Interpretation of Urine Drug Testing, San Francisco General Hospital Toxicology Laboratory
Opiate metabolism

**Opiate Confirmation**

- **Heroin** (metabolized too quickly to be detected) + (Acetylmorphine impurity)

  6-monoacetilmorphine (6-MAM)

  - Norcodeine (not reported)
  - **Morphine** *(not reported)* (minor pathway)
  - **Codeine** *(not reported)*
  - **Hydromorphone** *(not reported)*
  - **Hydrocodone** *(not reported)*

  * = reportable drug from opiate or oxycodone confirmation (following opiate or oxycodone screen positive)

**Oxycodone Confirmation**

- After **Heroin** use, urine may be positive for morphine only, or for codeine and morphine.
- After **Codeine** use, urine may be positive for codeine only, codeine and morphine (metabolite), or morphine only. Hydrocodone is a trace metabolite of codeine rarely found when very high codeine concentrations are present.
- After **Hydrocodone** use, urine may be positive for hydrocodone only, hydrocodone and hydromorphone (metabolite), or hydromorphone only.
- After **Hydromorphone** use, urine should be positive only for hydromorphone.
- After **Morphine** use, urine may be positive for morphine, and occasionally, for morphine and hydromorphone. Hydromorphone is a trace metabolite of morphine found only when very high morphine concentrations are present.
- After **Oxycodone** use, urine may be positive for oxycodone only, for oxycodone and oxymorphone (metabolite), or oxymorphone only.