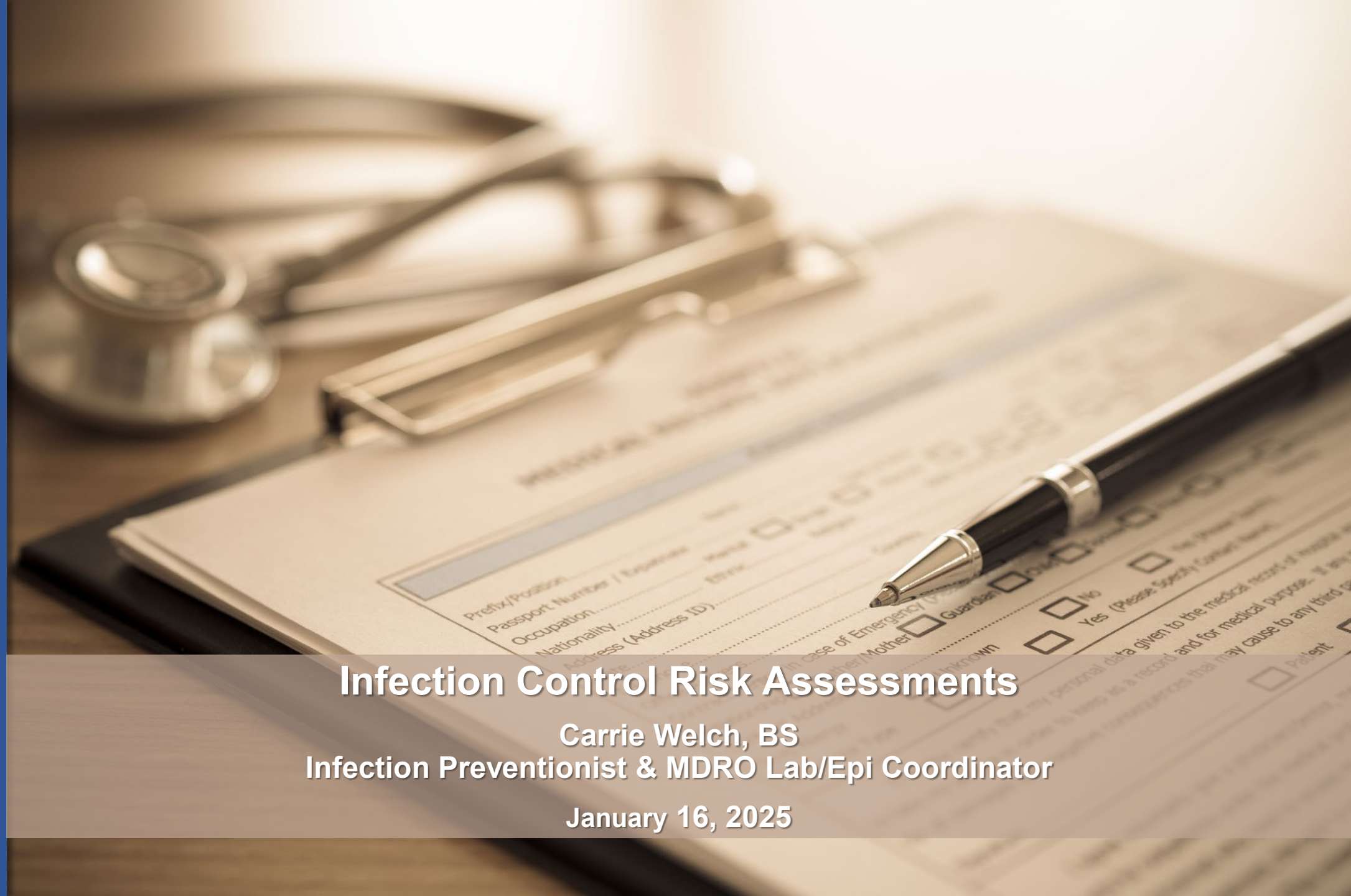

Infection Control Risk Assessments

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January 16, 2025

Kansas Department of Health and Environment
Division of Public Health

Polling Questions

- Join at menti.com
- Use code 66731913 or scan the QR code.

Performing a Risk Assessment

- What is a risk assessment and why is it important?
  - A tool to identify and prioritize potential risk factors, which is important because it helps guide prevention and control activities needed for your facility.

