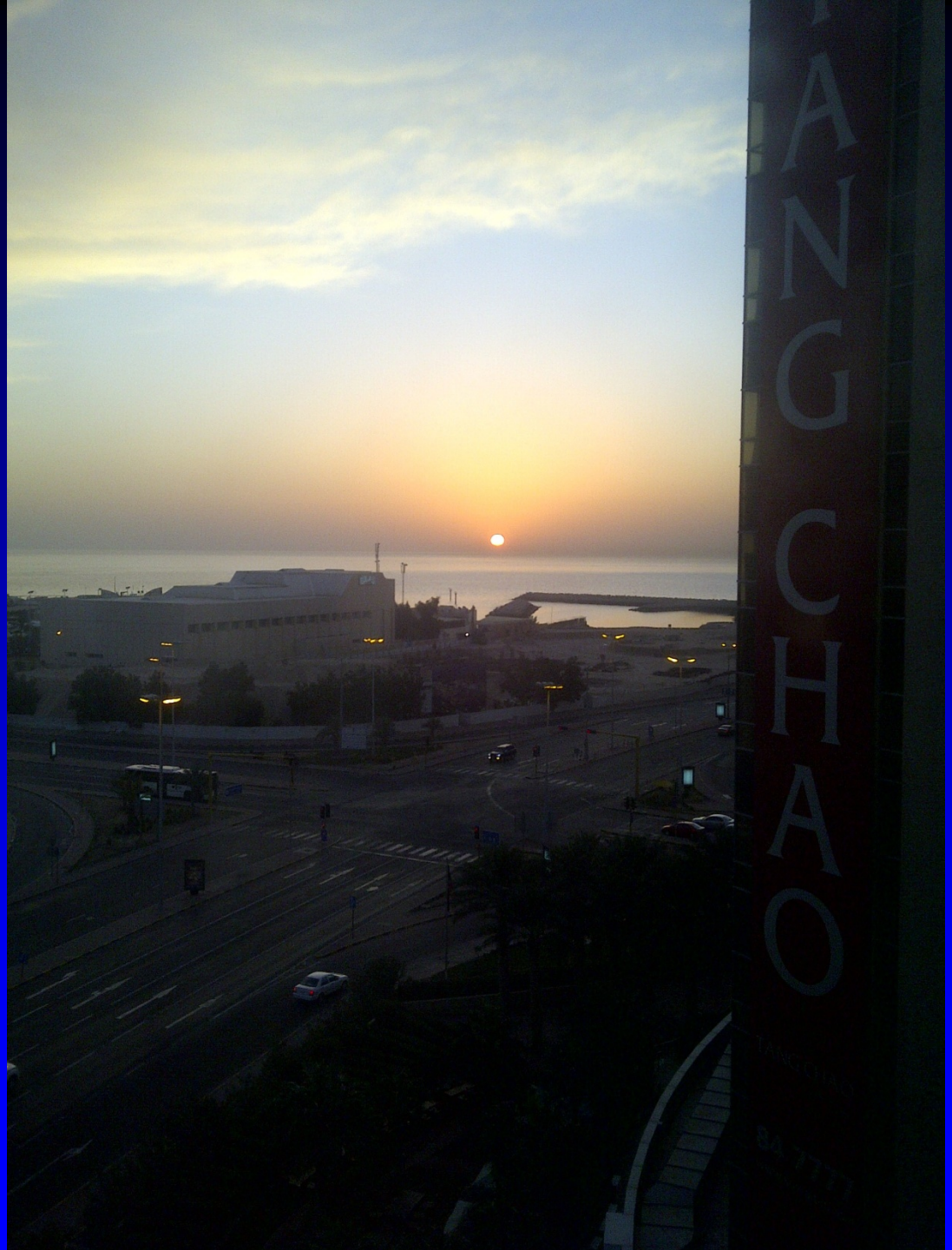
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Ethidium bromide

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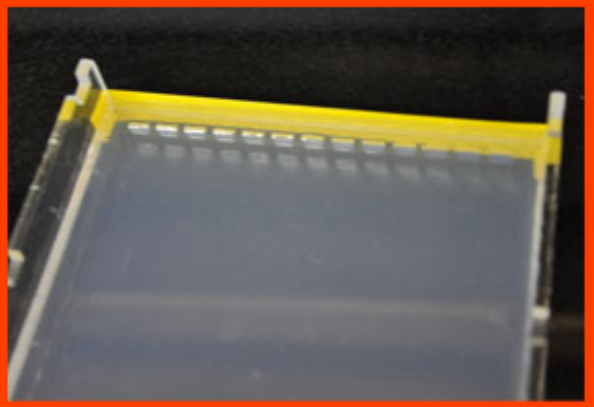
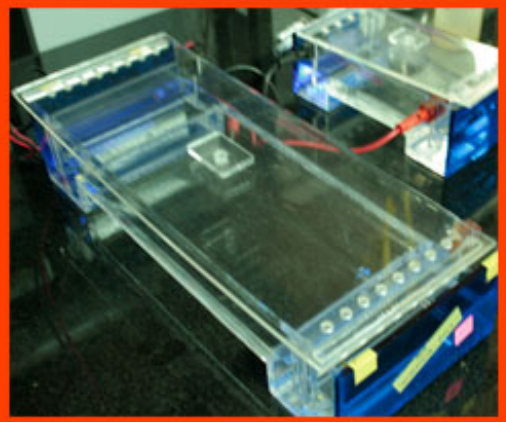


Gel (after half an hour)



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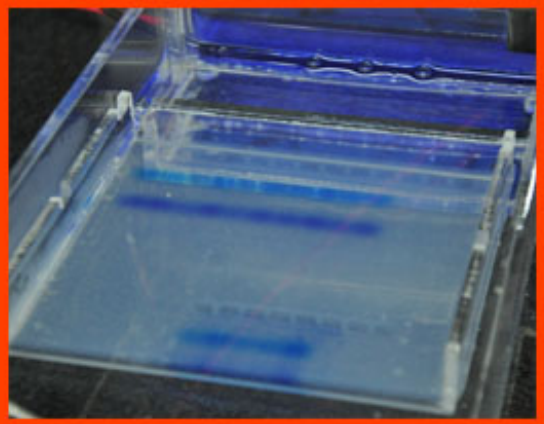

