Datasets for Disaster Food Supply Planning

Provided below is information on various statistical datasets that are helpful when planning to assure food supplies during an influenza pandemic or other widespread hazard. The data can be used to evaluate the community/county's at-risk population, food resources, care centers, etc.

Social and Economic Indicators – Data profiles showing social and economic indicators by county are available on the Missouri Department of Health and Senior Services Web site at http://www.health.mo.gov/CommunityDataProfiles/. Use the pull down menus to select the Social and Economic Indicators profile and your county. Then click Submit. These social and economic profiles were developed by the University of Missouri Office of Social and Economic Data Analysis.

How social and economic indicators can help in food supply planning:

- More population equates to more possible inflictions, and increases the risk of infection and subsequent spread.
- Population growth or decline reflects trends in births, deaths, and migratory patterns that can be expected to continue.
- More population at higher density carries implications of greater need and greater risk. In Missouri, the extreme example of population density (St. Louis City) correlates positively with poverty. The highest population densities in St. Louis and Jackson counties also have high poverty populations.
- Population aged 0-17 is considered dependent age cohorts with greater needs.
- Population aged 18-64 is considered the working-age, non-dependent population typically with health insurance, higher labor income, better health status, etc. However, some experts predict healthy, working-aged adults to be most adversely affected by a novel flu.
- Population aged 65+ is considered dependent age cohorts with greater needs and usually lower incomes. This would also apply to a population that is older than average life expectancy.
- Extreme growth in population aged 65-84 may reflect retirement destinations or aging in place.
- International immigration and population density correlate with low-income populations.
- Health status regarding disabilities, both physical and mental, may be helpful in determining at-risk populations.
- Employment status is considered a preparedness factor because it correlates with working-age population, income, health insurance coverage and health status.
- The unemployment rate in all ages can reflect those who may be in poverty, uninsured and in poor health.
- High income and good health status share a strong positive correlation.
- Low-income individuals are least able to devote time and resources to prepare for an event. Higher income would enable individuals to spend time and resources for pandemic or hazard preparedness.

- Agricultural characteristics should be considered since many experts believe that a novel pandemic episode will begin in an intermediate host, such as a pig where an antigenic shift (species jump from avian to swine to human) can occur.
- Students enrolled in free and reduced lunch programs and food stamp recipients should be considered as food-dependent populations.
- The number of children enrolled in Medicaid can help predict the number of dependent families who are living in poverty, are unemployed, uninsured and with disabilities.
- Fair or poor health status and lack of health care coverage correlates with low-income population with little to no health care access.
- A high prevalence of high blood pressure, high cholesterol and diabetes is indicative of a population with special needs.

U.S. Census - A fact sheet showing the social and economic indicators mentioned above by county is available on the U.S. Census Bureau Web site at http://factfinder.census.gov. The U.S. Census Bureau Web site provides a few more variables that might be helpful in your food supply planning:

- Data are available for some cities/towns.
- Data are available on the language spoken in the home. This could help determine international immigrant destinations and whether translators may be needed.
- Data are available for population not in labor force (NILF) which is more reflective of the labor market variation across counties than the unemployment rate. This characterizes discouraged and detached workers who have dropped out of the labor market completely.

Unemployment – Current local area unemployment statistics are available on the Missouri Department of Economic Development's Missouri Economic Research and Information Center Web site at http://ded.mo.gov/researchandplanning/indicators/laus/default.aspx. Local area unemployment statistics are also available on the United States Department of Labor's Bureau of Labor Statistics Web site at http://www.bls.gov/lau/home.htm.

- The unemployment rate for all ages can reflect those who may be in poverty, uninsured and in poor health.
- Employment is considered a preparedness factor because it correlates with working-age population, income, health insurance coverage and health status.

Old-Age, Survivors, and Disability Insurance (OASDI) and Supplemental Security Income (SSI)– The number of OASDI beneficiaries and SSI recipients by county are available on the Social Security Web site at http://www.segurosocial.gov/policy/docs/statcomps/.

- OASDI and SSI benefits have a positive relationship with low-income indicators: poverty, Medicaid, uninsured and unemployment rates.

Home Delivered Meals/Congregate Meals – The number of meals delivered to homes through the Older Adult Act is useful in identifying homebound residents. The number

of congregate meals delivered through senior centers is an indicator of a potentially food-dependent population. Senior centers can be good partners in disaster food planning. Information on the number of home delivered meals, congregate meals and senior centers is available from the Missouri Department of Health and Senior Services' Bureau of Senior Programs at 573-526-4542.

Grocery Stores – Information on the number and taxable sales of grocery and food stores in your county is available in the Public Taxable Sales Reports on the Missouri Department of Revenue Web site at http://dorx.mo.gov/publicreports/. Under Taxable Sales Reports, select the Taxable Sales Report Totals by SIC Codes within County. Look for Standard Industry Codes (SIC) 541 thru 549.

- More food sales equate to more manufactured food inventory in the county at any given time.
- Useful to evaluate food sources and processing locations.

Medicaid Participation – Data profiles showing Medicaid participation by county, age and race are available on the Missouri Department of Health and Senior Services Web site at http://www.health.mo.gov/CommunityDataProfiles/. Use the pull down menus to select the Medicaid Participation profile and your county. Then click Submit.

- Medicaid participation has inverse relationship with population growth and income.
- Medicaid participation has a strong positive correlation with poverty, unemployment, uninsured, disability and WIC rates.

More specifics on the different Medicaid categories can be obtained at http://www.health.mo.gov/data/mica/mica/medicaid.php.

WIC Participation – WIC participation data by county and other variables is available in the WIC Missouri Information for Community Assessments (MICAs) that are available on the Missouri Department of Health and Senior Services Web site at http://www.health.mo.gov/data/mica/WICMICA/.

- WIC participation correlates with poverty, unemployment, uninsured and Medicaid rates.

Colleges and Universities – If there are colleges and universities located in your county, it may be helpful to know the number of students in these institutions. This information is available in the Missouri Department of Higher Education annual reports that can be accessed at http://dhe.mo.gov/publications.html. Private institutions are not covered in this annual report.