- What types of risk assessments are needed?
  - Infection Prevention and Control Risk Assessment
  - Tuberculosis Risk Assessment
  - Construction Risk Assessment (ICRA)
  - Miscellaneous Risk Assessments when hazards are identified without immediate resolution

- How often should you perform a risk assessment?
  - Annually at minimum
  - With any big changes/events (Ex., construction, flood, pandemic)
  - When decisions need to be made for a new process or procedure

Performing a Risk Assessment continued

- Who should be included?
  - Infection Prevention and Control team, facility leadership, maintenance, environmental services and affected department staff (at minimum).

- What things should be considered?
  - Potential for specific infection
  - Treatment and care practices
  - Instrument and medical device cleaning, disinfection and handling
  - Environment of care
  - Emergency management
  - Risk of hazard, exposure, or injury
  - Others identified by the organization

Risk Assessment Definitions

1. Potential Risks

A comprehensive list broken down into different categories and subcategories. Please note these can be easily modified for your individual facility.

2. Probability of an event/condition occurring

This is determined by evaluating the risk of the potential threat occurring. Information regarding historical data, infection surveillance data, the scope of services provided by the facility, the environment of the surrounding area (topography, interstate roads, chemical plants, railroad, ports), and health department data, are considered when determining this score.

3. Potential Risk/Impact

Potential risk/impact of the event/condition on patients/residents and personnel, determined by evaluating the potential for patient/resident illness, injury, infection, death, need for admission to an inpatient facility; the potential for personnel illness, injury, infection, shortage; potential to impact the organization's ability to function/remain open; and degree of clinical and financial impact.

Risk Assessment Definitions continued

4. **Preparedness with Current Systems/Processes**
   The organization's preparedness to deal with the event/condition, determined by considering policies and procedures already in place, staff experience and response to actual situations and available services and equipment.

5. **Relative Prioritized Risk**
   Calculating the potential impact of the risk, with the probability of the event/condition occurring, and facilities readiness/preparedness to deal with it gives you the likelihood or percent level of something seriously happening.

Customizable

Important note: this Risk Assessment tool is meant to be tailored to your facility.

- **Rows can be deleted**
- Content can be changed to more pertinent risks

[FACILITY NAME HERE]

[YEAR] Infection Prevention and Control / Antibiotic Stewardship Risk Assessment

Potential Risks	Probability	Risk / Impact					Preparedness with Current Systems / Processes					Relative Prioritized Risks*	Rationale/Notes
	4 = Expected 3 = Likely 2 = Maybe 1 = Rare 0 = Never	*Possibility of death or permanent injury*	*Temporary Physical losses and damages*	*Increase the risk of infection/ spread of infection*	*Moderate Clinical / Financial*	*Minimal Clinical / Financial*	*NONE No Process / No Policy in Place / No Training Conducted*	*POOR Processes in Place, but Need Improvement / Uncertain Level of Training*	*FAIR Processes in Place and May Need Update / Some Training Done*	*GOOD Processes in Place and May Need Review / Most Trained*	*EXCELLENT Processes in Place and Working / All Trained*		
		5	*4*	*3*	*2*	*1*	*5*	*4*	*3*	*2*	*1*	0 - 100%	
PREVENTION													
HAND HYGIENE													
Lack of Hand Hygiene Compliance												0%	
Lack of accessible alcohol-based hand sanitizer (ABHS)												0%	
Lack of competency based training/audits on hire, annually, and at random												0%	
Other (specify)												0%	
PERSONAL PROTECTIVE EQUIPMENT (PPE)													
Lack of accessible personal protective equipment (PPE)												0%	
Inappropriate selection and use of PPE												0%	
Lack of competency based training/audits on hire, annually, and at random												0%	
Other (specify)												0%	

Customizable

Important note: this Risk Assessment tool is meant to be tailored to your facility.

- Columns/rows can be deleted
- **Content can be changed to more pertinent risks**