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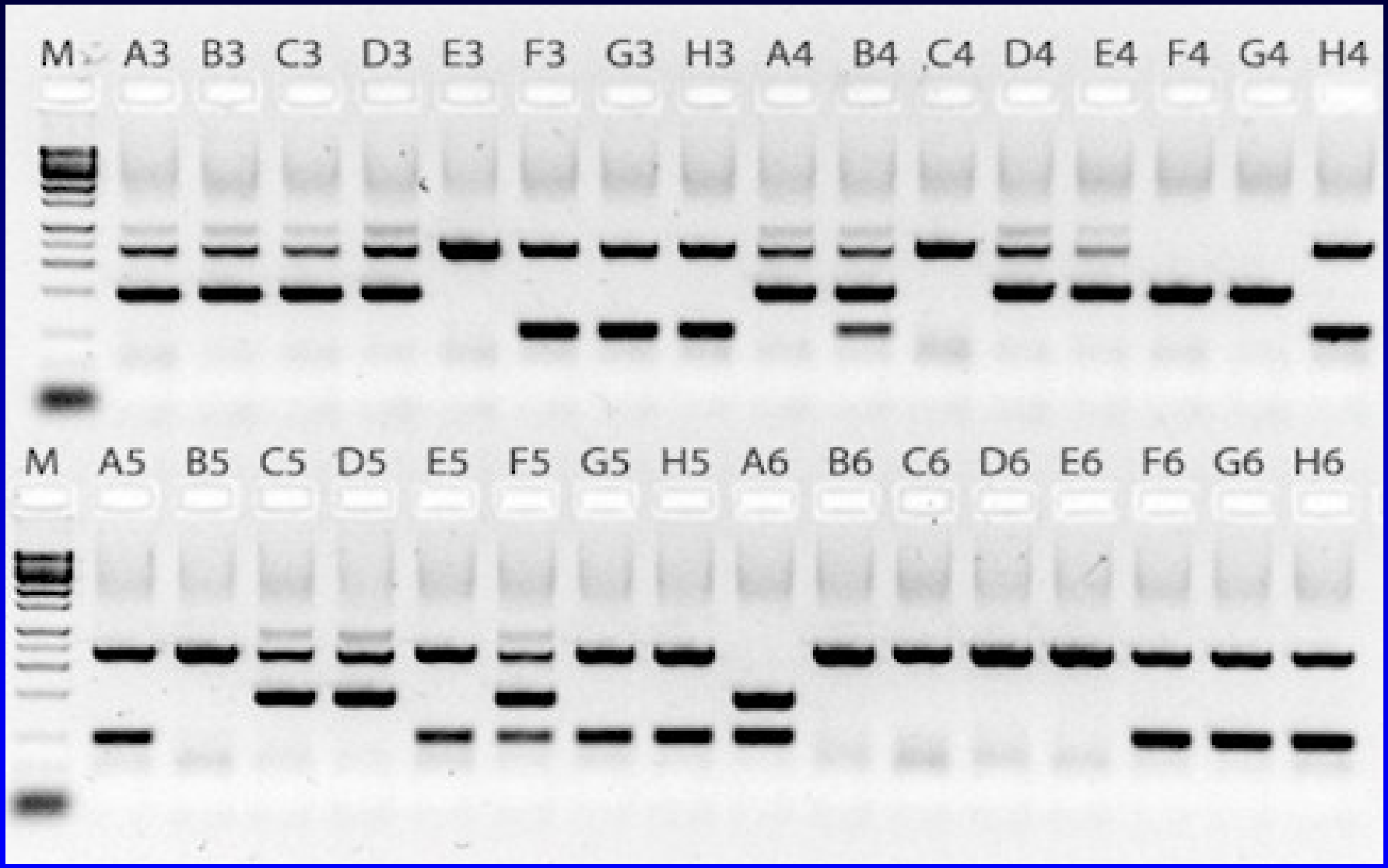
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Gels…

