	17	—	—	—	0	6	—	—
Arkansas <sup>6</sup>	—	0	23	—	6	—	0	1	—	—	—	0	0	—	—
Louisiana	—	1	7	—	1	—	0	2	—	—	—	0	4	—	—
Oklahoma	N	0	0	N	N	—	0	2	—	—	—	0	2	—	—
Texas <sup>6</sup>	—	69	244	—	40	—	0	14	—	—	—	0	4	—	—
Mountain	17	18	62	17	61	—	0	12	—	—	—	0	17	—	—
Arizona	—	0	0	—	—	—	0	4	—	—	—	0	2	—	—
Colorado	17	9	33	17	17	—	0	7	—	—	—	0	14	—	—
Idaho <sup>6</sup>	N	0	0	N	N	—	0	3	—	—	—	0	5	—	—
Montana <sup>6</sup>	—	0	16	—	10	—	0	1	—	—	—	0	1	—	—
Nevada <sup>6</sup>	N	0	0	N	N	—	0	2	—	—	—	0	1	—	—
New Mexico <sup>6</sup>	—	0	20	—	12	—	0	2	—	—	—	0	1	—	—
Utah	—	7	32	—	22	—	0	1	—	—	—	0	1	—	—
Wyoming <sup>6</sup>	—	0	0	—	—	—	0	1	—	—	—	0	2	—	—
Pacific	—	1	6	—	2	—	0	12	—	—	—	0	12	—	—
Alaska	—	1	5	—	2	—	0	0	—	—	—	0	0	—	—
California	—	0	0	—	—	—	0	8	—	—	—	0	6	—	—
Hawaii	—	0	4	—	—	—	0	0	—	—	—	0	0	—	—
Oregon	N	0	0	N	N	—	0	1	—	—	—	0	4	—	—
Washington	N	0	0	N	N	—	0	6	—	—	—	0	3	—	—
American Samoa	N	0	0	N	N	—	0	0	—	—	—	0	0	—	—
C.N.M.I.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Guam	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—
Puerto Rico	—	6	26	—	3	—	0	0	—	—	—	0	0	—	—
U.S. Virgin Islands	—	0	0	—	—	—	0	0	—	—	—	0	0	—	—

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* Incidence data for reporting years 2009 and 2010 are provisional. Data for HIV/AIDS, AIDS, and TB, when available, are displayed in Table IV, which appears quarterly.

† Updated weekly from reports to the Division of Vector-Borne Infectious Diseases, National Center for Zoonotic, Vector-Borne, and Enteric Diseases (ArboNET Surveillance). Data for California serogroup, eastern equine, Powassan, St. Louis, and western equine diseases are available in Table I.

‡ Not reportable in all states. Data from states where the condition is not reportable are excluded from this table, except starting in 2007 for the domestic arboviral diseases and influenza-associated pediatric mortality, and in 2003 for SARS-CoV. Reporting exceptions are available at <http://www.cdc.gov/epo/dphsi/phs/infdis.htm>.

§ Contains data reported through the National Electronic Disease Surveillance System (NEDSS).

## Notifiable Diseases and Mortality Tables

TABLE III. Deaths in 122 U.S. cities,\* week ending January 9, 2010 (1st week)