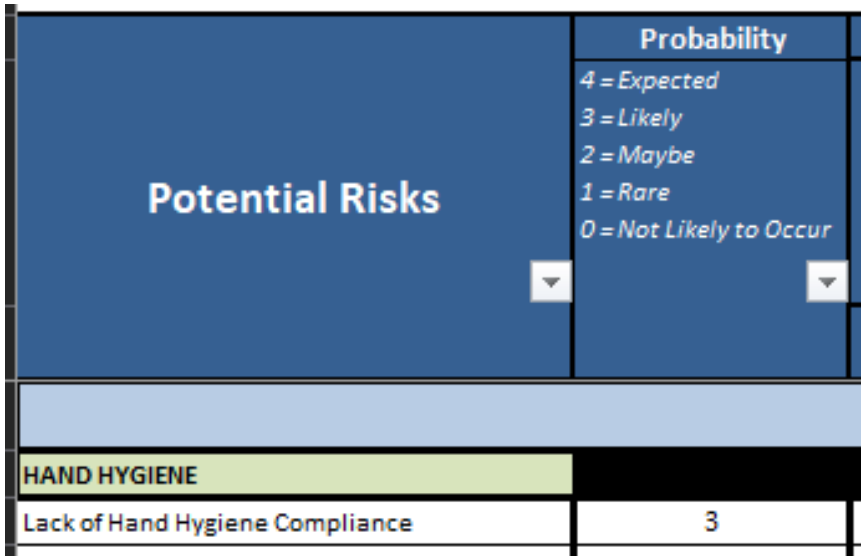
[FACILITY NAME HERE]

[YEAR] Infection Prevention and Control / Antibiotic Stewardship Risk Assessment

Potential Risks	Probability 4 = Expected 3 = Likely 2 = Maybe 1 = Rare 0 = Never	Risk / Impact					Preparedness with Current Systems / Processes					Relative Prioritized Risks*	Rationale/Notes
		Possibility of death or permanent injury	Temporary Physical losses and damages	Increase the risk of infection/ spread of infection	Moderate Clinical / Financial	Minimal Clinical / Financial	NONE No Process / No Policy in Place / No Training Conducted	POOR Processes in Place, but Need Improvement / Uncertain Level of Training	FAIR Processes in Place and May Need Update / Some Training Done	GOOD Processes in Place and May Need Review / Most Trained	EXCELLENT Processes in Place and Working / All Trained		
		5	4	3	2	1	5	4	3	2	1	0 - 100%	
PREVENTION													
HAND HYGIENE													
Lack of Hand Hygiene Compliance												0%	
Lack of accessible alcohol-based hand sanitizer (ABHS)												0%	
Lack of competency based training/audits on hire, annually, and at random												0%	
Other (specify)												0%	
PERSONAL PROTECTIVE EQUIPMENT (PPE)													
Lack of accessible personal protective equipment (PPE)												0%	
Inappropriate selection and use of PPE												0%	
Lack of competency based training/audits on hire, annually, and at random												0%	
Other (specify)												0%	

Probability

- What is the probability that this risk will occur?
  - On a scale of 0-4.
  - Zero (0) being never and, four (4) being expected.
- Example below: How likely are your staff to be compliant with hand hygiene policies?
  - Three (3) was added into the probability column.
  - This means staff are likely to not comply with hand hygiene policies.



Risk/Impact

- What is the risk/impact that this instance will cause?
  - On a scale of 1-5.
  - One (1) being minimal and, five (5) being probable.
- Example below: What is the risk or impact the lack of hand hygiene compliance will have on a resident?
  - A lack of hand hygiene compliance could increase the risk of infection/spread
  - Therefore, a three (3) was added to this column.

Potential Risks	Probability 4 = Expected 3 = Likely 2 = Maybe 1 = Rare 0 = Never	Risk / Impact Possibility of death or permanent injury	Temporary Physical losses and damages	Increase the risk of infection/ spread of infection	Moderate Clinical / Financial	Minimal Clinical / Financial
		5	4	3	2	1
				PREVENTION		
HAND HYGIENE						
Lack of Hand Hygiene Compliance	3			3		

Preparedness with Current Systems/Processes

- Are there systems/processes in place for this potential risk? How well prepared is your facility?
  - On a scale of 1-5.
  - One (1) being excellent and, five (5) being no systems/processes in place.
- Example below: How prepared is your facility with its current systems/processes with the lack of hand hygiene compliance?
  - Due to staff turnover and strain, hand hygiene audits have not been occurring.
  - On hire and annual competency-based training are in place.
  - So, a three (3) was added to the column.

