Healthy Kansans living in safe and sustainable environments.
Disease Surveillance and Reporting: The Role of a School Nurse

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Objectives

• Define a reportable disease

• Describe the purpose of surveillance and the application for identifying clusters of disease

• Recall regulations and statutes referring to disease reporting

• Identify case and outbreak prevention and control measures

• Explain uses of the communicable disease handbook

• Discuss process of school immunization assessments
History

• 1878
  – Congress authorized United States Marine Hospital Service to collect information on deaths from
    • Cholera
    • Smallpox
    • Plague
    • Yellow fever
  – Used to determine quarantine measures
Definition

• Reportable diseases are diseases considered to be of great public health importance

• Local, state, and national agencies require that such diseases be reported
Definition

• Permits surveillance which allows agencies to identify trends in disease occurrence as well as disease outbreaks

• Outbreaks are reportable regardless of the organism

1-877-427-7317
EPI HOTLINE
Not Just Counting Cases

- Prevent Disease Spread
- Eradicate Disease
- Describe at Risk Groups
- Evaluate Vaccines

KANSAS DISEASE SURVEILLANCE
Types of Surveillance

- Passive
- Active
- Sentinel
- Syndromic
Passive Surveillance

• Most commonly used for infectious disease surveillance

• “Provider-initiated”

• Relies on health care providers, laboratories, hospital infection control practitioners, school nurses and administrators
Active Surveillance

• Often used during outbreaks

• Other applications
  – Surveys (e.g., Behavioral Risk Factor Surveillance System)
  – Chart review
DISEASE REPORTING
Statutes and Regulations

- **K.S.A.**: Kansas Statutes Annotated
  - Statutes or laws passed by the legislature

- **K.A.R.**: Kansas Administrative Regulation
  - Regulations adopted by the agency
Health Supervision

• K.S.A. 65-101
  – Exercise general supervision of the health of Kansans
    • Require reports of infectious diseases
    • Investigate the causes of diseases including outbreaks
    • Take action to prevent the introduction of infectious diseases into and within the state
    • Provide education and other activities
    • Adopt rules and regulations necessary to carry out these laws (K.A.R.s)
Who Reports?

- K.S.A. 65-118

*Immunity from liability
*Confidential
Who Reports?

- **K.S.A. 65-118**
  - *(K.A.R. 28-1-18)*

*Immunity for liability
*Confidential
What is Reportable?

• K.S.A. 65-128
  – Designate diseases as infectious or contagious (K.A.R. 28-1-2)
Reportable Diseases (K.A.R. 28-1-2)

**REPORTABLE DISEASES IN KANSAS for health care providers, hospitals, and laboratories**


<table>
<thead>
<tr>
<th>Disease</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquired Immune Deficiency Syndrome (AIDS)</td>
<td></td>
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<tr>
<td>Aneuriasis</td>
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<tr>
<td>Anthrax</td>
<td></td>
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<tr>
<td>Arboviral disease (including West Nile virus, Western Equine encephalitis (WEE) and St. Louis encephalitis (SLE)) - indicate virus whenever possible</td>
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<tr>
<td>Botulism</td>
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<tr>
<td>Brucellosis</td>
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<tr>
<td>Campylobacter infections</td>
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<tr>
<td>Chancroid</td>
<td></td>
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<tr>
<td>Chlamydia trachomatis genital infection</td>
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<tr>
<td>Cholera</td>
<td></td>
</tr>
<tr>
<td>Cryptosporidiosis</td>
<td></td>
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<tr>
<td>Cyclospora infection</td>
<td></td>
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<tr>
<td>Diphtheria</td>
<td></td>
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<tr>
<td>Ehrlichiosis</td>
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<tr>
<td>Escherichia coli O157:H7 (and other shiga-toxin producing E. coli, also known as STEC)</td>
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<tr>
<td>Giardiasis</td>
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<tr>
<td>Gonorrhea</td>
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<tr>
<td>Haemophilus influenza, invasive disease</td>
<td></td>
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<tr>
<td>Human Immunodeficiency Virus (HIV) (includes Viral Load Tests)</td>
<td></td>
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<tr>
<td>Influenza deaths in children &lt;18 years of age</td>
<td></td>
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<tr>
<td>Legionellosis</td>
<td></td>
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<tr>
<td>Leprosy (Hansen disease)</td>
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<tr>
<td>Listeriosis</td>
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<tr>
<td>Lyme disease</td>
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<tr>
<td>Malaria</td>
<td></td>
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<tr>
<td>Measles (rubella)</td>
<td></td>
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<tr>
<td>Meningitis, bacterial</td>
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<tr>
<td>Meningococcaemia</td>
<td></td>
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<tr>
<td>Mumps</td>
<td></td>
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<tr>
<td>Pertussis (whooping cough)</td>
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<tr>
<td>Plague (Yersinia pestis)</td>
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<tr>
<td>Potomiyelitis</td>
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<tr>
<td>Psittacosis</td>
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<tr>
<td>Q Fever (Coxiella burnetii)</td>
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<tr>
<td>Rabies, human and animal</td>
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<tr>
<td>Rocky Mountain Spotted Fever</td>
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<tr>
<td>Rubella, including congenital rubella syndrome</td>
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<tr>
<td>Salmonellosis, including typhoid fever</td>
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<tr>
<td>Severe Acute Respiratory Syndrome (SARS)</td>
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<tr>
<td>Shigellosis</td>
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<tr>
<td>Smallpox</td>
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<tr>
<td>Streptococcal invasive, drug-resistant disease from Group A Streptococcus or Streptococcus pneumoniae</td>
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<tr>
<td>Syphilis, including congenital syphilis</td>
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<tr>
<td>Tetanus</td>
<td></td>
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<tr>
<td>Toxic shock syndrome, streptococcal and staphylococcal</td>
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<tr>
<td>Transmissible Spongiform Encephalopathy (TSE) or prion disease (includes CJD)</td>
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<tr>
<td>Trichinosis</td>
<td></td>
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<tr>
<td>Tuberculosis, active disease</td>
<td></td>
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<tr>
<td>Tuberculosis, latent infection</td>
<td></td>
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<tr>
<td>Tularemia</td>
<td></td>
</tr>
<tr>
<td>Varicella (chickenpox)</td>
<td></td>
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<tr>
<td>Viral hemorrhagic fever</td>
<td></td>
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<tr>
<td>Yellow fever</td>
<td></td>
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</tbody>
</table>
Reportable Diseases (K.A.R. 28-1-2)