Reporting area	All causes, by age (years)						P&† Total	Reporting area	All causes, by age (years)						P&† Total
	All Ages	≥65	45-64	25-44	1-24	<1			All Ages	≥65	45-64	25-44	1-24	<1	
New England	675	468	158	34	7	8	75	S. Atlantic	1,380	924	318	88	34	16	68
Boston, MA	181	121	45	12	1	2	17	Atlanta, GA	112	64	33	10	4	1	2
Bridgeport, CT	32	19	12	1	—	—	5	Baltimore, MD	137	82	43	8	3	1	8
Cambridge, MA	25	19	6	—	—	—	2	Charlotte, NC	128	98	20	8	1	1	9
Fall River, MA	23	20	3	—	—	—	3	Jacksonville, FL	217	164	35	13	4	1	12
Hartford, CT	59	31	27	—	1	—	7	Miami, FL	106	78	15	9	2	2	3
Lowell, MA	25	19	4	—	—	2	2	Norfolk, VA	97	68	25	3	1	—	4
Lynn, MA	15	11	2	2	—	—	1	Richmond, VA	79	47	19	9	3	1	4
New Bedford, MA	39	28	6	4	1	—	3	Savannah, GA	52	34	12	3	3	—	4
New Haven, CT	34	26	5	1	1	1	9	St. Petersburg, FL	82	52	22	3	3	2	3
Providence, RI	77	52	18	4	2	1	8	Tampa, FL	245	164	52	16	9	4	14
Somerville, MA	1	1	—	—	—	—	—	Washington, D.C.	103	56	38	5	1	3	2
Springfield, MA	51	45	4	1	—	1	2	Wilmington, DE	22	17	4	1	—	—	3
Waterbury, CT	30	19	7	4	—	—	5	E.S. Central	996	617	259	53	18	26	96
Worcester, MA	83	57	19	5	1	1	11	Birmingham, AL	166	105	44	7	4	6	18
Mid. Atlantic	2,342	1,712	465	103	34	28	145	Chattanooga, TN	92	59	26	6	1	—	8
Albany, NY	37	26	10	1	—	—	4	Knoxville, TN	138	99	29	5	1	4	21
Allentown, PA	28	24	3	1	—	—	1	Lexington, KY	75	40	29	6	—	—	3
Buffalo, NY	82	57	13	7	2	3	5	Memphis, TN	200	110	60	17	8	5	23
Camden, NJ	43	27	11	4	—	1	—	Mobile, AL	79	48	4	2	—	2	3
Elizabeth, NJ	21	12	7	2	—	—	1	Montgomery, AL	42	31	11	—	—	—	8
Erie, PA	47	40	5	1	—	1	3	Nashville, TN	204	125	56	10	4	9	12
Jersey City, NJ	10	4	6	—	—	—	—	W.S. Central	1,615	1,032	381	111	49	42	106
New York City, NY	1,454	1,049	303	67	21	14	95	Austin, TX	100	66	25	6	3	—	8
Newark, NJ	29	11	15	—	2	1	—	Baton Rouge, LA	66	40	10	9	7	—	—
Paterson, NJ	5	4	—	—	—	1	1	Corpus Christi, TX	66	43	18	3	2	—	8
Philadelphia, PA	121	94	20	7	—	—	5	Dallas, TX	312	176	74	28	10	24	21
Pittsburgh, PA <sup>§</sup>	50	36	10	—	2	2	7	El Paso, TX	139	100	26	7	4	2	6
Reading, PA	35	30	4	1	—	—	—	Fort Worth, TX	U	U	U	U	U	U	U
Rochester, NY	139	110	21	2	5	1	9	Houston, TX	298	193	71	24	6	4	18
Schenectady, NY	26	22	3	1	—	—	2	Little Rock, AR	89	56	23	5	—	5	2
Scranton, PA	29	26	2	—	—	1	2	New Orleans, LA	U	U	U	U	U	U	U
Syracuse, NY	119	91	20	5	—	3	9	San Antonio, TX	273	186	64	14	7	2	25
Trenton, NJ	24	16	5	2	1	—	1	Shreveport, LA	116	66	30	11	5	4	8
Utica, NY	14	10	2	2	—	—	—	Tulsa, OK	156	106	40	4	5	1	10
Yonkers, NY	29	23	5	—	1	—	—	Mountain	1,105	748	249	59	23	24	66
E.N. Central	1,958	1,325	465	102	38	28	132	Albuquerque, NM	144	106	27	8	1	2	9
Akron, OH	65	46	13	4	1	1	6	Boise, ID	73	55	12	1	1	4	7
Canton, OH	40	28	8	1	3	—	6	Colorado Springs, CO	84	59	19	3	1	2	4
Chicago, IL	U	U	U	U	U	U	U	Denver, CO	112	76	25	7	2	2	9
Cincinnati, OH	U	U	U	U	U	U	U	Las Vegas, NV	303	191	81	19	5	7	18
Cleveland, OH	320	230	66	20	2	2	13	Ogden, UT	40	32	5	2	1	—	2
Columbus, OH	238	156	55	10	6	11	17	Phoenix, AZ	U	U	U	U	U	U	U
Dayton, OH	127	91	25	6	5	—	8	Pueblo, CO	28	19	8	1	—	—	2
Detroit, MI	290	153	95	29	10	3	13	Salt Lake City, UT	156	80	46	14	10	6	7
Evansville, IN	70	47	21	1	1	—	4	Tucson, AZ	165	130	26	4	2	1	8
Fort Wayne, IN	97	74	17	4	1	1	7	Pacific	1,827	1,285	368	96	53	25	167
Gary, IN	4	1	2	1	—	—	—	Berkeley, CA	16	8	7	1	—	—	5
Grand Rapids, MI	49	32	11	4	1	1	7	Fresno, CA	166	125	32	7	2	—	17
Indianapolis, IN	171	116	40	6	6	3	14	Glendale, CA	42	37	5	—	—	—	7
Lansing, MI	45	35	7	2	1	—	3	Honolulu, HI	96	71	19	3	2	1	11
Milwaukee, WI	137	84	48	4	—	1	10	Long Beach, CA	63	36	20	3	3	1	6
Peoria, IL	U	U	U	U	U	U	U	Los Angeles, CA	318	196	70	31	15	6	35
Rockford, IL	79	53	18	4	1	3	6	Pasadena, CA	37	32	4	—	1	—	6
South Bend, IN	57	48	8	—	—	1	4	Portland, OR	155	113	27	6	7	2	10
Toledo, OH	81	57	20	4	—	—	8	Sacramento, CA	130	94	26	6	4	—	14
Youngstown, OH	88	74	11	2	—	1	6	San Diego, CA	61	48	9	2	2	—	4
W.N. Central	769	515	186	41	11	14	64	San Francisco, CA	144	92	37	8	3	4	17
Des Moines, IA	111	79	25	4	3	—	11	San Jose, CA	232	170	43	10	4	5	20
Duluth, MN	41	31	9	1	—	—	1	Santa Cruz, CA	25	17	3	2	2	1	1
Kansas City, KS	39	21	11	7	—	—	4	Seattle, WA	148	99	30	11	3	5	5
Kansas City, MO	108	75	23	6	1	3	10	Spokane, WA	63	53	8	1	1	—	3
Lincoln, NE	49	39	9	1	—	—	6	Tacoma, WA	131	94	28	5	4	—	6
Minneapolis, MN	76	50	18	4	—	4	7	Total <sup>¶</sup>	12,667	8,626	2,849	687	267	211	919
Omaha, NE	90	58	24	4	2	2	11								
St. Louis, MO	98	50	29	9	5	3	6								
St. Paul, MN	65	43	17	3	—	2	5								
Wichita, KS	92	69	21	2	—	—	3								