Potential Risks	Probability	Risk / Impact					Preparedness with Current Systems / Processes				
	4 = Expected 3 = Likely 2 = Maybe 1 = Rare 0 = Never	Possibility of death or permanent injury	Temporary Physical losses and damages	Increase the risk of infection/ spread of infection	Moderate Clinical / Financial	Minimal Clinical / Financial	NONE No Process / No Policy in Place / No Training Conducted	POOR Processes in Place, but Need Improvement / Uncertain Level of Training	FAIR Processes in Place and May Need Update / Some Training Done	GOOD Processes in Place and May Need Review / Most Trained	EXCELLENT Processes in Place and Working / All Trained
		5	4	3	2	1	5	4	3	2	1
PREVENTION											
HAND HYGIENE											
Lack of Hand Hygiene Compliance	3	3					3				

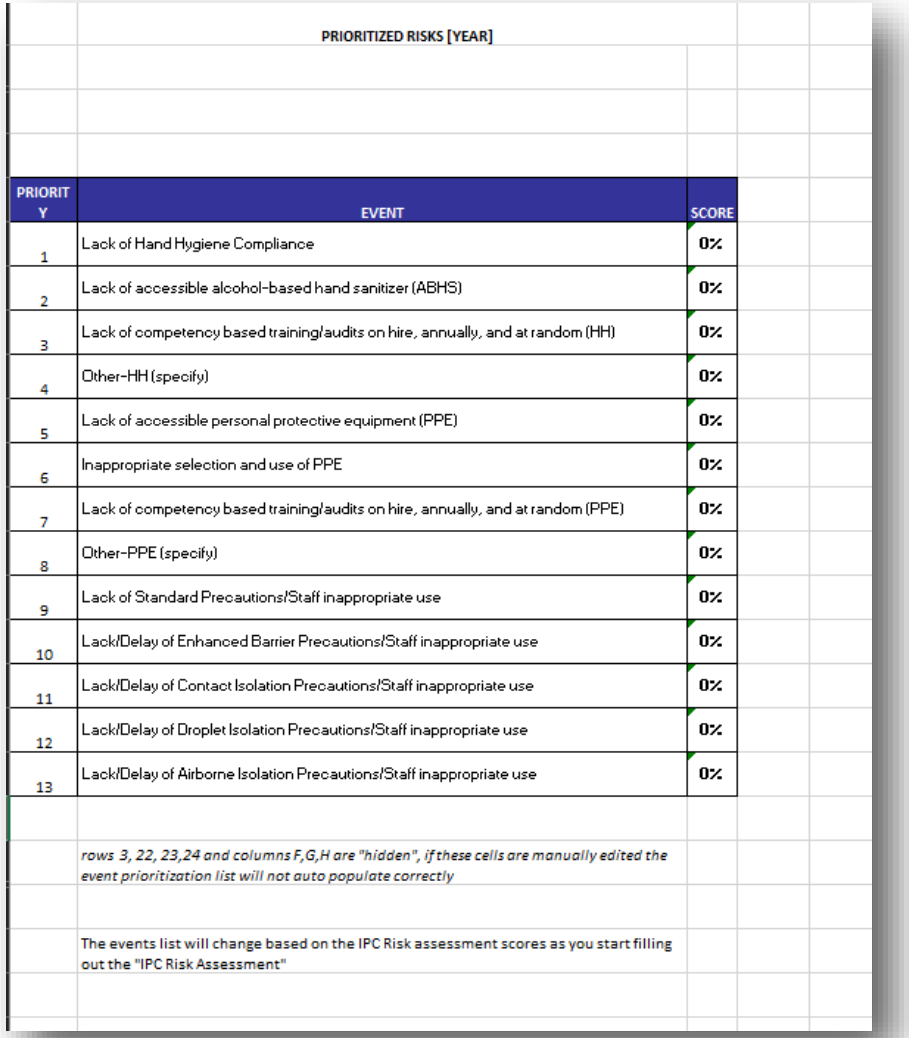
Relative Prioritized Risk

- Calculating the potential impact of the risk, with the probability of the event/condition occurring, and facilities readiness/preparedness to deal with it gives you the likelihood or percent level of something seriously happening.
- How likely is this potential risk to happen?
  - This field is auto calculated for you based on the numerical values entered in the 3 previous columns (All previous columns must be filled out with a numerical value on the given scale to calculate the relative risk).
  - Anything >30% is automatically highlighted in red. All risks highlighted in red will be added to the prioritized risk tab.