• Reportable within 4 hours
  – Outbreaks
  – Exotic or newly recognized disease
  – Suspect acts of terrorism
# Kansas Notifiable Disease Form

Today’s Date: __/__/__

<table>
<thead>
<tr>
<th>Patient’s Name:</th>
<th>Last</th>
<th>First</th>
<th>Middle</th>
</tr>
</thead>
</table>

Day Phone: ___________  Evening Phone: ___________

Residential Address: __________________________________________________________________

City: ___________  Zip: ___________  County: ___________

Ethnicity:  Hispanic or Latino  Not Hispanic or Latino  Unknown

Race:  (Circle all that apply)

- American Indian/Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- White
- Unknown

Sex:  M  F  Date of Birth: __/__/_______  Age if DOB unknown: __________

Disease Name: ___________________________________________________________________

Symptoms:  Onset: __/__/__

List the 3 most prominent symptoms:

Symptom 1: ___________  Symptom 2: ___________  Symptom 3: ___________

Outbreak associated?  Y  N  Died?  Y  N  Hospitalized?  Y  N

Institutional Residence?  None  Nursing Home  Correctional  Residential  Hospital  Psych

Physician Name: ___________________________________________________________________

Physician Phone: ___________

Laboratory Information:

Specimen Collection Date: __/__/_______  Date Reported To You: __/__/_______

Name of Test Performed: ___________________________________________________________________

Results of Test: ___________________________________________________________________

Name of Laboratory: ___________________________________________________________________

Laboratory Results Attached?  Y  N

Treatment Information:

Date of Treatment: __/__/_______  Treatment Type and Dosage: ___________________________________________________________________

Treatment Status:  Complete  On-going  Discontinued

Name of person reporting: ___________________________________________________________________

Phone: ___________

Comments: _____________________________________________________________________

Mail or fax reports to your local health department and/or to:

KDHE Office of Surveillance and Epidemiology, 1000 SW Jackson, Suite 210, Topeka, KS 66612-1274

Fax: 877-427-7318 (toll-free) (Revised 07/2003)
Preventing Spread of Disease

• K.S.A. 65-128
  – Regulations for the isolation and quarantine of persons that have or have been exposed to infectious diseases
  (K.A.R. 28-1-5, 28-1-6, 28-1-7, 28-1-12)
Isolation and Quarantine

• K.A.R. 28-1-5
  – Enforcement and conditions of isolation and quarantine

• K.A.R. 28-1-6
  – Disease-specific requirements for isolation and quarantine, exception definition, and “susceptible person” definition
Isolation

- Separation of contagious persons from people who are not sick
- Prevent infection and disease in susceptible persons
- Time varies by disease
Quarantine

- To remove exposed, susceptible individuals to see if they become sick
- To prevent spread of disease in the population
- Time varies by disease
“Susceptible Person”

• Has been exposed
  AND
  – No history of disease documented by a licensed physician
  OR
  – No laboratory evidence of immunity
  OR
  – No documentation acceptable to the secretary that demonstrates current immunity
Isolation for Cases

• K.A.R. 28-1-6
  – Diseases that require isolation for all cases
    • Chickenpox, Diphtheria, Meningitis caused by *Haemophilus influenzae* or *Neisseria meningitides*, Mumps, Plague, Pertussis, Polio, Rubella, Measles, Streptococcal disease, and TB
  – Diseases that require restriction or isolation from food handling
    • Amebiasis, Hepatitis A, Salmonellosis, Shiga-toxin *Escherichia coli*, Shigellosis, Staphylococcal disease, and Typhoid fever
Isolation for Cases

• K.A.R. 28-1-6
  – Diseases that require exclusion from patient, child, or elder care
    • Hepatitis A, Salmonellosis, Shiga-toxin *E. coli*, Shigellosis, and Typhoid fever
  – Diseases that require exclusion of children from school or daycare
    • Head lice, Scabies, Ringworm (Daycare and School)
    • Shiga-toxin *E. coli*, Shigellosis (Daycare only)
Quarantine for Contacts

• K.A.R. 28-1-6
  – Each susceptible person in a school or daycare shall either be vaccinated or excluded
    • Chickenpox, Mumps, Rubella, and Measles
  – Each susceptible person who is a food handler or works with children shall be excluded
    • Diphtheria
Public and Private Schools
Child Care Facilities

• K.S.A. 65-122
  – Parents or guardians, principals, or other persons in charge
    • Exclude children suspected to have an infectious disease

  – Physician or local health officer can submit a certificate if the person is not suffering from an infectious disease
Isolation and Quarantine
It’s the Law
FERPA

• Three situations in which protected student information may be released
  – is necessary to protect the health or safety of the student or other individuals
  – in juvenile court situations pursuant to the Child Abuse Prevention, Adoption and Family Services Act of 1988
  – to avert diffuse threats to the safety or health of a student or other individuals
MRSA
(Methicillin-Resistant Staphylococcus Aureus)

• Individual cases of MRSA not reportable
• Outbreaks are reportable
  – 3 or more cases epidemiologically linked
  – Available resources
    • http://www.cdc.gov/mrsa/community/schools/index.html
Lice

• Lice is not reportable

• K.A.R. 28-1-6
  – “Each student infested with lice shall be excluded from school, child care facility or family day care home until treatment with an anti-parasitic drug is initiated.”