U: Unavailable. —: No reported cases.

\* Mortality data in this table are voluntarily reported from 122 cities in the United States, most of which have populations of >100,000. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

† Pneumonia and influenza.

§ Because of changes in reporting methods in this Pennsylvania city, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

¶ Total includes unknown ages.

## Notifiable Diseases and Mortality Tables

TABLE IV. Provisional cases of selected notifiable disease,\* United States, quarter ending January 2, 2010 (52nd week)

Reporting area	Tuberculosis <sup>†</sup>				
	Current quarter	Previous 4 quarters		Cum 2009	Cum 2008
		Min	Max		
United States	1,823	1,823	2,776	9,388	12,928
New England	70	70	98	351	430
Connecticut	11	11	25	75	98
Maine	—	0	4	7	9
Massachusetts	55	55	59	228	262
New Hampshire	—	0	6	16	19
Rhode Island	2	2	7	19	36
Vermont	2	0	3	6	6
Mid. Atlantic	180	180	386	1,259	2,004
New Jersey	79	70	106	348	422
New York (Upstate)	39	39	55	186	303
New York City	20	20	204	593	893
Pennsylvania	42	15	55	132	386
E.N. Central	103	103	189	619	988
Illinois	45	45	91	287	481
Indiana	38	25	38	122	118
Michigan	—	0	22	39	172
Ohio	19	19	53	159	213
Wisconsin	1	1	6	12	4
W.N. Central	52	51	84	252	476
Iowa	4	4	12	34	49
Kansas	—	0	0	—	57
Minnesota	22	8	36	98	211
Missouri	21	13	27	81	107
Nebraska	2	2	7	20	33
North Dakota	1	1	1	4	3
South Dakota	2	2	5	15	16
S. Atlantic	313	313	604	1,915	2,635
Delaware	1	1	7	15	23
District of Columbia	9	7	13	41	54
Florida	79	79	233	696	957
Georgia	46	46	109	358	484
Maryland	70	31	70	213	278
North Carolina	11	11	74	192	331
South Carolina	33	31	51	153	188
Virginia	63	32	68	230	292
West Virginia	1	1	8	17	28
E.S. Central	134	77	163	526	676
Alabama	41	34	47	165	176
Kentucky	19	2	27	52	101
Mississippi	27	15	38	114	117
Tennessee	47	26	67	195	282
W.S. Central	175	175	453	1,440	1,914
Arkansas	3	3	27	62	84
Louisiana	11	0	67	119	227
Oklahoma	38	5	38	103	100
Texas	123	123	363	1,156	1,503
Mountain	81	66	155	444	544
Arizona	41	15	75	194	227
Colorado	12	12	23	67	103
Idaho	5	3	6	17	11
Montana	—	0	4	6	9
Nevada	6	6	43	85	102
New Mexico	7	7	14	36	60
Utah	10	7	11	37	27
Wyoming	—	0	2	2	5
Pacific	715	556	715	2,582	3,261
Alaska	8	1	12	30	50
California	475	475	604	2,189	2,784
Hawaii	23	23	37	124	124
Oregon	8	8	12	38	75
Washington	201	0	201	201	228
American Samoa	—	0	0	—	3
C.N.M.I.	—	0	0	—	34
Guam	—	0	0	—	90
Puerto Rico	—	0	5	5	95
U.S. Virgin Islands	—	0	0	—	4

C.N.M.I.: Commonwealth of Northern Mariana Islands.

U: Unavailable. —: No reported cases. N: Not reportable. NN: Not Nationally Notifiable. Cum: Cumulative year-to-date counts. Med: Median. Max: Maximum.

\* CDC is in the process of upgrading the national surveillance data management system for human immunodeficiency virus/acquired immunodeficiency syndrome. As a result, the quarterly data scheduled for this issue of MMWR is not being published in Table IV.