Liquids

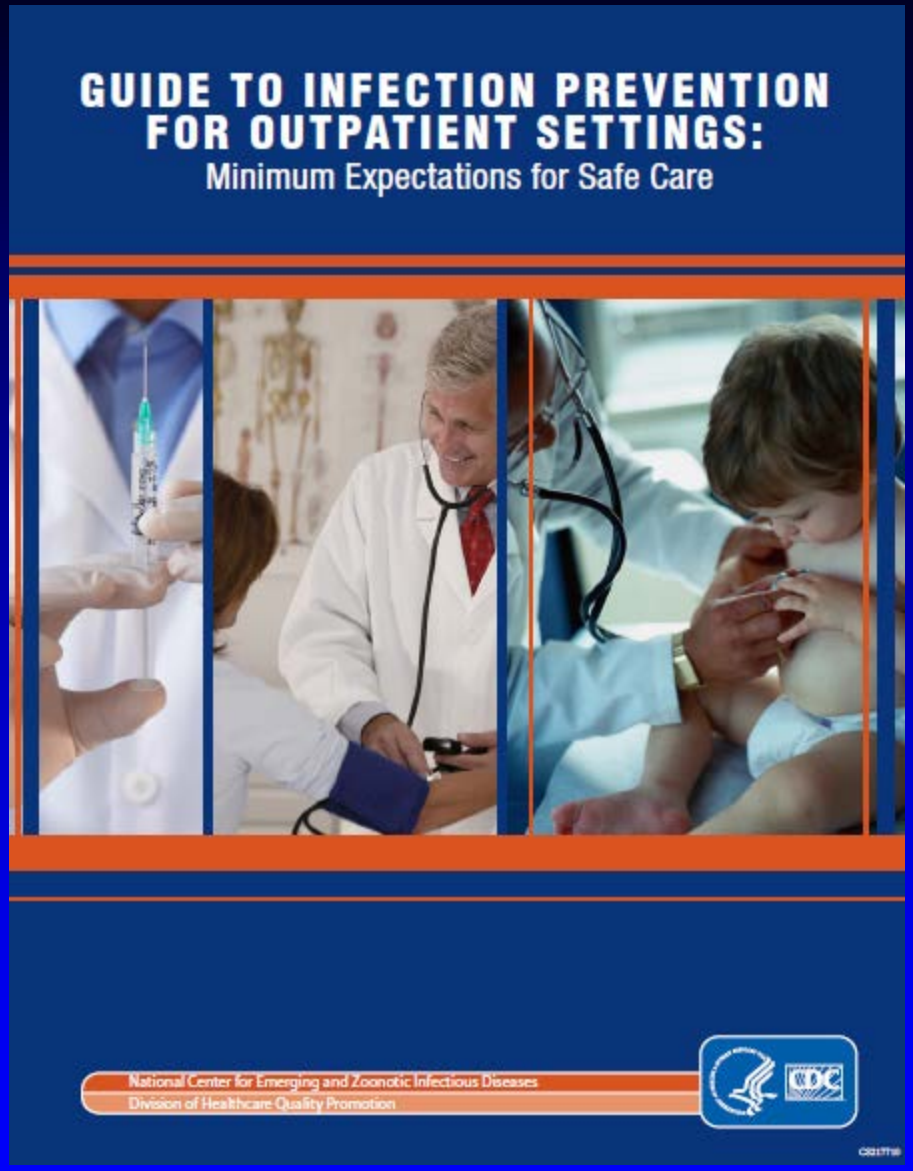
Fisher Scientific, Schleicher and Schuell, or VWR.

Ethidium Bromide Destaining Tea Bags

Transporting Biological Materials

Use secondary containers when moving biological materials from one room or building to another.

A secondary container must be leak-proof, lidded, and labeled with biohazard stickers.



http://www.cdc.gov/HAI/pdfs/guidelines/standatds-of-ambulatory-care-7-2011.pdf

AIDE-MEMOIRE

Infection control standard precautions in health care

Background

Standard precautions are meant to reduce the risk of transmission of bloodborne and other pathogens from both recognized and unrecognized sources. They are the basic level of infection control precautions which are to be used, as a minimum, in the care of all patients.

Hand hygiene is a major component of standard precautions and one of the most effective methods to prevent transmission of pathogens associated with health care. In addition to hand hygiene, the use of **personal protective equipment** should be guided by **risk assessment** and the extent of contact anticipated with blood and body fluids, or pathogens.

In addition to practices carried out by health workers when providing care, all individuals (including patients and visitors) should comply with infection control practices in health-care settings. The control of spread of pathogens from the source is key to avoid transmission. Among source control measures, **respiratory hygiene/cough etiquette**, developed during the severe acute respiratory syndrome (SARS) outbreak, is now considered as part of standard precautions.

Worldwide escalation of the use of standard precautions would reduce unnecessary risks associated with health care. Promotion of an **institutional safety climate** helps to improve conformity with recommended measures and thus subsequent risk reduction. Provision of adequate staff and supplies, together with leadership and education of health workers, patients, and visitors, is critical for an enhanced safety climate in health-care settings.

Important advice

- Promotion of a safety climate is a cornerstone of prevention of transmission of pathogens in health care.
- Standard precautions should be the minimum level of precautions used when providing care for all patients.
- Risk assessment is critical. Assess all health-care activities to determine the personal protection that is indicated.
- Implement source control measures for all persons with respiratory symptoms through promotion of respiratory hygiene and cough etiquette.

✔ Checklist

Health policy

- Promote a safety climate.
- Develop policies which facilitate the implementation of infection control measures.

Hand hygiene

- Perform hand hygiene by means of hand rubbing or hand washing (see overleaf for detailed indications).
- Hands should always be washed with soap and water if hands are visibly soiled, or exposure to spore-forming organisms is proven or strongly suspected, or after using the restroom. For other indications, if resources permit, perform hand rubbing with an alcohol-based preparation.
- Ensure availability of hand-washing facilities with clean running water.
- Ensure availability of hand hygiene products (clean water, soap, single use clean towels, alcohol-based hand rub). Alcohol-based hand rubs should ideally be available at the point of care.

Personal protective equipment (PPE)

- ASSESS THE RISK of exposure to body substances or contaminated surfaces BEFORE any health-care activity. **Make this a routine!**
- Select PPE based on the assessment of risk:
  - clean non-sterile gloves.
  - clean, non-sterile fluid-resistant gown.
  - mask and eye protection or a face shield.

Respiratory hygiene and cough etiquette

- Education of health workers, patients and visitors.
- Use of source control measures.
- Hand hygiene after contact with respiratory secretions.
- Spatial separation of persons with acute febrile respiratory symptoms.

World Health Organization

EPIDEMIC AND PANDEMIC ALERT AND RESPONSE

http://www.who.int/csr/resources/publications/4EPR_AM2.pdf

Health-care facility recommendations for standard precautions

KEY ELEMENTS AT A GLANCE

1. Hand hygiene[1]

Summary technique:

- Hand washing (40–60 sec): wet hands and apply soap; rub all surfaces; rinse hands and dry thoroughly with a single use towel; use towel to turn off faucet.
- Hand rubbing (20–30 sec): apply enough product to cover all areas of the hands; rub hands until dry.

Summary indications:

- Before and after any direct patient contact and between patients, whether or not gloves are worn.
- Immediately after gloves are removed.
- Before handling an invasive device.
- After touching blood, body fluids, secretions, excretions, non-intact skin, and contaminated items, even if gloves are worn.
- During patient care, when moving from a contaminated to a clean body site of the patient.
- After contact with inanimate objects in the immediate vicinity of the patient.