• Kansas regulations no longer require children to be nit free before returning to school
Measles (Rubeola)

- Transmission: airborne and droplet
  - Spread by coughing and sneezing
  - Survives up to 2 hours on environmental surfaces
  - Contagious 4 days before until 4 days after rash

- 90% of susceptible contacts infected
- 20% have complications

- Signs/symptoms
  - Fever, cough, coryza, conjunctivitis
  - Maculopapular rash
    - Begins on face, spreads downwards and outwards
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  – Maculopapular rash
    • Begins on face, spreads downwards and outwards
Prevention and Control Measures - Measles

• Exclusions from school and childcare
  – Cases: Four day isolation for infected persons from onset of rash
  – Contacts: Unvaccinated contacts that do not receive vaccination within 24 hours of case notification should be excluded for 21 days from onset of last reported case

• Contacts
  – Direct contact OR share same confined airspace with case OR in a room up to 2 hours after case leaves (contact with infectious airspace)
    • School: classroom, lunchroom, teammates, playmates, bus mates
Prevention and Control Measures - Measles

• Exclusions from school and childcare
  – Cases: Four day isolation for infected persons from onset of rash
  – Contacts: Unvaccinated contacts that do not receive vaccination within 24 hours of case notification should be excluded for 21 days from onset of last reported case

• Contacts
  – Direct contact OR share same confined airspace with case OR in a room up to 2 hours after case leaves (contact with infectious airspace)
    • School: classroom, lunchroom, teammates, playmates, bus mates
Mumps

• Transmission: droplet, direct and indirect contact with respiratory secretions
  – Spread by coughing, sneezing, talking, sharing utensils
  – Contagious 2 days before until 5 days after parotitis

• Signs/symptoms (non-specific)
  – Fever
  – Headache
  – Muscle aches
  – Tiredness
  – Loss of appetite
  – Swelling of salivary glands (parotitis)
Mumps

• Transmission: droplet, direct and indirect contact with respiratory secretions
  – Spread by coughing, sneezing, talking, sharing utensils
  – Contagious 2 days before until 5 days after parotitis

• Signs/symptoms (non-specific)
  – Fever
  – Headache
  – Muscle aches
  – Tiredness
  – Loss of appetite
  – Swelling of salivary glands (parotitis)
Prevention and Control Measures - Mumps

• Exclusions from school and childcare
  – Cases: Five day isolation for infected persons from onset of illness
  – Contact: Unvaccinated contacts that do not receive vaccination within 24 hours of case notification should be excluded for 26 days from onset of last reported case

• Contacts
  – Direct contact with respiratory droplets and/or body fluids OR in close proximity (<3 feet) for extended period of time (>1 hour)
    • School: educators, classmates, teammates
Prevention and Control Measures - Mumps

• Exclusions from school and childcare
  – Cases: Five day isolation for infected persons from onset of illness
  – Contact: Unvaccinated contacts that do not receive vaccination within 24 hours of case notification should be excluded for 26 days from onset of last reported case

• Contacts
  – Direct contact with respiratory droplets and/or body fluids OR in close proximity (<3 feet) for extended period of time (>1 hour)
    • School: educators, classmates, teammates
Pertussis (Whooping Cough)

- Transmission: direct contact with respiratory secretions
  - Spread by coughing or sneezing
  - Contagious from onset of cough up to 3 weeks after

- Signs/symptoms
  - Cough lasting \( \geq 14 \) days
  - Paroxysms (uncontrollable fits of coughing)
  - Inspiratory whoop
  - Post-tussive vomiting
Pertussis (Whooping Cough)

• Transmission: direct contact with respiratory secretions
  – Spread by coughing or sneezing
  – Contagious from onset of cough up to 3 weeks after

• Signs/symptoms
  – Cough lasting ≥ 14 days
  – Paroxysms (uncontrollable fits of coughing)
  – Inspiratory whoop
  – Post-tussive vomiting
Treatment Recommendations

• All patients with pertussis should be given antibiotic treatment
  – Lessens period of communicability and can reduce duration and severity of symptoms

• Chemoprophylaxis should **ONLY** be given to household **AND** high-risk contacts including:
  – Infants <1 years old
  – Pregnant women in 3rd trimester
  – Individuals with pre-existing health conditions
  – Individuals who have close contact with high-risk persons

• Initiating treatment >3 weeks after cough onset has limited benefit to cases and contacts
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  – Individuals who have close contact with high-risk persons

• Initiating treatment >3 weeks after cough onset has limited benefit to cases and contacts
Prevention and Control Measures - Pertussis

• Exclusions from school and childcare
  – Cases: Five day isolation from initiation of antibiotic treatment OR if untreated, 3 week isolation
  – Contact: Unvaccinated contacts should be monitored closely for symptoms for 21 days after exposure and those that develop symptoms should be excluded until pertussis is no longer suspected

• Contacts
  – Direct contact with respiratory droplets OR in close proximity (<3 feet) for extended period of time (>1 hour)
    • School: educators, classmates, teammates
Prevention and Control Measures - Pertussis

• Exclusions from school and childcare
  – Cases: Five day isolation from initiation of antibiotic treatment OR if untreated, 3 week isolation
  – Contact: Unvaccinated contacts should be monitored closely for symptoms for 21 days after exposure and those that develop symptoms should be excluded until pertussis is no longer suspected

• Contacts
  – Direct contact with respiratory droplets OR in close proximity (<3 feet) for extended period of time (>1 hour)
    • School: educators, classmates, teammates
Varicella (Chickenpox)

- Transmission: airborne, droplet, and direct contact
  - Spread by coughing and sneezing, breathing in lesion particles, contact with lesions
  - Contagious 2 days before until 6 days after rash or lesions have crusted over
  - Short survival time in environment

- 90% of susceptible contacts infected

- Signs/symptoms: pruritic skin rash
  - Generally appears first on head, most concentrated on trunk
  - Maculopapular lesions evolve into vesicles
  - Successive crops over several days
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- **Signs/symptoms**: pruritic skin rash
  - Generally appears first on head, most concentrated on trunk
  - Maculopapular lesions evolve into vesicles
  - Successive crops over several days
Prevention and Control Measures - Varicella

• Exclusions from school and childcare
  – Cases: Six day isolation for infected persons from onset of rash OR until lesions have crusted over (whichever comes first)
  – Contact: Unvaccinated contacts that do not receive vaccination within 24 hours of case notification should be excluded for 21 days from onset of last reported case

• Contacts
  – Direct contact with respiratory droplets OR lesions OR inhalation of aerosols from vesicular fluid
    • School: classroom, lunch table, teammates, playmates, bus mates
Prevention and Control Measures - Varicella