† CDC is in the process of implementing Public Health Information Network tuberculosis (TB) case notification message standards, which will simplify reporting of TB cases. As a result, TB provisional incidence counts for 2009 are now reported from the National Electronic Disease Surveillance System (NEDSS) and the Tuberculosis Information Management System (TIMS) data sources. Previously, provisional TB incidence counts were reported through the National Electronic Telecommunications System for Surveillance (NETSS). The 2009 TB provisional incidence counts are low in some reporting jurisdictions as these areas continue to catch up with data entry and transmission to CDC during this transition.



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Data presented by the Notifiable Disease Data Team and 122 Cities Mortality Data Team in the weekly *MMWR* are provisional, based on weekly reports to CDC by state health departments. Address all inquiries about the *MMWR* Series, including material to be considered for publication, to Editor, *MMWR* Series, Mailstop E-90, CDC, 1600 Clifton Rd., N.E., Atlanta, GA 30333 or to [mmwrq@cdc.gov](mailto:mmwrq@cdc.gov).

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# Recommended Adult Immunization Schedule — United States, 2010

**MMWR**  
QuickGuide

Weekly

January 15, 2010 / Vol. 59 / No. 1

The Advisory Committee on Immunization Practices (ACIP) annually reviews the recommended Adult Immunization Schedule to ensure that the schedule reflects current recommendations for the licensed vaccines. In October 2009, ACIP approved the Adult Immunization Schedule for 2010, which includes several changes. A bivalent human papillomavirus vaccine (HPV2) was licensed for use in females in October 2009. ACIP recommends vaccination of females with either HPV2 or the quadrivalent human papillomavirus vaccine (HPV4). HPV4 was licensed for use in males in October 2009, and ACIP issued a permissive recommendation for use in males. Introductory sentences were added to the footnotes for measles, mumps, rubella, influenza, pneumococcal, hepatitis A, hepatitis B, and meningococcal vaccines. Clarifications were made to the footnotes for measles, mumps, rubella, influenza, hepatitis A, meningococcal, and *Haemophilus influenzae* type b vaccines, and schedule information was added to the hepatitis B vaccine footnote.

Additional information is available as follows: schedule (in English and Spanish) at <http://www.cdc.gov/vaccines/recs/schedules/adult-schedule.htm>; adult vaccination at <http://www.cdc.gov/vaccines/default.htm>; ACIP statements for specific vaccines at <http://www.cdc.gov/vaccine/pubs/acip-list.htm>; and reporting adverse events at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

The Recommended Adult Immunization Schedule has been approved by the Advisory Committee on Immunization Practices, the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the American College of Physicians.

**Suggested citation:** Centers for Disease Control and Prevention. Recommended adult immunization schedule—United States, 2010. *MMWR* 2010;59(1).

## Changes for 2010

### Footnotes (Figures 1 and 2)

- The human papillomavirus (HPV) footnote (#2) includes language that a bivalent HPV vaccine (HPV2) has been licensed for use in females. Either HPV2 or the quadrivalent human papillomavirus vaccine (HPV4) can be used for vaccination of females aged 19 through 26 years. In addition, language has been added to indicate that ACIP issued a permissive recommendation for use of HPV4 in males.
- The measles, mumps, rubella (MMR) footnote (#5) has language added to clarify which adults born during or after 1957 do not need 1 or more doses of MMR vaccine for the measles and mumps components, and clarifies which women should receive a dose of MMR vaccine. Also, interval dosing information has been added to indicate when a second dose of MMR vaccine should be administered. Language has been added to highlight recommendations for vaccinating health-care personnel born before 1957 routinely and during outbreaks.
- The term “seasonal” has been added to the influenza footnote (#6).
- The hepatitis A footnote (#9) has language added to indicate that unvaccinated persons who anticipate close contact with an international adoptee should consider vaccination.
- The hepatitis B footnote (#10) has language added to include schedule information for the 3-dose hepatitis B vaccine.
- The meningococcal vaccine footnote (#11) clarifies which vaccine formulations are preferred for adults aged  $\leq 55$  years and  $\geq 56$  years, and which vaccine formulation can be used for revaccination. New examples have been added to demonstrate who should and should not be considered for revaccination.
- The selected conditions for *Haemophilus influenzae* type b (Hib) footnote (#13) clarifies which high-risk persons may receive 1 dose of Hib vaccine.