2. Gloves

- Wear when touching blood, body fluids, secretions, excretions, mucous membranes, nonintact skin.
- Change between tasks and procedures on the same patient after contact with potentially infectious material.
- Remove after use, before touching non-contaminated items and surfaces, and before going to another patient. Perform hand hygiene immediately after removal.

3. Facial protection (eyes, nose, and mouth)

- Wear a surgical or procedure mask and eye protection (face shield, goggles) to protect mucous membranes of the eyes, nose, and mouth during activities that are likely to generate splashes or sprays of blood, body fluids, secretions, and excretions.

4. Gown

- Wear to protect skin and prevent soiling of clothing during activities that are likely to generate splashes or sprays of blood, body fluids, secretions, or excretions.
- Remove soiled gown as soon as possible, and perform hand hygiene.

5. Prevention of needle stick injuries[2]

Use care when:

- handling needles, scalpels, and other sharp instruments or devices
- cleaning used instruments
- disposing of used needles.

6. Respiratory hygiene and cough etiquette

Persons with respiratory symptoms should apply source control measures:

- cover their nose and mouth when coughing/sneezing with tissue or mask, dispose of used tissues and masks, and perform hand hygiene after contact with respiratory secretions.

Health care facilities should:

- place acute febrile respiratory symptomatic patients at least 1 metre (3 feet) away from others in common waiting areas, if possible.
- post visual alerts at the entrance to health-care facilities instructing persons with respiratory symptoms to practise respiratory hygiene/cough etiquette.
- consider making hand hygiene resources, tissues and masks available in common areas and areas used for the evaluation of patients with respiratory illnesses.

7. Environmental cleaning

- Use adequate procedures for the routine cleaning and disinfection of environmental and other frequently touched surfaces.

8. Linens

Handle, transport, and process used linen in a manner which:

- prevents skin and mucous membrane exposures and contamination of clothing.
- avoids transfer of pathogens to other patients and or the environment.

9. Waste disposal

- Ensure safe waste management.
- Treat waste contaminated with blood, body fluids, secretions and excretions as clinical waste, in accordance with local regulations.
- Human tissues and laboratory waste that is directly associated with specimen processing should also be treated as clinical waste.
- Discard single use items properly.

10. Patient care equipment

- Handle equipment soiled with blood, body fluids, secretions, and excretions in a manner that prevents skin and mucous membrane exposures, contamination of clothing, and transfer of pathogens to other patients or the environment.
- Clean, disinfect, and reprocess reusable equipment appropriately before use with another patient.

[1] For more details, see: WHO Guidelines on Hand Hygiene in Health Care (Advanced draft), at: http://www.who.int/patientsafety/information_centre/ghhad_download/en/index.html.
[2] The SIGN Alliance at: http://www.who.int/injection_safety/sign/en/

Formaldehyde/ Paraformaldehyde

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Training on Medical Waste Management

in Collaboration with
Al-Essa Medical & Scientific Equipment Co. W.L.L

Management of Medical Waste in the Facility

Kuwait University
Health Science Center
29 January – 1 February, 2012

Categories of health-care waste

Waste category	Description and examples
Infectious waste	Waste suspected to contain pathogens e.g. laboratory cultures; waste from isolation wards; tissues (swabs), materials, or equipment that have been in contact with infected patients; excreta
Pathological waste	Human tissues or fluids e.g. body parts; blood and other body fluids; fetuses
Sharps	Sharp waste e.g. needles; infusion sets; scalpels; knives; blades; broken glass
Pharmaceutical waste	Waste containing pharmaceuticals e.g. pharmaceuticals that are expired or no longer needed; items contaminated by or containing pharmaceuticals (bottles, boxes)
Genotoxic waste	Waste containing substances with genotoxic properties e.g. waste containing cytostatic drugs (often used in cancer therapy); genotoxic chemicals
Chemical waste	Waste containing chemical substances e.g. laboratory reagents; film developer; disinfectants that are expired or no longer needed; solvents
Wastes with high content of heavy metals	Batteries; broken thermometers; blood-pressure gauges; etc.
Pressurized containers	Gas cylinders; gas cartridges; aerosol cans
Radioactive waste	Waste containing radioactive substances e.g. unused liquids from radiotherapy or laboratory research; contaminated glassware, packages, or absorbent paper; urine and excreta from patients treated or tested with unsealed radionuclides; sealed sources