• Exclusions from school and childcare
  – Cases: Six day isolation for infected persons from onset of rash OR until lesions have crusted over (whichever comes first)
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  – Direct contact with respiratory droplets OR lesions OR inhalation of aerosols from vesicular fluid
    • School: classroom, lunch table, teammates, playmates, bus mates
Varicella Reporting Form

Kansas Varicella (Chickenpox) Reporting Form

Today’s Date: ___ / ___ / ___

Name of person reporting: ___________________ Facility: ___________________ Phone: __________

Varicella diagnosed by (circle one): Parent  Physician/Nurse  School  Self  Other____________________

Date diagnosed: ___ / ___ / ___

Patient’s Last Name: ______________________ First Name: _______________ Middle Name: ________

Phone: ______________________ Address: ______________________________________________

City: ______________________ Zip: _______________ County: __________

Date of Birth: ___ / ___ / ___

Race: □ White  □ Black  □ Asian  □ Amer Indian/Alaska Native  □ Native Hawaiian/Pacific Islander

Ethnicity: □ Hispanic  □ Non-Hispanic

Sex: □ Male  □ Female

Pregnant: □ Yes  □ No  □ Unknown
Varicella Reporting Form

<table>
<thead>
<tr>
<th>Date of Rash Onset:</th>
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</thead>
<tbody>
<tr>
<td>Total # of lesions:</td>
<td>&lt; 50</td>
<td>50-249</td>
<td>250-500</td>
</tr>
<tr>
<td>Rash location:</td>
<td>Generalized</td>
<td>Focal</td>
<td>Unknown</td>
</tr>
<tr>
<td>Mostly macular/papular?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Mostly vesicular?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Hemorrhagic?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Itchy?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Scabs?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Crops/waves?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Fever?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Immunocompromised?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Hospitalized?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
<tr>
<td>Died?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

Has previously received varicella vaccine? | Yes | No | Unknown | |
Vaccine #1 date: | | | |
Vaccine #1 Type: | | |
Vaccine #1 Manufacturer: | | |
Vaccine #1 Lot #: | | |
Vaccine #2 date: | | | |
Vaccine #2 Type: | | |
Vaccine #2 Manufacturer: | | |
Vaccine #2 Lot #: | | |

Attends/teaches school or daycare? | Yes | No | Unknown | |
Facility Name: | | |
Facility City: | | |
Grade/Room: | | |
Teacher: | | |
Resources

• Prevention of MRSA in Organized Sports Toolkit

• Red Book – American Academy of Pediatrics
  – http://aapredbook.aappublications.org/

• Centers for Disease Control and Prevention
  – http://www.cdc.gov/
Resources

• Disease Investigation Guidelines

• Epidemiology Hotline: 24-hour hotline for disease reporting
  – 877-427-7317
Communicable Disease Handbook
Background

- Handbook outlining infectious diseases
  - Includes common as well as rare conditions
  - Acts as a resource for school nurses
- Last updated in June, 2004

Kansas Classroom

Handbook of
Communicable Diseases

Update: June 2004
So What Was Going On In 2004?

- Things happening in 2004
  - January 27 – The top song of 2004, “Yeah!” by Usher, was released
  - February 4 – Facebook launches
  - April 1 – Google releases Gmail
  - May 6 – The TV show, “Friends,” airs its last episode
  - May 19 – The top grossing movie of 2014, Shrek 2, was released in theaters
  - November 2 – George W. Bush defeated John Kerry in the US Presidential Election
So… Changes Were Necessary

- Disease sections added
  - Old handbook: 37 entries
  - New handbook: 42 entries

- Added functionality
  - Electronic document
  - Directory of local health departments
  - List of reportable diseases

- New modules
  - Bugs
  - Outbreak scenarios
Quick Note

This handbook is only a resource. It is not meant to replace the epidemiology staff at KDHE. All reportable diseases and outbreaks are still reportable to the state.

If you are suspecting an outbreak or need to report a notifiable condition, make sure you call the Epidemiology Hotline at 877-427-7317.
New and Improved

- Updated material and updated look
- Available online
- Updated as new recommendations are released

Example: Varicella

<table>
<thead>
<tr>
<th>Chickenpox (Varicella)</th>
<th>This disease is reportable in the state of Kansas and must be reported to public health authorities within 7 days of knowledge of the case. Please use the varicella report form to report cases.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signs and Symptoms</td>
<td>Fever and fatigue followed by generalized, itchy rash. This rash usually appears first on the face, chest and back then spreads to the rest of the body. Varicella in a vaccinated person maybe mild, without fever, and with an atypical rash with papules that do not progress to vesicles.</td>
</tr>
<tr>
<td>Infections Agent</td>
<td>Varicella-Zoster virus</td>
</tr>
<tr>
<td>Mode of Spread</td>
<td>Person-to-person by direct contact, droplet or airborne spread of respiratory tract secretions; indirectly through articles freshly contaminated with secretions from infected persons.</td>
</tr>
<tr>
<td>Incubation Period</td>
<td>Usually 14 to 16 days, with a range from 10 to 21 days.</td>
</tr>
<tr>
<td>Period of Communicability</td>
<td>From 1 to 2 days before the rash appears until lesions are crusted.</td>
</tr>
<tr>
<td>Control Measures</td>
<td>Identify all susceptible contacts and recommend the varicella vaccine be given if within three days of exposure. Non-immune contacts that are unable to receive varicella vaccine within 3-5 days of exposure should isolate themselves at home.</td>
</tr>
<tr>
<td>Contact Investigation</td>
<td>In the school setting, close personal contacts, teachers, other staff, and classmates would be considered as potentially exposed individuals. Susceptible individuals are those who have neither documented history of varicella disease nor any immunizations against chickenpox. U.S.-born individuals who were born before 1980 are considered immune. Provide education to susceptible contacts on the benefits of vaccination, incubation period, symptoms and precautions to take if symptoms develop. For school settings, active surveillance should be conducted for 21 days after the last confirmed or probable case was reported.</td>
</tr>
<tr>
<td>Duration of Illness</td>
<td>Duration of illness is usually 5 to 10 days.</td>
</tr>
<tr>
<td>Exclusion and Readmission Criteria</td>
<td>K.A.R. 28-1-6 Chickenpox (varicella): Each infected person shall remain in isolation for 6 days after the first crop of vesicles appears or until the lesions are crusted, whichever comes first. Each susceptible person shall be either vaccinated within 24 hours of notification to the secretary or excluded until 21 days after the onset of the last reported illness.</td>
</tr>
</tbody>
</table>
| Additional Resources   | CDC Website – Chickenpox (Varicella)  
CDC Fact Sheet: Kids  
CDC Fact Sheet: Parents  
KDHE Disease Investigation Guideline – Chickenpox (Varicella)  
KDHE Varicella Case Report Form |
Example: Varicella