**FIGURE 1. Recommended adult immunization schedule, by vaccine and age group — United States, 2010**

VACCINE ▼	AGE GROUP ►	19–26 years	27–49 years	50–59 years	60–64 years	≥65 years
Tetanus, diphtheria, pertussis (Td/Tdap) <sup>1,*</sup>		Substitute one-time dose of Tdap for Td booster; then boost with Td every 10 years				Td booster every 10 years
Human papillomavirus <sup>2,*</sup>		3 doses (females)				
Varicella <sup>3,*</sup>		2 doses				
Zoster <sup>4</sup>					1 dose	
Measles, mumps, rubella <sup>5,*</sup>		1 or 2 doses		1 dose		
Influenza <sup>6,*</sup>		1 dose annually				
Pneumococcal (polysaccharide) <sup>7,8</sup>		1 or 2 doses				1 dose
Hepatitis A <sup>9,*</sup>		2 doses				
Hepatitis B <sup>10,*</sup>		3 doses				
Meningococcal <sup>11,*</sup>		1 or more doses				

\* Covered by the Vaccine Injury Compensation Program. For all persons in this category who meet the age requirements and who lack evidence of immunity (e.g., lack documentation of vaccination or have no evidence of prior infection) Recommended if some other risk factor is present (e.g., based on medical, occupational, lifestyle, or other indications) No recommendation

**FIGURE 2. Vaccines that might be indicated for adults, based on medical and other indications — United States, 2010**

INDICATION ►	VACCINE ▼	Pregnancy	Immunocompromising conditions (excluding human immunodeficiency virus [HIV]) <sup>3–5,12</sup>	HIV infection <sup>3–5,12,13</sup> CD4+ T lymphocyte count	Diabetes, heart disease, chronic lung disease, chronic alcoholism	Asplenia <sup>13</sup> (including elective splenectomy and persistent complement component deficiencies)	Chronic liver disease	Kidney failure, end-stage renal disease, receipt of hemodialysis	Health-care personnel
Tetanus, diphtheria, pertussis (Td/Tdap) <sup>1,*</sup>	Td	Substitute one-time dose of Tdap for Td booster; then boost with Td every 10 years							
Human papillomavirus <sup>2,*</sup>		3 doses for females through age 26 years							
Varicella <sup>3,*</sup>		Contraindicated		2 doses					
Zoster <sup>4</sup>		Contraindicated		1 dose					
Measles, mumps, rubella <sup>5,*</sup>		Contraindicated		1 or 2 doses					
Influenza <sup>6,*</sup>		1 dose TIV annually							1 dose TIV or LAIV annually
Pneumococcal (polysaccharide) <sup>7,8</sup>		1 or 2 doses							
Hepatitis A <sup>9,*</sup>		2 doses							
Hepatitis B <sup>10,*</sup>		3 doses							
Meningococcal <sup>11,*</sup>		1 or more doses							

\* Covered by the Vaccine Injury Compensation Program. For all persons in this category who meet the age requirements and who lack evidence of immunity (e.g., lack documentation of vaccination or have no evidence of prior infection) Recommended if some other risk factor is present (e.g., based on medical, occupational, lifestyle, or other indications) No recommendation

**NOTE:** The above recommendations must be read along with the footnotes on pages Q3–Q4 of this schedule.

**1. Tetanus, diphtheria, and acellular pertussis (Td/Tdap) vaccination**

Tdap should replace a single dose of Td for adults aged 19–64 years who have not received a dose of Tdap previously.

Adults with uncertain or incomplete history of primary vaccination series with tetanus and diphtheria toxoid-containing vaccines should begin or complete a primary vaccination series. A primary series for adults is 3 doses of tetanus and diphtheria toxoid-containing vaccines; administer the first 2 doses at least 4 weeks apart and the third dose 6–12 months after the

second; Tdap can substitute for any one of the doses of Td in the 3-dose primary series. The booster dose of tetanus and diphtheria toxoid-containing vaccine should be administered to adults who have completed a primary series and if the last vaccination was received ≥10 years previously. Tdap or Td vaccine may be used, as indicated.

If a woman is pregnant and received the last Td vaccination ≥10 years previously, administer Td during the second or third trimester. If the woman received the last Td vaccination <10 years previously, administer Tdap

during the immediate postpartum period. A dose of Tdap is recommended for postpartum women, close contacts of infants aged <12 months, and all health-care personnel with direct patient contact if they have not previously received Tdap. An interval as short as 2 years from the last Td vaccination is suggested; shorter intervals can be used. Td may be deferred during pregnancy and Tdap substituted in the immediate postpartum period, or Tdap can be administered instead of Td to a pregnant woman.

Consult the ACIP statement for recommendations for giving Td as prophylaxis in wound management.

## 2. Human papillomavirus (HPV) vaccination

HPV vaccination is recommended at age 11 or 12 years with catch-up vaccination at ages 13 through 26 years.

Ideally, vaccine should be administered before potential exposure to HPV through sexual activity; however, females who are sexually active should still be vaccinated consistent with age-based recommendations. Sexually active females who have not been infected with any of the four HPV vaccine types (types 6, 11, 16, 18, all of which HPV4 prevents) or any of the two HPV vaccine types (types 16 and 18, both of which HPV2 prevents) receive the full benefit of the vaccination. Vaccination is less beneficial for females who have already been infected with one or more of the HPV vaccine types. HPV4 or HPV2 can be administered to persons with a history of genital warts, abnormal Papanicolaou test, or positive HPV DNA test, because these conditions are not evidence of prior infection with all vaccine HPV types.