Potential Risks	Probability	Risk / Impact					Preparedness with Current Systems / Processes					Relative Prioritized Risks*
	4 = Expected 3 = Likely 2 = Maybe 1 = Rare 0 = Never	Possibility of death or permanent injury	Temporary Physical losses and damages	Increase the risk of infection/ spread of infection	Moderate Clinical / Financial	Minimal Clinical / Financial	NONE No Process / No Policy in Place / No Training Conducted	POOR Processes in Place, but Need Improvement / Uncertain Level of Training	FAIR Processes in Place and May Need Update / Some Training Done	GOOD Processes in Place and May Need Review / Most Trained	EXCELLENT Processes in Place and Working / All Trained	
		5	4	3	2	1	5	4	3	2	1	0 - 100%
PREVENTION												
HAND HYGIENE												
Lack of Hand Hygiene Compliance	3	3					3					45%

Prioritized Risk Tab

- This tab is auto populated from the relative prioritized risk column.
- It prioritizes your risks for the year based on the auto calculated percentages in the IPC Risk Assessment tab.
- These are policies or systems within your facility that may need to be updated or improved.
- To avoid disrupting the formulas, type over risks or delete risks to customize for your facility.



PRIORITIZED RISKS [YEAR]

PRIORITY	EVENT	SCORE
1	Lack of Hand Hygiene Compliance	0%
2	Lack of accessible alcohol-based hand sanitizer (ABHS)	0%
3	Lack of competency based training/audits on hire, annually, and at random (HH)	0%
4	Other-HH (specify)	0%
5	Lack of accessible personal protective equipment (PPE)	0%
6	Inappropriate selection and use of PPE	0%
7	Lack of competency based training/audits on hire, annually, and at random (PPE)	0%
8	Other-PPE (specify)	0%
9	Lack of Standard Precautions/Staff inappropriate use	0%
10	Lack/Delay of Enhanced Barrier Precautions/Staff inappropriate use	0%
11	Lack/Delay of Contact Isolation Precautions/Staff inappropriate use	0%
12	Lack/Delay of Droplet Isolation Precautions/Staff inappropriate use	0%
13	Lack/Delay of Airborne Isolation Precautions/Staff inappropriate use	0%

rows 3, 22, 23,24 and columns F,G,H are "hidden", if these cells are manually edited the event prioritization list will not auto populate correctly

The events list will change based on the IPC Risk assessment scores as you start filling out the "IPC Risk Assessment"

Average Score

- As the risk assessment gets filled out by your team, an average score begins to be calculated as well as an overall relative risk.
- This average score can be used from year to year to see improvements in your facilities systems/processes.

Potential Risks	Probability *4 = Expected* *3 = Likely* *2 = Maybe* *1 = Rare* *0 = Never*
Other weather related/natural disaster (specify)	2
Sentinel Event	3
Product/supply/device recalls and substitutions	2
Failure to Follow Policies and Procedures	3
Lack of Evidence Based Policies and Procedures	1
AVERAGE SCORE	**2.20**

Example:

[FACILITY NAME HERE]

[YEAR] Infection Prevention and Control / Antibiotic Stewardship Risk Assessment

Potential Risks	Probability 4 = Expected 3 = Likely 2 = Maybe 1 = Rare 0 = Never	Potential Risk / Impact Possibility of death or permanent injury	Temporary Physical losses and damages	Increase the risk of infection/ spread of infection	Moderate Clinical / Financial	Minimal Clinical / Financial	Preparedness with Current Systems / Processes NONE No Process / No Policy in Place / No Training Conducted	POOR Processes in Place, but Need Improvement / Uncertain Level of Training	FAIR Processes in Place and May Need Update / Some Training Done	GOOD Processes in Place and May Need Review / Most Trained	EXCELLENT Processes in Place and Working / All Trained	Relative Prioritized Risks*	Rationale/Notes
		5	4	3	2	1	5	4	3	2	1	0 - 100%	
Utilities Failure - ie. HVAC/Electrical/Plumbing/Etc.	2	2					2					20%	
Surge Capacity - the capacity to take in others	1	2					3					13%	
Tornado	2	5					2					35%	
Fire related	1	2					3					13%	
Other weather related/natural disaster (specify)	1	1					1					5%	
OTHER													
Sentinel Event	1	1					1					5%	
Product/supply/device recalls and substitutions	2	1					2					15%	
Failure to Follow Policies and Procedures	2	2					2					20%	
Lack of Evidence Based Policies and Procedures	2	2					2					20%	
AVERAGE SCORE	2.14											13%	

Relative Risk increases with percentage.

Indicators with Relative Risk > 30% to be included in the Infection Prevention and Control / Antibiotic Stewardship Annual Plan goals for improvement.

