

# NGS Specimen Handling Chart

No culture media. No aerobic/anaerobic split. Every sample goes **straight into a MiDOG tube** - stable at room temperature for one year.



• Collect



• Preserve



• Ship



## White-label tube

Swabs, abscess, fluids, tissue, feces, water and **everything except urine**.



## Yellow-label tube

**Urine only.** Comes in the Urine Collection Kit. Never use it for other sample types.



## Swabs - Skin, Ear & Lesion

WHITE-LABEL TUBE

- Swab the **active lesion**, not nearby skin.
- Snap the shaft at the score line into the tube.
- Clean debris with sterile saline or as appropriate.
- **Small-sized swabs** for ear canals, small animals & exotics as needed.



## Abscess

WHITE-LABEL TUBE

### PREFERRED

**Needle-aspirated pus** from the abscess cavity, or **deep tissue from the abscess wall** - highest pathogen yield, lowest contamination.

### SAMPLE QUALITY, BEST → WORST

#### BEST

Aspirated pus

2

Deep tissue biopsy

3

Deep swab of abscess wall

#### WORST

Deep swab of abscess wall



### DO NOT SWAB

- Superficial drainage or pus
- Necrotic center
- Surrounding intact skin



## Urine

YELLOW-LABEL URINE TUBE

- **2-4 mL of liquid urine** into the yellow-label tube.
- Do not use the white tube. Do not use a swab; add the urine
- **Cysto beats free-catch** - free-catch picks up skin organisms on the way out.



## Fluids & Aspirates

WHITE-LABEL TUBE

- Joint fluid, bile, eye & nasal washes, rinses, cavity aspirates.
- **4 mL ideal**, 2 ml minimum. Less is accepted but may return nothing.
- Fluids go directly into the tube if possible; avoid just sending the soaked swab.

**Blood: use as last resort only.** If unavoidable: 0.5-1ml serum or plasma into the white-label tube.



## Tissue & Body Parts

WHITE-LABEL TUBE

- **Macerate tissue or grind in a sterile mortar & pestle** so the buffer can penetrate and mix well with sample.
- Only material in **MiDOG tubes** will be accepted.
- Nothing loose in the envelope such as toes, tails, nails, hardware.



## Water - Pool & Aquarium

WHITE-LABEL TUBE

- **~4 mL water** in the tube, cap, **invert 5-10x**.
- **Recommended:** swab the water filter and add to the same tube
- Separate tubes are billed separately



## Feces

WHITE-LABEL TUBE

- **Pea-sized amount** into the white-label tube or 0.1g.
- Avoid picking up litter, bedding, and soil

| SAMPLE TYPE                  | TUBE         | AMOUNT / VOLUME                   | TYPICAL CASES & LIKELY ORGANISMS                                                   |
|------------------------------|--------------|-----------------------------------|------------------------------------------------------------------------------------|
| Swab: skin / ear / lesion    | White label  | Swab shaft snapped into tube      | Otitis externa · Pyoderma<br><i>S. pseudintermedius</i> · <i>Malassezia</i>        |
| Abscess                      | White label  | Aspirated pus or deep wall tissue | Bite-wound · Anal sac<br><i>Pasteurella multocida</i> · <i>anaerobes</i>           |
| Urine                        | Yellow label | 2–4 mL liquid, into tube          | Cystitis · Pyelonephritis<br><i>E. coli</i> · <i>Enterococcus</i> · <i>Proteus</i> |
| Fluids : joint, bile, washes | White label  | Min 2 mL · 4 mL ideal             | Septic arthritis · Pyothorax<br><i>Streptococcus spp.</i> · <i>E. coli</i>         |
| Blood (last resort)          | White label  | Serum or plasma, 0.5–1 mL         | Suspected bacteremia                                                               |



### Legend

-  White-label tube: everything except urine
-  Yellow-label tube: urine **only**
-  Aspirate: preferred for abscess
-  Room temperature: store & ship
-  No ice / no cold chain needed



### Tips

- Cysto beats free-catch.** Free-catch adds skin organisms as the urine passes out; cysto shows only what is in the bladder.
- Antibiotics are fine.** Sample before, during, and after therapy to track the real-time response.
- Recheck timing.** Once clinical signs resolve, wait about a week before a follow-up sample.
- Go deep.** Surface material adds contaminant DNA and hides the real pathogen.
- Ship together.** Multiple samples can travel in one prepaid FedEx envelope without affecting quality.
- Forgot to send it?** A collected sample keeps for up to a year in the tube; send it anyway.
- Kit shelf life is 12 months.** Check dates before sampling and reorder early.
- Think like the microbe.** Ask where the organisms of interest live or are shed, then sample to capture the most microbial biomass with the least host DNA, e.g. urine over blood.



### Why NGS Is Different

- One test captures bacteria and fungi, parasites and DNA viruses, plus resistance and toxin genes.
- No need to wait for days to weeks for organisms to grow.
- Works during antibiotic therapy.
- Never again “No Growth” results.
- Molecular-based precision diagnostics.

#### ALWAYS

MiDOG tubes only - other containers are rejected

Yellow label = urine · white label = everything else

Room-temp stable up to 1 year

No ice / no cold chain

~48 h turnaround after receipt

Detection limit 200 cells / sample

All species accepted