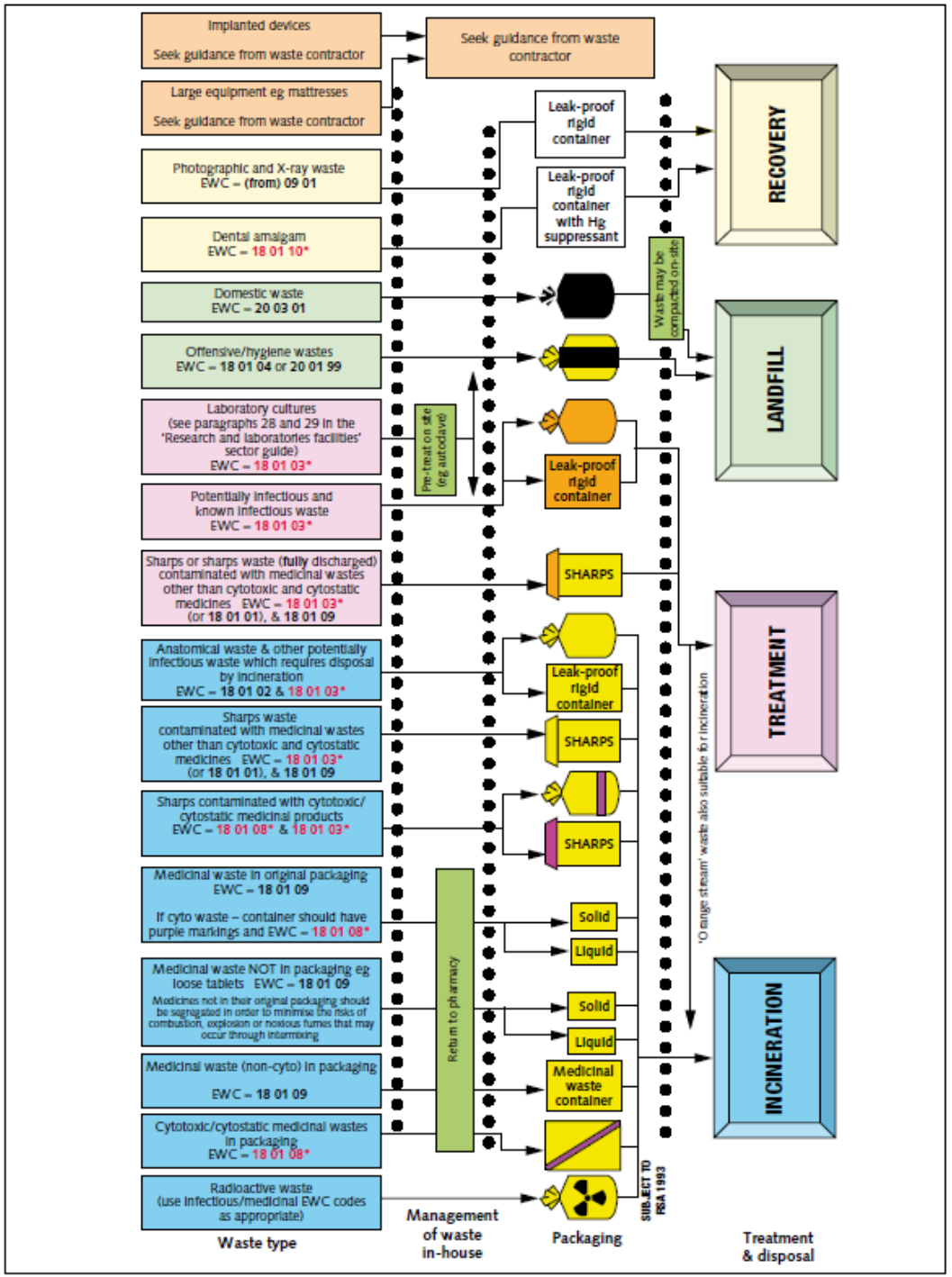
WHO Classification - Color Code

Waste Type

Waste Type	WHO Color Code
Biological Waste (including Pathological and Infectious)	YELLOW
Sharps	YELLOW
Pharmaceutical Waste(including Cytotoxic)	BROWN
Chemical Waste	BROWN
Radioactive Waste	None

Bag Colors

Bag Type	Color	Use
Chemotherapy Waste Liner	Brown	Safely transport hazardous chemotherapy waste products
Autoclavable Bag	Red	Keep contaminated medical equipment and supplies sterile and emit less odor when autoclaving (heat-resistant bag)
Biohazard/Infectious Waste Liner	Yellow	Disposal of infectious waste
Evidence and Property Star Seal	Yellow	Disposal of infectious waste
Contaminated Linen	Yellow	Hazardous or contaminated contents and is safe for landfill or incineration
Specimen Transport Bag (Self-sealing)	Clear	Transport specimen
Specimen Transport Bag (Heat Sealable)	Clear	Transport specimen



HTM 07-01 NHS UK

Is this what it really looks like???

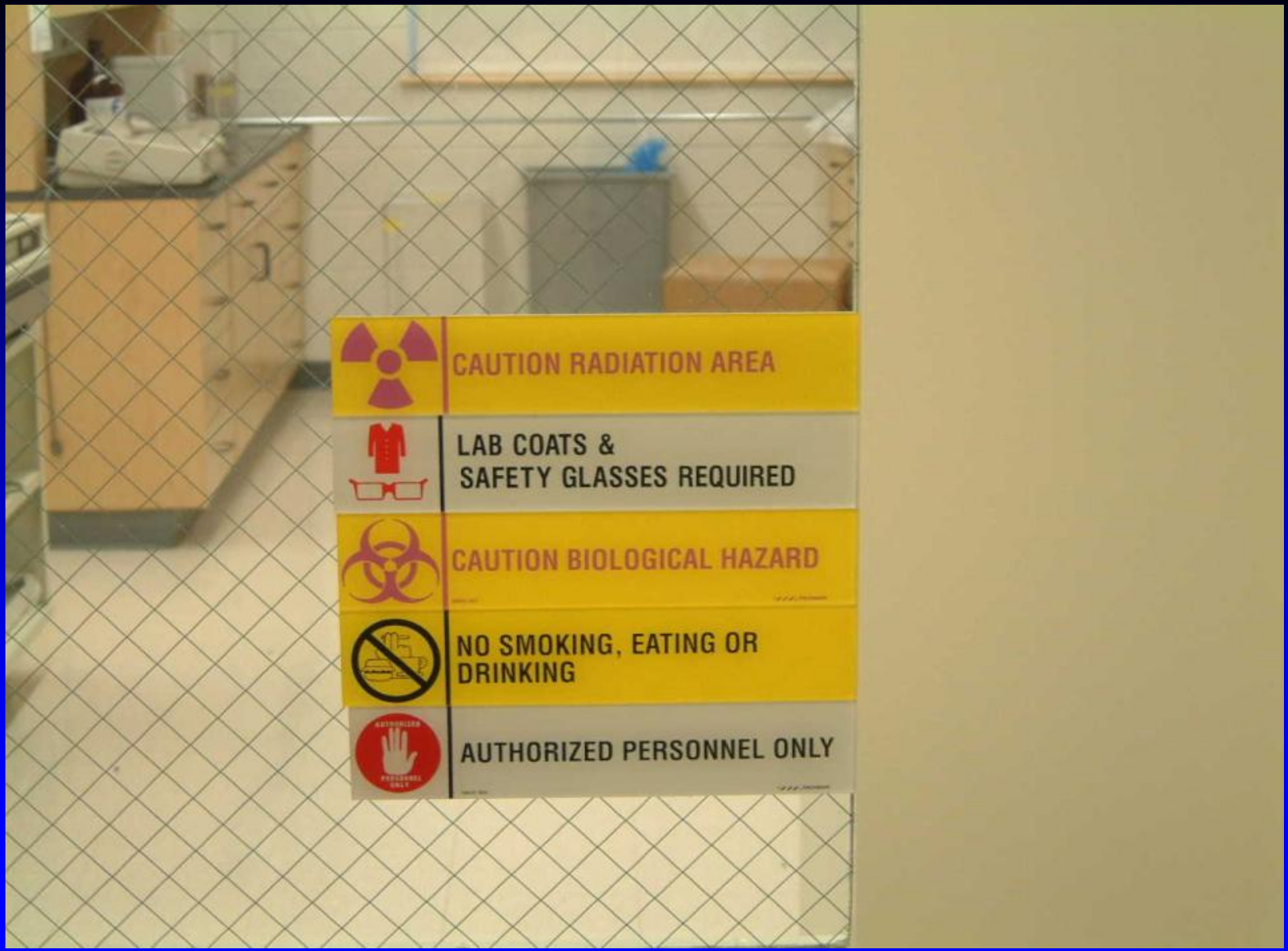
It is all about Color Coding!!!!