<table>
<thead>
<tr>
<th>Chickenpox (Varicella)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signs and Symptoms</strong></td>
<td>Few days or so followed by a generalized, itchy rash. This rash usually appears first on the face, chest and back then spreads to the rest of the body. Varicella in a vaccinated person maybe mild, without fever, and with an atypical rash with papules that do not progress to vesicles.</td>
</tr>
<tr>
<td><strong>Infectious Agent</strong></td>
<td>Varicella-Zoster virus</td>
</tr>
<tr>
<td><strong>Mode of Spread</strong></td>
<td>Person-to-person by direct contact, droplet or airborne spread of respiratory tract secretions; indirectly through articles freshly contaminated with secretions from infected persons.</td>
</tr>
<tr>
<td><strong>Incubation Period</strong></td>
<td>Usually 14 to 16 days, with a range from 10 to 21 days</td>
</tr>
<tr>
<td><strong>Period of Communicability</strong></td>
<td>From 1 to 2 days before the rash appears until lesions are crusted.</td>
</tr>
<tr>
<td><strong>Control Measures</strong></td>
<td>Identify all susceptible contacts. Recommend the varicella vaccine be given within three days of exposure. Non-immune contacts that are unable to receive varicella vaccine within 3-5 days of exposure should isolate themselves at home.</td>
</tr>
<tr>
<td><strong>Contact Investigation</strong></td>
<td>In the school setting, close personal contacts, teachers, other staff, and classmates would be considered as potentially exposed individuals. Susceptible individuals are those who have neither a documented history of varicella disease nor any immunizations against chickenpox. U.S.-born individuals who were born before 1980 are considered immune. Provide education to susceptible contacts on the benefits of vaccination, incubation period, symptoms and precautions to take if symptoms develop. For school settings, active surveillance should be conducted for 21 days after the last confirmed or probable case was reported.</td>
</tr>
<tr>
<td><strong>Duration of Illness</strong></td>
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</tr>
<tr>
<td><strong>Exclusion and Readmission Criteria</strong></td>
<td>K.A.R. 28-1-6 Chickenpox (varicella): Each infected person shall remain in isolation for 6 days after the first crop of vesicles appears or until the lesions are crusted, whichever comes first. Each susceptible person shall be either vaccinated within 24 hours of notification to the secretary or excluded until 21 days after the onset of the last reported illness.</td>
</tr>
<tr>
<td><strong>Additional Resources</strong></td>
<td>CDC Website – Chickenpox (Varicella)</td>
</tr>
</tbody>
</table>

**CDC Fact Sheet: Kids**  
**CDC Fact Sheet: Parents**  
**KDHE Disease Investigation Guideline – Chickenpox (Varicella)**  
**KDHE Varicella Case Report Form**
Example: Varicella

**Chickenpox (Varicella)**

This disease is reportable in the state of Kansas and must be reported to public health authorities within 7 days of knowledge of the case. Please use the varicella report form to report cases.

**Signs and Symptoms**

Fever and fatigue followed by generalized, itchy rash. This rash usually appears first on the face, chest and back then spreads to the rest of the body. Varicella in a vaccinated person may be mild, without fever, and with an atypical rash with papules that do not progress to vesicles.

**Infectious Agent**

Varicella-Zoster virus

**Mode of Spread**

Person-to-person by direct contact, droplet or airborne spread of respiratory tract secretions; indirectly through articles freshly contaminated with secretions from infected persons.

**Incubation Period**

 Usually 14 to 16 days, with a range from 10 to 21 days.

**Period of Communicability**

From 1 to 2 days before the rash appears until lesions are crusted.

**Control Measures**

Identify all susceptible contacts and recommend the varicella vaccine be given if within three days of exposure. Non-immune contacts that are unable to receive varicella vaccine within 3-5 days of exposure should isolate themselves at home.

**Contact Investigation**

In the school setting, close personal contacts, teachers, other staff, and classmates would be considered as potentially exposed individuals. Susceptible individuals are those who have neither documented history of varicella disease nor any immunizations against chickenpox. U.S.-born individuals who were born before 1980 are considered immune. Provide education to susceptible contacts on the benefits of vaccination, incubation period, symptoms and precautions to take if symptoms develop. For school settings, active surveillance should be conducted for 21 days after the last confirmed or probable case was reported.

**Duration of Illness**

Duration of illness is usually 5 to 10 days.

**Exclusion and Readmission Criteria**

K.A.R. 28-1-5 Chickenpox (varicella): Each infected person shall remain in isolation for 6 days after the first crop of vesicles appears or until the lesions are crusted, whichever comes first. Each susceptible person shall be either vaccinated within 24 hours of notification to the secretary or excluded until 21 days after the onset of the last reported illness.