HPV4 may be administered to males aged 9 through 26 years to reduce their likelihood of acquiring genital warts. HPV4 would be most effective when administered before exposure to HPV through sexual contact.

A complete series for either HPV4 or HPV2 consists of 3 doses. The second dose should be administered 1–2 months after the first dose; the third dose should be administered 6 months after the first dose.

Although HPV vaccination is not specifically recommended for persons with the medical indications described in Figure 2, "Vaccines that might be indicated for adults based on medical and other indications," it may be administered to these persons because the HPV vaccine is not a live-virus vaccine. However, the immune response and vaccine efficacy might be less for persons with the medical indications described in Figure 2 than in persons who do not have the medical indications described or who are immunocompetent. Health-care personnel are not at increased risk because of occupational exposure and should be vaccinated consistent with age-based recommendations.

## 3. Varicella vaccination

All adults without evidence of immunity to varicella should receive 2 doses of single-antigen varicella vaccine if not previously vaccinated or the second dose if they have received only 1 dose, unless they have a medical contraindication. Special consideration should be given to those who 1) have close contact with persons at high risk for severe disease (e.g., health-care personnel and family contacts of persons with immunocompromising conditions) or 2) are at high risk for exposure or transmission (e.g., teachers; child-care employees; residents and staff members of institutional settings, including correctional institutions; college students; military personnel; adolescents and adults living in households with children; nonpregnant women of childbearing age; and international travelers).

Evidence of immunity to varicella in adults includes any of the following: 1) documentation of 2 doses of varicella vaccine at least 4 weeks apart; 2) U.S.-born before 1980 (although for health-care personnel and pregnant women, birth before 1980 should not be considered evidence of immunity); 3) history of varicella based on diagnosis or verification of varicella by a health-care provider (for a patient reporting a history of or having an atypical case, a mild case, or both, health-care providers should seek either an epidemiologic link with a typical varicella case or to a laboratory-confirmed case or evidence of laboratory confirmation, if it was performed at the time of acute disease); 4) history of herpes zoster based on diagnosis or verification of herpes zoster by a health-care provider; or 5) laboratory evidence of immunity or laboratory confirmation of disease.

Pregnant women should be assessed for evidence of varicella immunity. Women who do not have evidence of immunity should receive the first dose of varicella vaccine upon completion or termination of pregnancy and before discharge from the health-care facility. The second dose should be administered 4–8 weeks after the first dose.

## 4. Herpes zoster vaccination

A single dose of zoster vaccine is recommended for adults aged ≥60 years regardless of whether they report a prior episode of herpes zoster. Persons with chronic medical conditions may be vaccinated unless their condition constitutes a contraindication.

## 5. Measles, mumps, rubella (MMR) vaccination

Adults born before 1957 generally are considered immune to measles and mumps.

*Measles component:* Adults born during or after 1957 should receive 1 or more doses of MMR vaccine unless they have 1) a medical contraindication; 2) documentation of vaccination with 1 or more doses of MMR vaccine; 3) laboratory evidence of immunity; or 4) documentation of physician-diagnosed measles.

A second dose of MMR vaccine, administered 4 weeks after the first dose, is recommended for adults who 1) have been recently exposed to measles or are in an outbreak setting; 2) have been vaccinated previously with killed measles vaccine; 3) have been vaccinated with an unknown type of measles vaccine during 1963–1967; 4) are students in postsecondary educational institutions; 5) work in a health-care facility; or 6) plan to travel internationally.

*Mumps component:* Adults born during or after 1957 should receive 1 dose of MMR vaccine unless they have 1) a medical contraindication; 2) documentation of vaccination with 1 or more doses of MMR vaccine; 3) laboratory evidence of immunity; or 4) documentation of physician-diagnosed mumps.

A second dose of MMR vaccine, administered 4 weeks after the first dose, is recommended for adults who 1) live in a community experiencing a mumps outbreak and are in an affected age group; 2) are students in postsecondary educational institutions; 3) work in a health-care facility; or 4) plan to travel internationally.

*Rubella component:* 1 dose of MMR vaccine is recommended for women who do not have documentation of rubella vaccination, or who lack laboratory evidence of immunity. For women of childbearing age, regardless of birth year, rubella immunity should be determined, and women should be counseled regarding congenital rubella syndrome. Women who do not have evidence of immunity should receive MMR vaccine upon completion or termination of pregnancy and before discharge from the health-care facility.

*Health-care personnel born before 1957:* For unvaccinated health-care personnel born before 1957 who lack laboratory evidence of measles, mumps, and/or rubella immunity or laboratory confirmation of disease, health-care facilities should consider vaccinating personnel with 2 doses of MMR vaccine at the appropriate interval (for measles and mumps) and 1 dose of MMR vaccine (for rubella), respectively.

During outbreaks, health-care facilities should recommend that unvaccinated health-care personnel born before 1957, who lack laboratory evidence of measles, mumps, and/or rubella immunity or laboratory confirmation of disease, receive 2 doses of MMR vaccine during an outbreak of measles or mumps, and 1 dose during an outbreak of rubella.