SURGICAL FACE MASK
Medicos


ANIOSGEL
ANIOS


MULTIBO


LAB COATS &
SAFETY GLASSES REQUIRED
CAUTION BIOLOGICAL HAZARD
NO SMOKING, EATING OR
DRINKING
AUTHORIZED PERSONNEL ONLY


CAUTION RADIATION AREA
LAB COATS &
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MRI-CYL


SOLID
WASTE
(HAZARDOUS)
HALOGENATED
WASTE
(HAZARDOUS)
NON-
HALOGENATED
WASTE
(HAZARDOUS)
EAGLE


262 Safety Storage Cab. 3
VWR Scientific
FS014
FLAMMABLE
KEEP FIRE AWAY
EAGLE


Fisherbrand


DEPOSIT BROKEN
Fisherbrand


MERCURY
spill control
station
BURN KIT
FIRST AID


ATTENTION
ALL SPILLS SHOULD BE CLEANED UP BY TRAINED PERSONNEL ONLY
EMERGENCY NUMBERS
LAB SAFETY SUPPLY
SpillKART
JUNIOR
BATTERY STATION
Spill
Response Kit


WHEATON
WHEATON
NaCl
WHEATON
Scientific Products
CORNING
Hot Plate Stirrer
PC-351

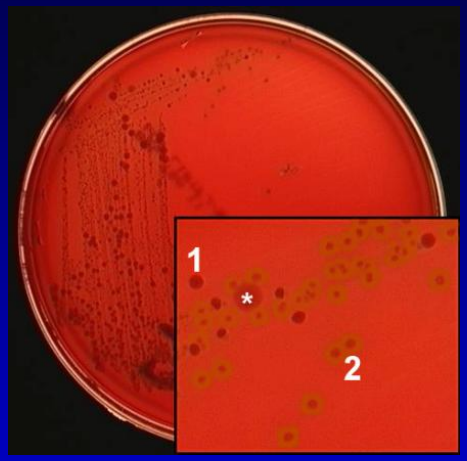

Hood 9


SDC
the NDL rganization, Inc.


Not always Perfect!!

Infectious Waste

Infectious Waste



Autoclave bag

Sharps Containers

SHARPSGUARD®

1

Making sense of change

Changes to ordering codes for sharps containers from

Daniels Healthcare

'orange to orange, black to purple'

Old ordering codes			New ordering codes		
Product name	NHS Supply Chain code	Daniels code	Product name	To order from NHS Supply Chain	To order from Daniels Healthcare in case quantities
SHARPSBIN™ 0.5	FSL091	DD442NR	SHARPSGUARD® orange 0.5	No change	DD442NROL
SHARPSBIN™ 0.6	FSL094	DD509	SHARPSGUARD® orange 0.6	No change	DD509OL
SHARPSBIN™ mini	FSL179	DD478	SHARPSGUARD® orange mini	No change	DD478OL
SHARPSBIN™ 1	FSL045	DD477	SHARPSGUARD® orange 1	No change	DD477OL
SHARPSBIN™ com-plus	FSL433	DD479	SHARPSGUARD® orange com-	No change	DD479OL
SHARPSBIN™ 2.5	FSL182	DD472	SHARPSGUARD® orange 2.5	No change	DD472OL
SHARPSBIN™ 3.75	FSL086	DD474	SHARPSGUARD® orange 3.75	No change	DD474OL
SHARPSBIN™ 5	FSL121	DD471	SHARPSGUARD® orange 5	No change	DD471OL
SHARPSBIN™ 7	FSL135	DD473	SHARPSGUARD® orange 7	No change	DD473OL
SHARPSGUARD® 8.5	FSL109	DD580	SHARPSGUARD® EXTRA orange	No change	DD580OL
SHARPSBIN™ 11.5	FSL122	DD476	SHARPSGUARD® orange 11.5	No change	DD476OL
SHARPSBIN™ 22	FSL126	DD475	SHARPSGUARD® orange 22	No change	DD475OL
SHARPSBIN™ 22 xa	FSL058	DD439	SHARPSGUARD® orange 22 xa	No change	DD439OL
SHARPSBIN™ 22 ra	FSL092	DD440	SHARPSGUARD® orange 22 ra	No change	DD440OL
SHARPSBIN™ theatre	FSL110	DD530	SHARPSGUARD® orange theatre	No change	DD530OL
SHARPSBIN™ 0.6		DD609	SHARPSGUARD® cyto 0.6		DD609
SHARPSBIN™ cyto com-plus	FSL077	DD679	SHARPSGUARD® cyto com-plus	No change	DD679
			SHARPSGUARD® cyto 2.5	FSL004	DD672
SHARPSBIN™ cyto 5	FSL409	DD605	SHARPSGUARD® cyto 5	No change	DD605
SHARPSBIN™ cyto 11.5	FSL411	DD610	SHARPSGUARD® cyto 11.5	No change	DD610
SHARPSBIN™ cyto 22	FSL412	DD620	SHARPSGUARD® cyto 22	No change	DD620
SHARPSBIN™ cyto 22 xa	FSL081	DD639	SHARPSGUARD® cyto 22 xa	No change	DD639