**Additional Resources**

- CDC Website – Chickenpox (Varicella)
- CDC Fact Sheet: Kids
- CDC Fact Sheet: Parents
- KDHE Disease Investigation Guideline – Chickenpox (Varicella)
- KDHE Varicella Case Report Form
# Example: Shigellosis

<table>
<thead>
<tr>
<th><strong>Shigellosis</strong></th>
<th>This disease is reportable in the state of Kansas and must be reported to public health authorities within 7 days of knowledge of the case.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signs and Symptoms</strong></td>
<td>Diarrhea, fever, nausea, vomiting, intestinal cramps and/or constipation. When severe, stools contain blood, mucus, and pus.</td>
</tr>
<tr>
<td><strong>Infectious Agent</strong></td>
<td><em>Shigella</em>, a bacterium</td>
</tr>
<tr>
<td><strong>Mode of Spread</strong></td>
<td>Fecal-oral transmission with a low infectious dose (10-200 organisms). Direct transmission is associated to poor hand washing and with certain sexual behaviors (e.g., oral-anal). Indirect transmission occurs via contaminated food, milk, water, manmade objects (fomites) and houseflies (vectors).</td>
</tr>
<tr>
<td><strong>Incubation Period</strong></td>
<td>Usually 1 to 3 days, with a range from 12 to 96 hours. Up to 1 week for <em>Shigella dysenteriae</em>.</td>
</tr>
<tr>
<td><strong>Period of Communicability</strong></td>
<td>Communicability continues as long as organisms are excreted, usually at most four weeks after onset. Asymptomatic carriers may transmit infection. Antimicrobial treatment may decrease the shedding to a few days.</td>
</tr>
<tr>
<td><strong>Control Measures</strong></td>
<td>With an understanding of and ability to practice good hygiene, children usually do not represent a risk of spreading this pathogen via the fecal-oral route. Children are a risk only if the infected child is unable to or fails to maintain good hygiene, including hand hygiene after toilet use. Children in diapers at any age constitute a far greater risk of spreading <em>Shigella</em>. In school settings, exclude children with diarrhea, vomiting, and fever until symptoms resolve. During a school-based outbreak of <em>Shigella</em>, stronger exclusion measures may be warranted and will be based on consultations with the KDHE-BEPH.</td>
</tr>
<tr>
<td><strong>Contact Investigation</strong></td>
<td>If there is a potential for disease transmission follow-up with all close contacts to determine if transmission has occurred and to identify any high risk situations.</td>
</tr>
<tr>
<td><strong>Duration of Illness</strong></td>
<td>Duration of illness is usually 4 to 7 days.</td>
</tr>
<tr>
<td><strong>Exclusion and Readmission Criteria</strong></td>
<td>K.A.R. 28-1-5 for <em>Shigella</em>: Enteric precautions shall be followed for the duration of acute symptoms. Each infected person shall be excluded from food handling, patient care, and any occupation involving the care of young children and the elderly. No infected child shall attend a child care facility or family day care home until two negative stool cultures are obtained at least 24 hours apart and no sooner than 48 hours following discontinuation of antibiotics. For the purposes of the regulation “enteric precautions” shall mean thorough hand washing after attending to infectious cases or touching the feces of an infected person, disinfection of articles that have been in contact with infectious cases or feces, and sanitary disposal of feces until two negative stool cultures are obtained at least 24 hours apart and no sooner than 48 hours following the discontinuation of antibiotics.</td>
</tr>
</tbody>
</table>
| **Additional Resources** | [CDC Website – Shigellosis](https://www.cdc.gov/shigellosis/index.html)  
[KDHE Disease Investigation Guideline – Shigellosis](https://docs.google.com/document/d/1YxPp71EJ8)  
[FoodSafety.gov – Shigella](https://www.foodsafety.gov/) |
### Example: Insect Reference Guide

<table>
<thead>
<tr>
<th>Causative Organism</th>
<th>Head Lice (<em>Pediculus humanus capitis</em>)</th>
<th>Scabies (<em>Sarcoptes scabiei var. hominis</em>)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signs and Symptoms</strong></td>
<td>Itching and irritation may be experienced. Sores on the head caused by scratching.</td>
<td>Intense itching and a pimple-like itchy rash, which can include tiny blisters and scales.</td>
</tr>
<tr>
<td><strong>Health Risks</strong></td>
<td>No serious medical threat – not known to spread disease</td>
<td>Not known to spread disease, but perpetual itching of scabies may lead to skin sores which may become infected.</td>
</tr>
<tr>
<td><strong>Person-to-Person Spread?</strong></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Mode of Spread</strong></td>
<td>Head-to-head contact with an infested person (more common) and sharing of clothing or belongings (less common)</td>
<td>Spread by direct, prolonged skin-to-skin contact. It is also spread through sharing of clothing, towels, or bedding.</td>
</tr>
<tr>
<td><strong>Control Measures</strong></td>
<td>Infestations are commonly treated by insecticide spraying. Monitor household contacts for signs of bed bug bites</td>
<td>All household members and other close contacts should be checked and treated simultaneously.</td>
</tr>
<tr>
<td><strong>Exclusion and Readmission Criteria</strong></td>
<td>There is no exclusion for an individual with bed bugs</td>
<td>There is no exclusion for an individual with scabies. Ensure that any rashes on the infested individual are covered.</td>
</tr>
<tr>
<td><strong>Additional Notes</strong></td>
<td>Treatments should be strictly followed according to the treatment directions.</td>
<td>If a person thinks he/she might have scabies after coming in contact with a person who has scabies, contact a physician for evaluation. Products used to treat scabies are available only with a doctor’s prescription.</td>
</tr>
<tr>
<td><strong>Additional Resources</strong></td>
<td><a href="https://www.cdc.gov/parasites/bedbugs/bedbugs.html">CDC Website – Bed bugs</a></td>
<td><a href="https://www.cdc.gov/parasites/lice/index.html">CDC Website – Head Lice</a></td>
</tr>
<tr>
<td><strong>Images</strong></td>
<td><img src="https://www.cdc.gov/parasites/bedbugs/images/bed-bug.jpg" alt="Bed Bug" /></td>
<td><img src="https://www.cdc.gov/parasites/lice/images/head-lice.jpg" alt="Head Lice" /></td>
</tr>
</tbody>
</table>

Department of Health and Environment
### Example: Outbreak Line Lists

**Line List Examples**

Below are examples of line lists created for an outbreak. The section in blue is general demographic information we would collect for any outbreak, regardless of the illness associated with the event. This helps us keep tabs on the individuals experiencing illness and makes contact investigation easier. Below the general information are examples of line list additions which we would include on disease-specific outbreaks. The section in red represents the questions we would add for an outbreak of gastrointestinal illness while the section in green represents the questions we would add for an outbreak of varicella. KDHE epidemiology staff might add additional questions to accompany those below for specific information, depending on the situation and the infectious agent. Please consult with KDHE epidemiology staff (877-427-7317) before the creation of a line list to ensure all pertinent information is being collected.