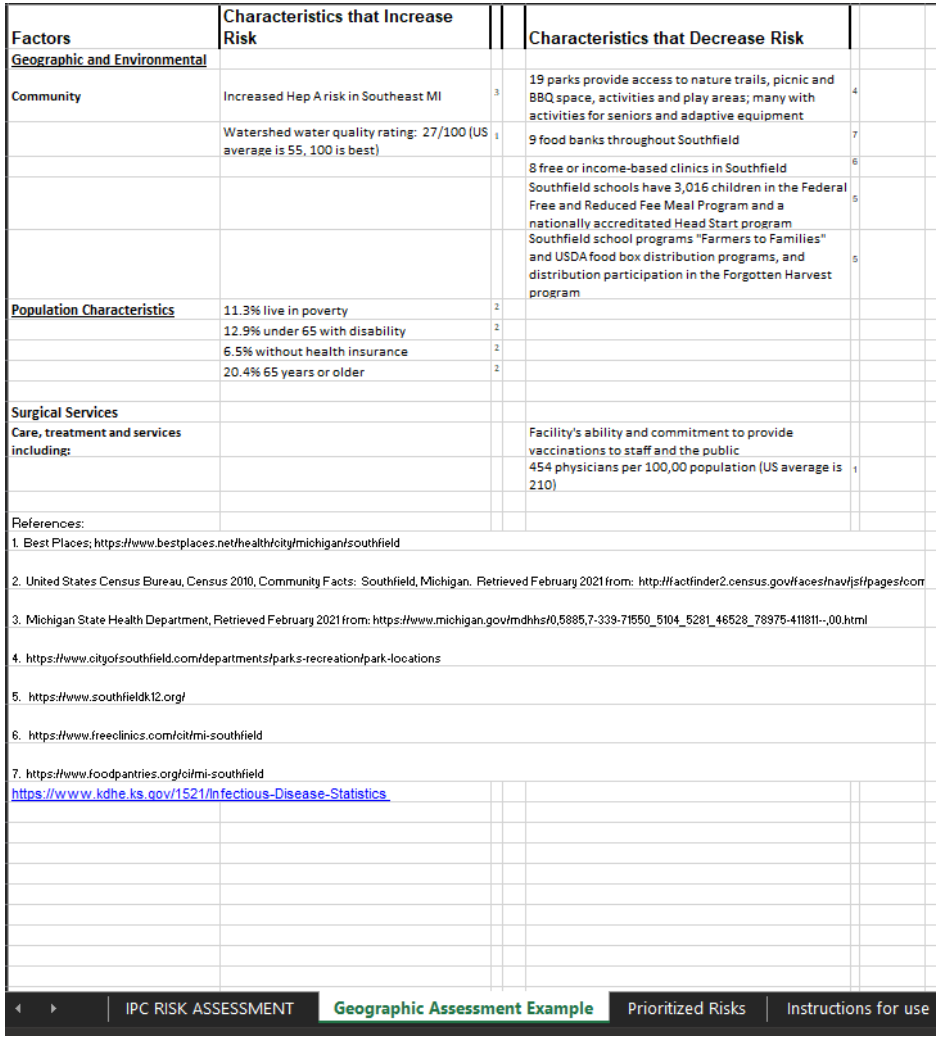
Note: This is a screenshot, therefore, the average score and the overall prioritized risk cannot be manually calculated here.

Geographic Assessment Tab

This tab can be used for risks specific to your area/community that can contribute to some of the risks in this assessment.

- Use Kansas infectious disease data by county for updating this tab – kdhe.ks.gov/1521/

- Example shown right: includes Hep A and watershed issues.



Factors	Characteristics that Increase Risk		Characteristics that Decrease Risk	
Geographic and Environmental				
Community	Increased Hep A risk in Southeast MI	3	19 parks provide access to nature trails, picnic and BBQ space, activities and play areas; many with activities for seniors and adaptive equipment	4
	Watershed water quality rating: 27/100 (US average is 55, 100 is best)	1	9 food banks throughout Southfield	7
			8 free or income-based clinics in Southfield	6
			Southfield schools have 3,016 children in the Federal Free and Reduced Fee Meal Program and a nationally accreditated Head Start program	5
			Southfield school programs "Farmers to Families" and USDA food box distribution programs, and distribution participation in the Forgotten Harvest program	5
Population Characteristics	11.3% live in poverty	2		
	12.9% under 65 with disability	2		
	6.5% without health insurance	2		
	20.4% 65 years or older	2		
Surgical Services				
Care, treatment and services including:			Facility's ability and commitment to provide vaccinations to staff and the public	
			454 physicians per 100,00 population (US average is 210)	1