Safe Management of Healthcare Waste - Which **option** will you chose ?

www.daniels.co.uk

DANIELS HEALTHCARE LTD Unit 14 Station Field Ind. Est. Kidlington, Oxon OX5 1JD Tel: 01865 371841

Page 12

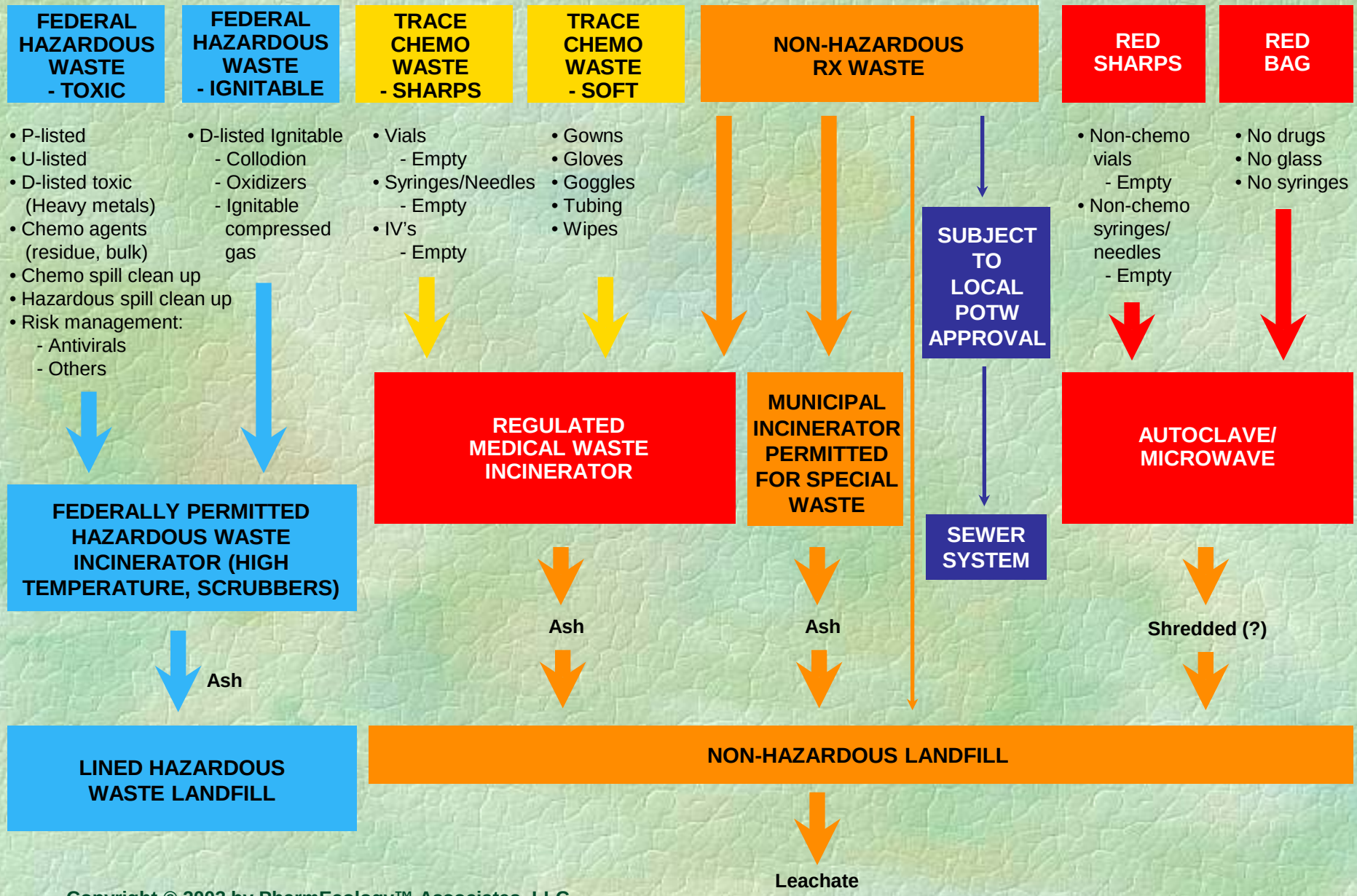
SHARPSGUARD® from d. DANIELS

Page 5

Pathological Waste

Cytotoxic / Genotoxic Waste

Recommended Pharmaceutical Waste Streams



Chemical Waste - Organics

Chemical Waste - Flammables

Chemical Waste Inorganics

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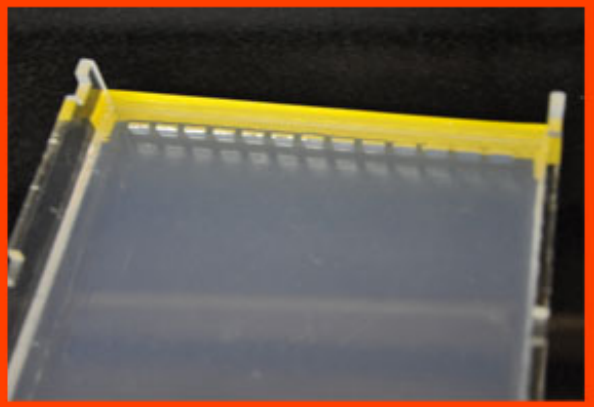