**Information to be collected on all outbreaks:**

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>Race</th>
<th>Ethnicity</th>
<th>DOB</th>
<th>Sex</th>
<th>Student or Staff?</th>
<th>Grade</th>
<th>Healthcare provider visited</th>
<th>Visited ER</th>
<th>Hospitalized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bear</td>
<td>Yogli</td>
<td>White</td>
<td>Non-Hispanic</td>
<td>5/15/1958</td>
<td>M</td>
<td>Staff</td>
<td>2</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Jetson</td>
<td>Elroy</td>
<td>White</td>
<td>Non-Hispanic</td>
<td>6/7/2006</td>
<td>M</td>
<td>Student</td>
<td>2</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

**Gastrointestinal Illness Outbreak – Additional Questions**

<table>
<thead>
<tr>
<th>Onset Date</th>
<th>Onset Time</th>
<th>Symptoms Experienced</th>
<th>Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Vomiting</td>
<td>Diarrhea</td>
</tr>
<tr>
<td>5/6/14</td>
<td>9:00am</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>5/8/14</td>
<td>12:45pm</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

**Varicella Outbreak – Additional Questions**

<table>
<thead>
<tr>
<th>Rash Onset Date</th>
<th>Number of Lesions</th>
<th>Diagnosed By</th>
<th>Vaccination History</th>
<th>Lab work done?</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/22/14</td>
<td>&lt;50</td>
<td>Parent</td>
<td>Dose 1 date: 3/15/2006</td>
<td>N</td>
</tr>
<tr>
<td>10/25/14</td>
<td>X</td>
<td>X</td>
<td>Dose 2 date: 3/8/2010</td>
<td>N</td>
</tr>
</tbody>
</table>

Department of Health and Environment
In Closing…

- We want to improve the handbook and you can help!
- The handbook is being updated periodically

<table>
<thead>
<tr>
<th>Revision History:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
<td>Section(s) Changed</td>
<td>Comments</td>
</tr>
<tr>
<td>9/24/2015</td>
<td>--</td>
<td>Kansas Classroom Handbook of Communicable Diseases first uploaded to KDHE website</td>
</tr>
</tbody>
</table>
Questions?
Resources

• Kansas Department of Infectious Disease Epidemiology and Response

• Disease Reporting

• Isolation and Quarantine Regulations
  – http://www.kdheks.gov/epi/regulations.htm
Kindergarten Immunization Coverage Assessment
Background

- Long-standing study performed by KDHE
- Objective: evaluate vaccination coverage levels for Kansas kindergartners
- Immunization goals
  - Up-to-date status for Kansas vaccination requirements
    - KSA 72-5209
KSA 72-5209

- “...every pupil enrolling in any school...shall present...certification...that the pupil has received such tests and inoculations as are deemed necessary by the secretary.”
  - Also allows for vaccine exemptions
  - Vaccines required for entry into Kansas schools
    - DTaP vaccine
    - Polio vaccine
    - MMR vaccine
    - Varicella vaccine
    - Hepatitis B vaccine
Methods

- **Sampling methodology**
  - Created through coordination with the CDC
    - County and school type (private versus public) represent one strata
- **Vaccine coverage**
  - Stratified random sample of schools
    - Vaccine coverage data not comparable to any previous years
- **School policy and vaccine exemption**
  - Census of all schools with a kindergarten class
    - Vaccine exemption data comparable to previous years
Study Design

- A sample of schools send vaccination records
- Schools are instructed to send a specific number of records
- All schools submit enrollment, exemption, and school policy data
- Online data entry available
- Letters mailed out in January
Methods: Vaccination Coverage

- Letters were sent out to all schools with a kindergarten class
  - Letters sent out in January
  - Send vaccination records
    - Pre-determined number of records
  - Do not send immunization records

Schools with a Kindergarten Class

- Vaccination, Exemption, and School Policy Data
- Exemption and School Policy Data
January 1, 2016

Dear School Name / Secretary:

The Kansas Department of Health and Environment (KDHE) Immunization Program annually conducts a survey to assess the immunization coverage rates of two-year-old children in Kansas as well as the current coverage levels for children entering kindergarten. The Immunization Program would like to conduct this study for the new 2015-16 kindergarten class and requests your assistance. We received responses from almost every school last year and we hope that all elementary schools will be able to participate in this important study this year.

The sampling method used in this survey is similar to the methodology used in last year’s assessment. Read the instructions carefully to ensure that proper procedures are followed. Please note that the sampling instructions that follow are specific to your school and may not apply to other schools. If you are aware of another school which has not received this letter, please have them contact Charles Cohlin at CCohlin@kdheks.com or (785) 296-1243.

We kindly ask that selected schools provide a photocopy of the immunization record of kindergartners currently enrolled. This record can be a Kansas Certificate of Immunization (KCI), printout of a record from an electronic system, or other immunization record (from a physician’s office, etc.). Electronic submission through KSWebIZ is no longer accepted as a method of record submission for the kindergarten immunization assessment. Completion of this task may vary from 30 minutes to 2 hours.

1. Your school has been selected to submit 30 immunization records for the 2015-16 kindergarten children (excluding those enrolled in preparatory kindergarten classes). Please randomly select 30 records from all immunization records, including exemptions. Examples of random selection include:
   - Picking the first 30 records of all kindergarten students
   - Picking the last 30 records of all kindergarten students
   - Selecting 30 students from a classroom or a combination of classrooms
   - Picking every nth record (e.g., second, third, etc.) until you have picked a total of 30 records

2. Photocopy each selected record. To ensure confidentiality, make sure that all personal identification information on each record (i.e., Child’s name, Guardian’s name, Address, Phone number) is NOT visible on the (photocopy) record. PLEASE DO NOT REMOVE THE DATE OF BIRTH. Please ensure that the following vaccination histories are part of the records sent: DTaP, Hepatitis A, Hepatitis B, Haemophilus influenza, MMR, Pneumococcal, Polio, Influenza, and Varicella and/or history of varicella disease.

