

Epidemic	Middle Ages (500-1500)	Renaissance (1500 – 1700)	18 <sup>th</sup> Century (1701-1800)	19 <sup>th</sup> Century (1801-1900)	20 <sup>th</sup> Century (1901 – 2000)	21 <sup>st</sup> Century (Today)
Cholera		<ul style="list-style-type: none"> <li>- 1550: record of earliest cholera</li> <li>- Ganges river spreads cholera</li> </ul>		<ul style="list-style-type: none"> <li>- 1830s: major outbreaks; kills a ½ million in NYC</li> <li>- 1854: <b>John Snow</b> maps cholera outbreaks in London; blamed water as source; disproved “<b>miasmas theory</b>”</li> <li>- 1873: Better sanitation reduces cholera rates</li> </ul>	<ul style="list-style-type: none"> <li>- 1992: cholera re-emerges</li> </ul>	<ul style="list-style-type: none"> <li>- Continues to kill in areas without access to safe water &amp; adequate sanitation</li> <li>- Kills thousands per year</li> </ul>
Smallpox	<ul style="list-style-type: none"> <li>- Smallpox &amp; measles proposed to be 2 different diseases</li> <li>- Person-to-person transmission &amp; acquired immunity proposed</li> </ul>	<ul style="list-style-type: none"> <li>- 1500's: Smallpox carried by Spanish explorers wipes out half of Natives in Central &amp; South America</li> <li>- 1633: Kills 90% of American Indian population in parts of US</li> </ul>	<ul style="list-style-type: none"> <li>- Continues in Europe, killing 400,000 per year</li> <li>- 1718: variolation discovered as a way to confer immunity</li> <li>- 1796: <b>Edward Jenner</b> creates first vaccine</li> </ul>	<ul style="list-style-type: none"> <li>- 1810-1830s: mandatory vaccination laws in Europe</li> <li>- 1840'-1980's: vaccination protests</li> </ul>	<ul style="list-style-type: none"> <li>- 1940s: massive vaccine campaign eliminates SP in Britain/US</li> <li>- 1960s: WHO sets goal to eradicate SP in the world in 10 yrs</li> <li>- 1975: last reported case in Bangladesh</li> <li>- 1979: WHO declares smallpox defeated</li> </ul>	<ul style="list-style-type: none"> <li>- Vaccines remain in 2 secure labs - US/Russia</li> <li>- Debate continues over destroying them (use as weapons vs. need for cure in future)</li> </ul>
Epidemic	Middle Ages (500-1500)	Renaissance (1500 – 1700)	18 <sup>th</sup> Century (1701-1800)	19 <sup>th</sup> Century (1801-1900)	20 <sup>th</sup> Century (1901 – 2000)	21 <sup>st</sup> Century (Today)
Plague	<ul style="list-style-type: none"> <li>- 541: First plague in Europe kills up to 10,000 per day</li> <li>- 1347: Black death spread by war &amp; trade</li> <li>- 1400s: death depicted in art</li> </ul>	<ul style="list-style-type: none"> <li>- Belief that “bad air” caused plague (<b>miasmas</b>); wearing of costumes including coats and headgear including a metal “beak” packed with herbs to filter the tainted air</li> </ul>	<ul style="list-style-type: none"> <li>- 1720: last serious European outbreak occurs in France</li> <li>- spread to Asia</li> </ul>	<ul style="list-style-type: none"> <li>- 1855: last major epidemic originates in China &amp; spreads globally</li> <li>- 1894: Discovery of the bacteria that causes plague (<i>Yersinia pestis</i>)</li> <li>- 1897: discovery that fleas transfer bacteria from rats to humans</li> </ul>	<ul style="list-style-type: none"> <li>- 1900: beginning of first major outbreak in US</li> <li>- only 10 – 15 cases per year in US since 1925</li> <li>- 1938: drugs discovered to cure plague</li> <li>- later, antibiotics provide even better treatment</li> </ul>	<ul style="list-style-type: none"> <li>- Remains problem in undeveloped countries 1,000-3,000 cases per year</li> </ul>
HIV/AIDS					<ul style="list-style-type: none"> <li>- 1930s: virus in chimps mutates into a form that can affect humans</li> <li>- 1960s: virus spreads from Africa to Haiti to US</li> <li>- 1981: CDC identifies AIDs in young, gay men</li> <li>- 1983: HIV virus is discovered</li> <li>- 1987: AIDS quilt memorial project</li> </ul>	<ul style="list-style-type: none"> <li>33 million people worldwide live with HIV</li> <li>20 million have died</li> <li>a cure is still not available</li> </ul>

<b>Tuberculosis</b>	<ul style="list-style-type: none"> <li>- earliest evidence: mummies</li> <li>- 460 BC: <i>Phthisis</i> (Greek for “I am wasting”) appears in literature as the name for TB</li> <li>- Hippocrates identifies TB as most widespread &amp; fatal disease of time</li> <li>- 160-1100: human spinal remains show TB signs</li> </ul>		<ul style="list-style-type: none"> <li>- “Great White Plague”</li> <li>- leading cause of death for Europeans</li> <li>- spread to N. America through settlers</li> </ul>	<ul style="list-style-type: none"> <li>- 1819: stethoscope invented to listen to internal sounds of lungs and help diagnose TB</li> <li>- 1859: first sanitariums for TB started</li> <li>- 1882: Koch discovers TB bacteria, proves it spreads through sneeze/cough,</li> <li>- “Germ Theory” for infectious disease</li> </ul>	<ul style="list-style-type: none"> <li>- Prevention methods like anti-spitting campaign are introduced</li> <li>- 1926: TB vaccine discovered; widely used in Europe/Africa/Asia; not in US (lower infection rates)</li> <li>- 1943: antibiotic cure for TB discovered</li> <li>- 1989: officials predict worldwide eradication of TB by 2010</li> <li>- 1990s: MDR-TB emerges &amp; WHO declares TB as a global emergency</li> <li>- 2000: XDR-TB discovered (not responsive to any known drugs)</li> </ul>	<ul style="list-style-type: none"> <li>- 1/3 of world pop. carry TB in body, but only 1/10 of those will develop TB &amp; 1/20 will die of it</li> </ul>
Epidemic	<b>Middle Ages</b> (500-1500)	<b>Renaissance</b> (1500 – 1700)	<b>18<sup>th</sup> Century</b> (1701-1800)	<b>19<sup>th</sup> Century</b> (1801-1900)	<b>20<sup>th</sup> Century</b> (1901 – 2000)	<b>21<sup>st</sup> Century</b> (Today)