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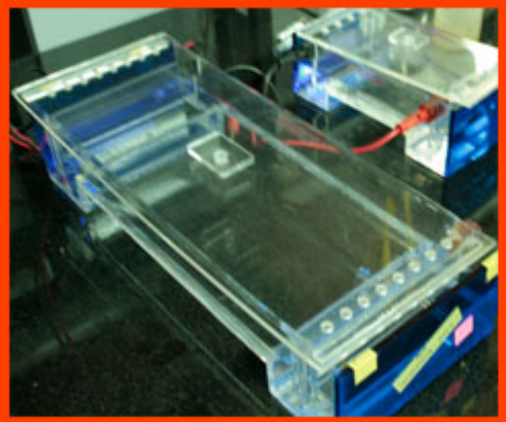

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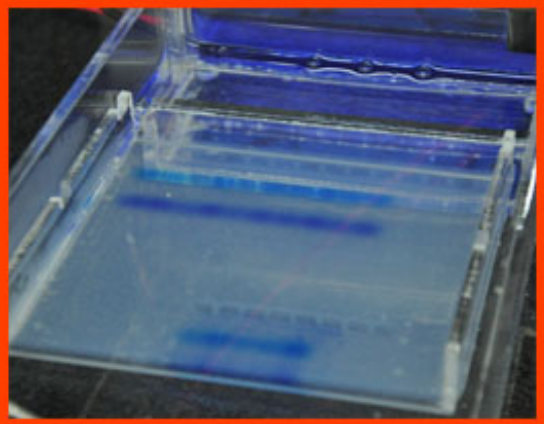

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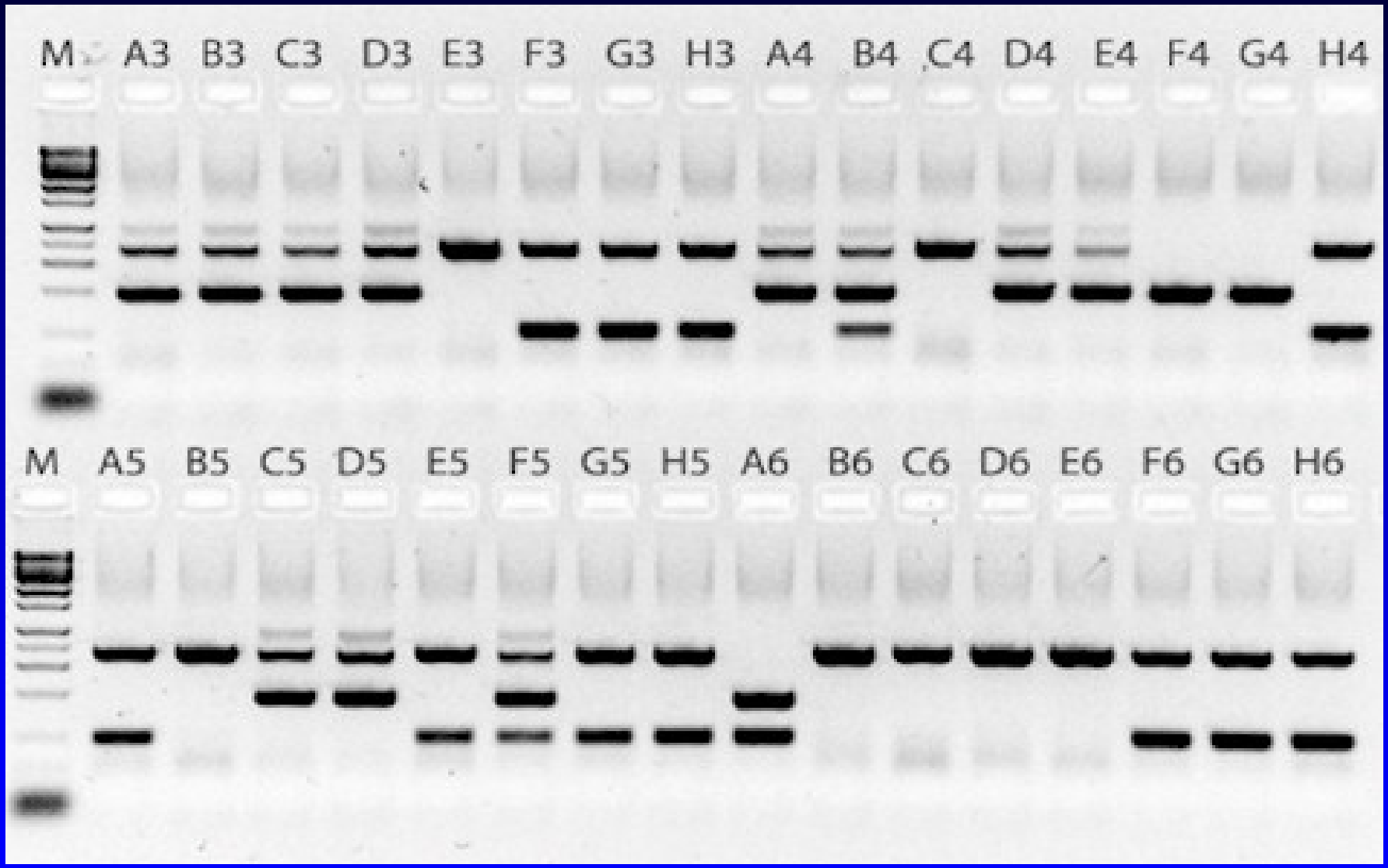
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Batteries

Glass/ Broken Glass

Amalgam Container

HAZARDOUS HEALTHCARE WASTE/ MEDICAL WASTE FLOWCHART

INFECTIOUS WASTE

SHARPS

PATHOLOGICAL WASTE

LANDFILL AREA

CHEMICAL WASTE FLOWCHART

CHEMICAL STREAM

ORGANIC WASTE

FLAMABLE

INORGANIC WASTE

LANDFILL AREA

BATTERY/ BROKEN GLASS WASTE FLOWCHART

LANDFILL AREA