3. Complete the lower portion of this letter. Mail that page with the requested immunization records to Charles Cohlin, 1000 SW Jackson, Suite 075, Topeka, KS, 66612-1290. If more than one school will be rest in the same envelope, please keep school’s records and enrollment information separated and indicate on the envelope which schools are enclosed.

4. Please submit all information by February 1, 2016.

We recognize the importance of obtaining information to monitor and assess immunization coverage rates in Kansas, and we realize that accurate results rely on responses from as many schools as possible. Your participation in this project is greatly needed and would be most appreciated. The annual report will be posted on the KDHE Immunization Program website (http://www.kidheks.gov/immunize) by August 2016. If you have any questions, please contact Charles Cohlin at (785) 296-1243 or CCohlin@kdheks.com.

Sincerely,

[Signature]
Commissioner of Education
Kansas State Department of Education
Kansas Department of Health and Environment

PLEASE DETACH AND RETURN WITH KCI COPIES

<table>
<thead>
<tr>
<th>School’s Complete Name</th>
<th>County Name</th>
<th>District Number</th>
<th>Total Number Enrolled in Kindergarten</th>
<th>Total Number of Kindergarten Religious Exemptions</th>
<th>Total Number of Kindergarten Medical Exemptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We would appreciate it if you could fill out this brief survey:

1. At your school, how long is the grace period during which children may become up-to-date for immunizations (check one)?
   - 30 days
   - 60 days
   - 90 days
   - First day of 2nd Semester
   - No grace period policy
   - Children must be up-to-date on the first day of school
   - September 30 (count day)
   - Exclusion Date
   - Other

2. Does your school exclude children who are not up-to-date for required immunizations (Consistent with KSA 72-3211a— “The school board may exclude...any pupil...until such time as the pupil shall have complied with the requirements”)?
   - Yes
   - No
   - Not sure
### Methods: School Policy and Vaccine Exemption

<table>
<thead>
<tr>
<th>School’s Complete Name</th>
<th>District Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Name</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Number Enrolled in Kindergarten</th>
<th>Total Number of Records Sent (Exempt and Non-Exempt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Kindergarten Religious Exemptions</td>
<td>Total Number of Religious Exemption Records Sent</td>
</tr>
<tr>
<td>Total Number of Kindergarten Medical Exemptions</td>
<td>Total Number of Medical Exemption Records Sent</td>
</tr>
</tbody>
</table>

First day of school for Kindergartners 2014-15: _____/_____/2014

mm dd

If you would like to receive the results for your district please write your email address:

---

We would appreciate it if you could fill out this brief survey:

1. At your school, how long is the grace period during which children may become up-to-date for immunizations (check one)?
   - 30 days
   - 60 days
   - 90 days
   - First day of 2nd Semester
   - No grace period policy
   - Children must be up-to-date on the first day of school
   - September 22 (count day)
   - Exclusion Date: __________
   - Other ________________

2. Does your school exclude children who are not up to date for required immunizations (Consistent with KSA 72-5211a - “The school board…may exclude… any pupil … until such time as the pupil shall have complied with the requirements”)?
   - Yes
   - No
   - Not sure
# Methods: School Policy and Vaccine Exemption

<table>
<thead>
<tr>
<th>School's Complete Name</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>District Number</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Number Enrolled in Kindergarten</th>
<th>Total Number of Records Sent (Exempt and Non-Exempt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Kindergarten Religious Exemptions</td>
<td>Total Number of Religious Exemption Records Sent</td>
</tr>
<tr>
<td>Total Number of Kindergarten Medical Exemptions</td>
<td>Total Number of Medical Exemption Records Sent</td>
</tr>
</tbody>
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If you would like to receive the results for your district please write your email address:  

We would appreciate it if you could fill out this brief survey:

1. At your school, how long is the grace period during which children may become up-to-date for vaccinations (check one)?
   - 30 days
   - 60 days
   - 90 days
   - First day of 2nd Semester
   - No grace period policy
   - Children must be up-to-date on the first day of school
   - September 22 (count day)
   - Exclusion Date: __________
   - Other ________________

2. Does your school exclude children who are not up to date for required vaccinations (Consistent with KSA 72-5211a - “The school board...may exclude...any pupil...until such time as the pupil shall have complied with the requirements”)?
   - Yes
   - No
   - Not sure
### Methods: School Policy and Vaccine Exemption

<table>
<thead>
<tr>
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First day of school for Kindergartners 2014-15: ____/____/2014  

mm dd

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   - 90 days  
   - First day of 2nd Semester  
   - No grace period policy  
   - Children must be up-to-date on the first day of school  
   - September 22 (count day)  
   - Exclusion Date: ___________  
   - Other _______________  

date for required immunizations (Consistent with KSA 72-5211a - “The school board…may exclude…any pupil … until such time as the pupil shall have complied with the requirements”)?  
   - YES  
   - NO  
   - NOT SURE
Methods: School Policy and Vaccine Exemption

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First day of school for Kindergartners 2014-15: ____/____/2014

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   - Yes
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   - Not sure
So... These Vaccination Records

- Paper immunization records
  - All demographic information removed except for date of birth
  - Record cannot be used at all if there isn’t a date of birth
Due Dates

- How do we use the data you provide?
  - Kindergarten Immunization Coverage Assessment
  - Retrospective Immunization Coverage Assessment
  - Centers for Disease Control and Prevention Data Analysis
Vaccination Coverage

- Data entry of all immunization records received by KDHE
  - Kansas Certificate of Immunizations (KCI) or other immunization documents
- Analysis
  - Kindergarten entry
  - 30 days after kindergarten entry
Vaccination Coverage

- **Subpopulations analyzed**
  - School type (private vs. public schools)
  - County of residence (urban vs. moderately populated vs. sparsely populated)
  - School exclusion policy (excluding vs. non-excluding)

- **Coverage assessment posted online**
Closing Notes

- The survey is done annually
  - Make sure your address is up-to-date with the Kansas State Department of Education
- Immunization reports are found online
  - Kindergarten: http://www.kdheks.gov/immunize/kindergarten_coverage.htm
  - Retrospective: http://www.kdheks.gov/immunize/retro_survey.html
One More Note

A big thank you to the nurses!
Questions?
Healthy Kansans living in safe and sustainable environments.