Complete information about evidence of immunity is available at <http://www.cdc.gov/vaccines/recs/provisional/default.htm>.

## 6. Seasonal influenza vaccination

Vaccinate all persons aged ≥50 years and any younger persons who would like to decrease their risk for influenza. Vaccinate persons aged 19 through 49 years with any of the following indications.

*Medical:* Chronic disorders of the cardiovascular or pulmonary systems, including asthma; chronic metabolic diseases (including diabetes mellitus); renal or hepatic dysfunction, hemoglobinopathies, or immunocompromising conditions (including immunocompromising conditions caused by medications or HIV); cognitive, neurologic, or neuromuscular disorders; and pregnancy during the influenza season. No data exist on the risk for severe or complicated influenza disease among persons with asplenia; however, influenza is a risk factor for secondary bacterial infections that can cause severe disease among persons with asplenia.

*Occupational:* All health-care personnel, including those employed by long-term care and assisted-living facilities, and caregivers of children aged <5 years.

*Other:* Residents of nursing homes and other long-term care and assisted-living facilities; persons likely to transmit influenza to persons at high risk (e.g., in-home household contacts and caregivers of children aged <5 years, persons aged ≥50 years, and persons of all ages with high-risk conditions).

Healthy, nonpregnant adults aged <50 years without high-risk medical conditions who are not contacts of severely immunocompromised persons in special-care units may receive either intranasally administered live, attenuated influenza vaccine (FluMist) or inactivated vaccine. Other persons should receive the inactivated vaccine.

## 7. Pneumococcal polysaccharide (PPSV) vaccination

Vaccinate all persons with the following indications.

*Medical:* Chronic lung disease (including asthma); chronic cardiovascular diseases; diabetes mellitus; chronic liver diseases, cirrhosis; chronic alcoholism; functional or anatomic asplenia (e.g., sickle cell disease or

splenectomy [if elective splenectomy is planned, vaccinate at least 2 weeks before surgery]; immunocompromising conditions (including chronic renal failure or nephrotic syndrome); and cochlear implants and cerebrospinal fluid leaks. Vaccinate as close to HIV diagnosis as possible.

**Other:** Residents of nursing homes or long-term care facilities and persons who smoke cigarettes. Routine use of PPSV is not recommended for American Indians/Alaska Natives or persons aged <65 years unless they have underlying medical conditions that are PPSV indications. However, public health authorities may consider recommending PPSV for American Indians/Alaska Natives and persons aged 50 through 64 years who are living in areas where the risk for invasive pneumococcal disease is increased.

#### 8. Revaccination with PPSV

One-time revaccination after 5 years is recommended for persons with chronic renal failure or nephrotic syndrome; functional or anatomic asplenia (e.g., sickle cell disease or splenectomy); and for persons with immunocompromising conditions. For persons aged ≥65 years, one-time revaccination is recommended if they were vaccinated ≥5 years previously and were aged <65 years at the time of primary vaccination.

#### 9. Hepatitis A vaccination

Vaccinate persons with any of the following indications and any person seeking protection from hepatitis A virus (HAV) infection.

**Behavioral:** Men who have sex with men and persons who use injection drugs.

**Occupational:** Persons working with HAV-infected primates or with HAV in a research laboratory setting.

**Medical:** Persons with chronic liver disease and persons who receive clotting factor concentrates.

**Other:** Persons traveling to or working in countries that have high or intermediate endemicity of hepatitis A (a list of countries is available at <http://www.cdc.gov/travel/content/diseases.aspx>).

Unvaccinated persons who anticipate close personal contact (e.g., household contact or regular babysitting) with an international adoptee from a country of high or intermediate endemicity during the first 60 days after arrival of the adoptee in the United States should consider vaccination. The first dose of the 2-dose hepatitis A vaccine series should be administered as soon as adoption is planned, ideally ≥2 weeks before the arrival of the adoptee.

Single-antigen vaccine formulations should be administered in a 2-dose schedule at either 0 and 6–12 months (Havrix), or 0 and 6–18 months (Vaqta). If the combined hepatitis A and hepatitis B vaccine (Twinrix) is used, administer 3 doses at 0, 1, and 6 months; alternatively, a 4-dose schedule, administered on days 0, 7, and 21–30 followed by a booster dose at month 12 may be used.

#### 10. Hepatitis B vaccination

Vaccinate persons with any of the following indications and any person seeking protection from hepatitis B virus (HBV) infection.

**Behavioral:** Sexually active persons who are not in a long-term, mutually monogamous relationship (e.g., persons with more than one sex partner during the previous 6 months); persons seeking evaluation or treatment for a sexually transmitted disease (STD); current or recent injection-drug users; and men who have sex with men.

**Occupational:** Health-care personnel and public-safety workers who are exposed to blood or other potentially infectious body fluids.