References:

1. Best Places; https://www.bestplaces.net/health/city/michigan/southfield

2. United States Census Bureau, Census 2010, Community Facts: Southfield, Michigan. Retrieved February 2021 from: http://factfinder2.census.gov/faces/nav/jsf/pages/com

3. Michigan State Health Department, Retrieved February 2021 from: https://www.michigan.gov/mdhhs/0,5885,7-339-71550_5104_5281_46528_78975-411811--,00.html

4. https://www.cityofsouthfield.com/departments/parks-recreation/park-locations

5. https://www.southfieldk12.org/

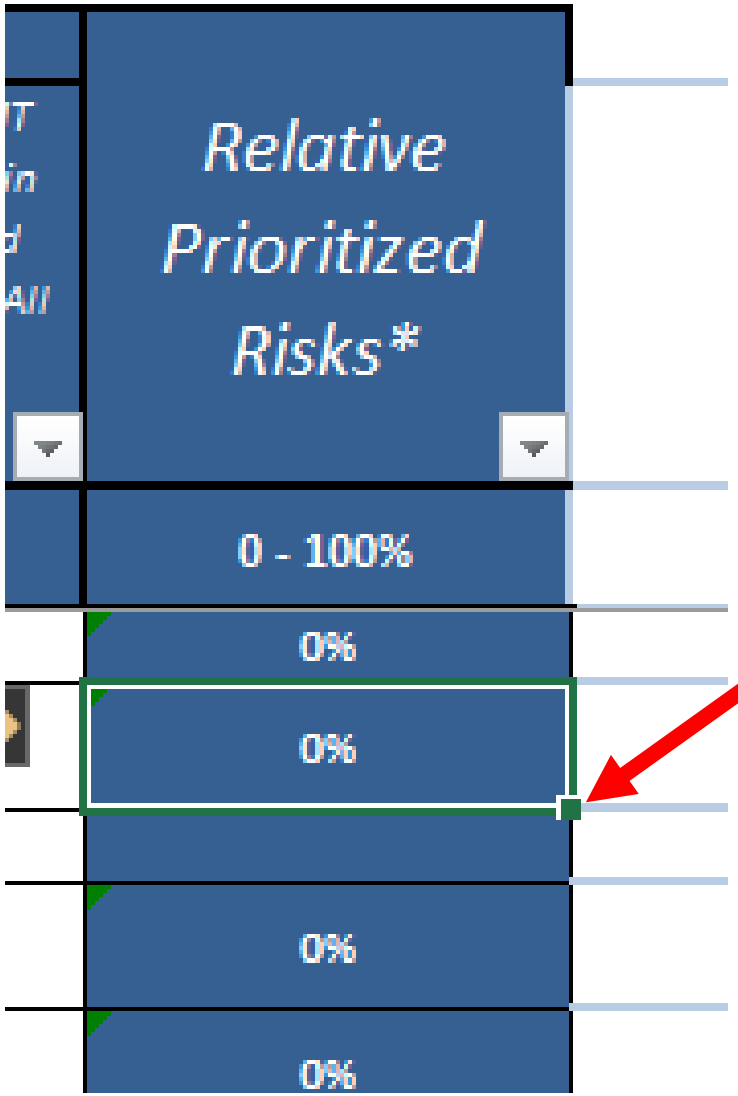
6. https://www.freeclinics.com/cit/mi-southfield

7. https://www.foodpantries.org/ci/mi-southfield

https://www.kdhe.ks.gov/1521/Infectious-Disease-Statistics

IPC RISK ASSESSMENT | Geographic Assessment Example | Prioritized Risks | Instructions for use

Inserting a New Row



You can always add new rows in the risk assessment tool but be aware the formulas we have already imbedded in the tool will need to be pasted to any new cells in which a formula is needed for the tool to work.

To do this, drag the formula from an existing row to the new row:

- Hover over the small green square in the bottom right corner of the cell that has the formula
- Your cursor will change from a white thick ✚ to a thin black crosshairs ┼
- Then left click on your mouse, hold, and drag that formula down to the cell below it.
- The formula is automatically updated to its corresponding row.

