

| CHARACTERISTICS            |                                                                                                                                                                                              |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Synonym or Cross Reference | HCV, non-A non-B hepatitis, parenterally transmitted non-A non-B hepatitis, non-B transfusion-associated hepatitis, post-transfusion non-A non-B hepatitis Footnote 2, and HCV infection.    |
| Disease                    | N/A                                                                                                                                                                                          |
| Morphology                 | Small (50nm), single-stranded, enveloped RNA virus of the Flaviviridae family and Hepacavirus genus. 6 major genotypes and over 100 subtypes. North America main genotypes: types 1, 2, & 3. |
| Zoonosis                   | None                                                                                                                                                                                         |

| RISK GROUP & CONTAINMENT REQUIREMENTS |                                                                                                                                                             |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ABSL-2                                | For all procedures utilizing infected animals.                                                                                                              |
| BSL-2/BSL-2+                          | For all procedures involving suspected or known infectious specimen or cultures, work in a BSC unless otherwise approved and stated in lab-specific manual. |
| Risk Group 2                          | Risk Group 2                                                                                                                                                |

| LABORATORY HAZARDS             |                                                                                                                                               |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Primary Hazards                | Needlestick injury, or cuts with sharp instruments                                                                                            |
| Sources                        | Samples described in IBC protocol.                                                                                                            |
| Lab Acquired Infections (LAIs) | Seroprevalence studies (Western countries) have shown 1% antibody-to-HCV rates among hospital-based workers (e.g., lab, healthcare provider). |

| PERSONAL PROTECTIVE EQUIPMENT |                                                                                 |
|-------------------------------|---------------------------------------------------------------------------------|
| Additional Precautions        | Additional PPE may be required depending on lab-specific SOPs and IBC Protocol. |
| Minimum PPE Requirements      | Lab coat, disposable gloves, safety glasses, closed toed shoes, long pants.     |

| SPILL PROCEDURES |                                                                                                                                                                                                                                                                                |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Large            | Immediately notify all lab personnel and clear the area. Remove any contaminated PPE/clothing before exiting the lab. Lock all entry doors, post warning signage, and deny entry. Call DPS (213-740-4321) and ask to notify EH&S. Inform the PI and/or Lab Manager/Supervisor. |
| Small            | Notify all lab personnel lab. Remove contaminated PPE and don new PPE. Cover spill area with absorbent material and add fresh 1:10 bleach:water. Allow 20 minutes (or as directed) contact time. After 20 minutes, clean up and dispose of materials.                          |

| VIABILITY             |                                                                                                                                                |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Disinfection          | Use 10 % dilution of household bleach (minimum 0.3% sodium hypochlorite) for 20 to 30 minutes, or an acceptable time approved by IBC and EH&S. |
| Survival Outside Host | HCV is relatively unstable; however, in plasma it can survive drying and environmental exposure to room temperature for at least 16 hours      |

| HEALTH HAZARDS        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host Range            | Humans. Chimpanzees have been used as experimental hosts.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Incubation Period     | Ranges from 2 to 12 weeks                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Infectious Dose       | Unknown                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Modes of Transmission | Parenteral: infected needles (e.g., shared by drug users), blood transfusion, organ transplantation, contaminated medical, tattoo, and body piercing equipment. Less common routes: sexual contact, sharing razors and/or toothbrushes, mother to child during pregnancy and childbirth.                                                                                                                                                                                                                                        |
| Signs and Symptoms    | 60-75% of patients are asymptomatic. Acute hepatitis symptoms: fatigue, myalgia, low-grade fever, right upper quadrant pain, nausea, vomiting, jaundice, arthralgia, maculopapular rash, and mild hepatosplenomegaly. Chronic symptoms: chronic hepatitis, cirrhosis, and hepatocellular carcinoma. Extrahepatic manifestations (uncommon): mixed essential cryoglobulinaemia, membranous or membranoproliferative glomerulonephritis, non-Hodgkin’s lymphoma, Sjorgren’s syndrome, lichen planus, and porphyria cutanea tarda. |

| EXPOSURE PROCEDURES |                                                                                        |
|---------------------|----------------------------------------------------------------------------------------|
| Medical Follow-up   | Visit USC’s designated healthcare provider. Bring a copy of this PSDS.                 |
| Mucous Membrane     | Flush eyes for 5-10 minutes at eyewash station.                                        |
| Other Exposures     | Immediately wash affected area with soap and water for 15 minutes.                     |
| Reporting           | Immediately report incident to supervisor, notify EH&S, and complete Manager’s Report. |

| MEDICAL PRECAUTIONS/TREATMENT |                                                                                                                                                                                     |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prophylaxis                   | Postexposure prophylaxis with immune globulin or antiviral agents is not recommended                                                                                                |
| Surveillance                  | Monitor for symptoms. Initial test: enzyme immunoassay for HCV antibodies. PCR methods to detect HCV RNA. Other tests: Branched DNA assay and transcription mediated amplification. |
| Treatment                     | Monotherapy: pegylated interferon (polyethylene glycol and interferon-alpha). Combined therapy: ribavirin with pegylated- or standard interferon.                                   |
| USC Requirements              | Immediately report any exposures to Environmental Health & Safety.                                                                                                                  |
| Vaccines                      | None. Vaccines are in development to prevent initial infection, viral persistence, or clear viraemia in individuals with chronic HCV infections.                                    |

| REFERENCES                                                            |                                                                                              |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| BMBL<br><a href="http://tiny.cc/cdc-bmb1">http://tiny.cc/cdc-bmb1</a> | Canadian PSDS<br><a href="http://tiny.cc/canada-gov-psds">http://tiny.cc/canada-gov-psds</a> |
| CDC<br><a href="https://www.cdc.gov/">https://www.cdc.gov/</a>        | NIH Guidelines<br><a href="http://tiny.cc/nih-bio-secure">http://tiny.cc/nih-bio-secure</a>  |