**Medical:** Persons with end-stage renal disease, including patients receiving hemodialysis; persons with HIV infection; and persons with chronic liver disease.

**Other:** Household contacts and sex partners of persons with chronic HBV infection; clients and staff members of institutions for persons with

developmental disabilities; and international travelers to countries with high or intermediate prevalence of chronic HBV infection (a list of countries is available at <http://www.cdc.gov/travel/content/diseases.aspx>).

Hepatitis B vaccination is recommended for all adults in the following settings: STD treatment facilities; HIV testing and treatment facilities; facilities providing drug-abuse treatment and prevention services; health-care settings targeting services to injection-drug users or men who have sex with men; correctional facilities; end-stage renal disease programs and facilities for chronic hemodialysis patients; and institutions and nonresidential day-care facilities for persons with developmental disabilities.

Administer or complete a 3-dose series of hepatitis B vaccine to those persons not previously vaccinated. The second dose should be administered 1 month after the first dose; the third dose should be administered at least 2 months after the second dose (and at least 4 months after the first dose). If the combined hepatitis A and hepatitis B vaccine (Twinrix) is used, administer 3 doses at 0, 1, and 6 months; alternatively, a 4-dose schedule, administered on days 0, 7, and 21–30 followed by a booster dose at month 12 may be used.

Adult patients receiving hemodialysis or with other immunocompromising conditions should receive 1 dose of 40 µg/mL (Recombivax HB) administered on a 3-dose schedule or 2 doses of 20 µg/mL (Engerix-B) administered simultaneously on a 4-dose schedule at 0, 1, 2, and 6 months.

#### 11. Meningococcal vaccination

Meningococcal vaccine should be administered to persons with the following indications.

**Medical:** Adults with anatomic or functional asplenia, or persistent complement component deficiencies.

**Other:** First-year college students living in dormitories; microbiologists routinely exposed to isolates of *Neisseria meningitidis*; military recruits; and persons who travel to or live in countries in which meningococcal disease is hyperendemic or epidemic (e.g., the "meningitis belt" of sub-Saharan Africa during the dry season [December through June]), particularly if their contact with local populations will be prolonged. Vaccination is required by the government of Saudi Arabia for all travelers to Mecca during the annual Hajj.

Meningococcal conjugate vaccine (MCV4) is preferred for adults with any of the preceding indications who are aged ≤55 years; meningococcal polysaccharide vaccine (MPSV4) is preferred for adults aged ≥56 years. Revaccination with MCV4 after 5 years is recommended for adults previously vaccinated with MCV4 or MPSV4 who remain at increased risk for infection (e.g., adults with anatomic or functional asplenia). Persons whose only risk factor is living in on-campus housing are not recommended to receive an additional dose.

#### 12. Immunocompromising conditions

Inactivated vaccines generally are acceptable (e.g., pneumococcal, meningococcal, influenza [inactivated influenza vaccine]) and live vaccines generally are avoided in persons with immune deficiencies or immunocompromising conditions. Information on specific conditions is available at <http://www.cdc.gov/vaccines/pubs/acip-list.htm>.

#### 13. Selected conditions for which *Haemophilus influenzae* type b (Hib) vaccine may be used

Hib vaccine generally is not recommended for persons aged ≥5 years. No efficacy data are available on which to base a recommendation concerning use of Hib vaccine for older children and adults. However, studies suggest good immunogenicity in patients who have sickle cell disease, leukemia, or HIV infection or who have had a splenectomy. Administering 1 dose of Hib vaccine to these high-risk persons who have not previously received Hib vaccine is not contraindicated.

These schedules indicate the recommended age groups and medical indications for which administration of currently licensed vaccines is commonly indicated for adults aged ≥19 years, as of January 1, 2009. Licensed combination vaccines may be used whenever any components of the combination are indicated and when the vaccine's other components are not contraindicated. For detailed recommendations on all vaccines, including those that are used primarily for travelers or are issued during the year, consult the manufacturers' package inserts and the complete statements from the Advisory Committee on Immunization Practices (ACIP) (<http://www.cdc.gov/vaccines/pubs/acip-list.htm>).

Report all clinically significant postvaccination reactions to the Vaccine Adverse Event Reporting System (VAERS). Reporting forms and instructions on filing a VAERS report are available at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

Information on how to file a Vaccine Injury Compensation Program claim is available at <http://www.hrsa.gov/vaccinecompensation> or by telephone, 800-338-2382. To file a claim for vaccine injury, contact the U.S. Court of Federal Claims, 717 Madison Place, N.W., Washington, D.C. 20005; telephone, 202-357-6400.

Additional information about the vaccines in this schedule, extent of available data, and contraindications for vaccination is available at <http://www.cdc.gov/vaccines> or from the CDC-INFO Contact Center at 800-CDC-INFO (800-232-4636) in English and Spanish, 24 hours a day, 7 days a week.

Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

The recommendations in this schedule were approved by ACIP, the American Academy of Family Physicians, the American College of Obstetricians and Gynecologists, and the American College of Physicians.