Mini Risk Assessments

- If needed, keep on file to produce for regulatory bodies.
- Used as a focused review of an identified potential hazard or risk.
- Template is customizable to fit the needs of the program.
- Should be reassessed at least annually and anytime there is a change.
- Use a multi-disciplinary approach for all departments affected.

Identified Risk				
EXAMPLE: Summer Village currently has multiple storage rooms in the kitchen area with product stored in corrugated cardboard boxes. The outside box contains the recall information that would be discarded if the boxes were removed. The inside packaging, typically a bag, does not have any labeling or product information on it for most of the fruits and vegetables. Removing the product from the original shipping container could prevent recall of products and cause serious harm to patients and healthcare workers if the product that is recalled is.				
Risk Assessment				
Hazard or Condition	**Level of Risk**			
EXAMPLE	High Risk = 3	Moderate Risk = 2	Low Risk = 1	No Risk = 0
Resident Impact				
Proximity				0
Infection				0
Adequate IPC surveillance and monitoring				0

Corrective Action Required if cumulative score is 2 or higher. (Circle or highlight Yes or No)		
Cumulative Risk Score is 2 or greater?	Yes	No

Description of Risk Assessment Findings: EXAMPLE

Minor plumbing leak in 2019 related to a cracked pipe resulted in wet/stained ceiling tiles and small puddles of water on floor. All piping has been replaced and is inspected annually. Staff are aware to report any stained ceiling tiles or leaks. Area is occupied 7 days a week but not 24 hours a day.

Fresh fruits and vegetables are stored in multiple locations in the original shipping container that is made of corrugated cardboard. The printed label information (product name, size, lot number, code(s), expiration dates, shipping dates, and establishment number) is located on the outside of the corrugated box. There is no information on the inside storage bags or on the products themselves. Removal of this product from its original container could potentially lead to patient harm in the event of a product recall.

Three wire storage units are missing a solid surface on the bottom shelf where products are stored.

Recommendations: EXAMPLE

Corrugated cardboard boxes/containers delivered to the kitchen that contain product information only on the outside shipping container, will remain in the original container due to risk of lot recall.

The above-mentioned location(s) will eliminate as much corrugated cardboard as possible to maintain a clean and safe environment and reduce the combustible level within the area.

All corrugated cardboard boxes will be stored in one storeroom that is free of overhead plumbing and potential pipe leaks.

Staff and security will monitor for pests, leaks or moisture in the storeroom and boxes and discard any compromised boxes and contents.

Hierarchy of Controls	
Elimination	Eliminate or remove the hazard at the source.
Substitution	Replace the system or process with something less harmful.
Isolation	Isolate the hazard from people by distance or physical barrier.
Engineering controls	Redesign the equipment, process, or system to reduce exposure.
Administrative controls	Develop policies and procedures to mitigate the risk. Educate personnel about the
Personal protective equipment	Apply standard precautions, the last line of defense protecting those on an individual

Action Plan		
Hierarchy of Controls	**Control Measure**	**Date to be Completed**
EXAMPLE: Administrative controls	EXAMPLE: Security will walk the area every 4 hours when un-occupied and look for potential leaks. All security staff will receive education on identifying leaks (wet/stained tiles, moisture on walls, water on floor) and how to report leaks.	10/14/2024

Review/Approval Process (EXAMPLE)		
Reviewer	**Approved/Denied**	**Date**
Multidisciplinary review team	Approved	10/10/2024
Administration (CEO, DON, or ADON)	Approved	10/10/2024
Infection Prevention Committee	Approved	10/20/2024
Environment of Care/Safety Committee	Approved	10/25/2024

Additional Resources and References

1. KDADS Statutes and Regulations for the Licensure & Operation of Nursing Facilities
2. OSHA BBP Standards
3. IPC Risk Assessment Template | CDC
4. APIC Risk Assessment Template
5. Generic Risk Assessment Document
6. The New IP's Guide to the Annual Infection Prevention Risk Assessment, Plan & Review
7. KDHE TB Program
8. CDC TB Risk Assessment Form
9. ASHE ICRA 2.0 - Construction Risk Assessment Toolkit

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Healthcare-Associated Infections & Antimicrobial Resistance Section

KDHE HAI/AR Section Contact Info:

Email: kdhe.HAIAR@ks.gov

Website: kdhe.ks.gov/1514/

24/7 KDHE Epidemiology Hotline

Toll-Free 877-427-7317

Looking for more information on Infection Prevention?

How can we help?

Questions